

England - KS2 Curriculum For Sustainability Complementing the KS2 Framework



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English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music/ Dance / Drama and PE	Personal, Social, Health and Economic Education (PSHE) Citizenship
<p>English:</p> <p>Reading</p> <p>develop their reading skills through a variety of fiction and non-fiction texts, including novels, poems, plays, and informational texts.</p> <p>Learn to analyse texts for meaning, identify literary devices, and make inferences.</p> <p>Writing:</p>	<p>Mathematics:</p> <p>Number and Place Value:</p> <p>Develop a deep understanding of numbers and their relationships, including place value, ordering, and rounding.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Master these fundamental</p>	<p>Science:</p> <p>Biology: study living organisms, including plants, animals, and humans, exploring topics such as adaptation, habitats, life cycles, and the human body.</p> <p>Chemistry: Learn about the properties of materials, changes of state, chemical reactions, elements,</p>	<p>Computing:</p> <p>Learn about computer hardware, software, algorithms, and data representation.</p> <p>Develop coding skills through programming activities, learn about internet safety, digital citizenship, and ethical considerations</p>	<p>History</p> <p>Learn about Key periods in History, events, and include Sustainability and Conservation Agricultural History.</p> <p>Learn about conservation and sustainability in periods of history , events,</p>	<p>Art and Design:</p> <p>Explore various artistic techniques, including drawing, painting, sculpture, printmaking, and textiles.</p> <p>Study the work of famous artists, develop their own artistic style, and learn to express</p>	<p>Personal Wellbeing:</p> <p>Mental and emotional health: Understanding and managing emotions, stress, and anxiety.</p> <p>Physical health and wellbeing: Promoting healthy lifestyle choices, including diet, exercise, and personal hygiene.</p> <p>Relationships: Developing positive relationships with</p>

<p>learn to write for different purposes and audiences, including narratives, recounts, explanations, persuasive texts, and poetry.</p> <p>Develop ability to structure writing effectively, use descriptive language, and incorporate grammar and punctuation correctly.</p> <p>Speaking and Listening: early and fluently, listen attentively to others, and engage in respectful dialogue.</p>	<p>operations, including both mental and written methods.</p> <p>Fractions: Learn about equivalent fractions, comparing and ordering fractions, adding, subtracting, multiplying, and dividing fractions.</p> <p>Geometry: Explore shapes, angles, symmetry, transformations, and properties of 2D and 3D shapes.</p> <p>Measurement: Include measure and calculate</p>	<p>compounds, and mixtures.</p> <p>Physics: investigate forces, energy, light, sound, electricity, magnetism, and Earth and space.</p> <p>Geography: Explore physical geography, including landforms, climate, rivers, and mountains</p> <p>Explore human geography, such as population, settlement patterns, economic activities, and global issues like climate change and sustainability.</p> <p>Develop map skills, including using coordinates, scale,</p>	<p>related to technology use.</p> <p>Design and Technology (D&T): Engage in designing, making, and evaluating products using a range of materials and tools.</p> <p>Learn about the design process, including research, planning, prototyping, and refinement, and develop skills in problem-solving, creativity, and critical thinking.</p>	<p>and civilizations, such as Ancient Egypt, the Roman Empire, the Viking Age, the Tudors, the Industrial Revolution, and World War II.</p> <p>Learn about significant figures, important dates, causes and discoveries , inventions consequences of historical events, and how the past has influenced the present sustainability and earth</p>	<p>themselves creatively.</p> <p>Music: Learn about musical elements such as rhythm, pitch, dynamics, tempo, and texture through natural resources</p> <p>They will explore different genres of music, learn to play musical instruments, sing, compose music, related to sustainability /Environmental in indigenous communities</p>	<p>family, friends, and peers, and understanding boundaries and consent.</p> <p>Social Skills: Communication: Effective communication skills, including listening, expressing feelings, and resolving conflicts peacefully.</p> <p>Collaboration: Working cooperatively in groups, respecting others' opinions, and understanding the value of teamwork.</p> <p>Diversity and inclusion: Appreciating and celebrating</p>
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	<p>length, area, volume, capacity, mass, time, and temperature using appropriate units.</p> <p>Statistics:</p> <p>interpret and present data using graphs, charts, and tables, and learn about measures of central tendency and dispersion.</p>	<p>and symbols, and understanding geographical data.</p>	<p>e</p>	<p>resources agenda</p> <p>Learn the History of resources trade globally include East India Company and the positive and negative impacts</p>	<p>Physical Education (PE)</p> <p>Engage in a range of physical activities, including team building, dance, and outdoor adventure activities.</p> <p>.Drama</p> <p>Explore a range of Sustainability issues through drama</p>	<p>differences in culture, religion, ethnicity, and abilities.</p> <p>Health Education:</p> <p>Drugs, alcohol, and tobacco education: Understanding the risks associated with substance misuse and making informed choices.</p> <p>Healthy lifestyles: Promoting physical activity, balanced diets, and the importance of sleep for overall wellbeing.</p> <p>Safety: Recognizing potential dangers in the environment and</p>
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						<p>learning how to stay safe both online and offline.</p> <p>Economic Education:</p> <p>Financial literacy: Basic understanding of money management, including budgeting, saving, and spending responsibly.</p> <p>Careers education: Exploring different careers, skills needed for employment, and the importance of education and training for future success.</p> <p>Citizenship:</p> <p>Rights and responsibilities:</p>
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						<p>Understanding democratic values, human rights, and the importance of being an active and responsible citizen.</p> <p>Democracy and government: Learning about the political system, elections, and the role of citizens in shaping society.</p> <p>Global citizenship: Exploring global issues such as poverty, climate change, and inequality, and understanding the interconnectedness of the world.</p>
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The Sustainability Curriculum Headings

Understanding Sustainability (SUS1)	Environmental Awareness (SUS2)	Environmental Stewardship (SUS3)	Waste Management (SUS4)	Energy Conservation (SUS5)	Biodiversity and Ecosystems (SUS6)
Climate Change and Adaptation (SUS7)	Food and Agriculture (SUS8)	Water Conservation (SUS9)	Sustainable Transport and Urban Planning (SUS10)	Citizenship / Global Responsibility and Sustainable Development (SUS11)	Outdoor Learning and Connection to Nature (SUS12)

Understanding Sustainability (SUS1)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship
Reading: Objective: Develop reading skills by engaging with a variety of fiction and non-fiction texts	Number and Place Value: Developing Understanding of Sustainable	Science Biology: Objective: Study living organisms,	Computing: Understanding Sustainable Computing	Understanding Key Periods in History with a Focus on Sustainability and	Art and Design: Exploring Sustainability Through Various Artistic	Mental and Emotional Health: Understanding Emotions:

<p>related to sustainability.</p> <p>Example Text: "The Water Princess" by Susan Verde - a picture book about a girl's journey to access clean water, highlighting the importance of water conservation.</p> <p>Objective: Analyse texts for meaning to understand the themes and messages related to sustainability.</p> <p>Example Text: "Hoot" by Carl Hiaasen - a novel that explores environmental activism and the protection of endangered species in Florida.</p> <p>Objective: Identify</p>	<p>Numbers:</p> <p>Explore numerical data related to sustainability, such as population growth, carbon emissions, or renewable energy production, to develop a deep understanding of numbers and their significance in environmental contexts.</p> <p>Investigate place value concepts in the context of sustainability, such as understanding the magnitude of large numbers representing global populations or quantities of</p>	<p>including plants, animals, and humans, to understand their roles in ecosystems and the importance of biodiversity.</p> <p>Example Activity: Investigate local habitats to identify different species of plants and animals, and discuss their interdependence within the ecosystem.</p> <p>Objective: Explore topics such as adaptation and survival strategies in living organisms, emphasising the importance of resilience and biodiversity</p>	<p>Practices:</p> <p>Learn about the environmental impact of computer hardware production and usage, including energy consumption, electronic waste, and resource depletion.</p> <p>Explore ways to reduce the environmental footprint of technology, such as energy-efficient computing practices, electronic recycling, and sustainable manufacturing processes.</p> <p>Coding for</p>	<p>Conservation Agricultural History:</p> <p>Identify key periods in history, including Ancient civilizations such as Mesopotamia, Ancient Egypt, and the Roman Empire, as well as the Mediaeval period, the Tudor era, the Industrial Revolution, and World War II.</p> <p>Explore the agricultural practices of ancient civilizations, understanding their methods of sustainability</p>	<p>Techniques:</p> <p>Learn about sustainability concepts such as recycling, renewable energy, and conservation through drawing, painting, sculpture, printmaking, and textiles.</p> <p>Experiment with different artistic materials and techniques to create artworks that reflect environmental themes, such as using recycled materials for sculpture or exploring natural dyes for textiles.</p> <p>Studying Famous Artists and Developing Personal Artistic</p>	<p>Identify and label a range of emotions, including positive and negative ones, and understand how they impact personal wellbeing.</p> <p>Develop strategies for managing emotions effectively, such as mindfulness techniques, relaxation exercises, and positive self-talk.</p> <p>Stress and Anxiety Management:</p> <p>Recognize signs of stress and anxiety and learn coping mechanisms to alleviate them, such as deep breathing exercises, journaling, or seeking support from trusted individuals.</p>
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<p>and analyse literary devices used in texts to convey messages about sustainability.</p> <p>Example Text: "The Lorax" by Dr. Seuss - a children's book that uses allegory and symbolism to address environmental issues like deforestation and pollution.</p> <p>Objective: Make inferences about characters, settings, and events in texts to understand their implications for sustainability.</p> <p>Example Text: "The Great Kapok Tree" by Lynne Cherry - a picture book where the consequences of cutting down a rainforest are explored through the</p>	<p>natural resources.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Applying Fundamental Operations to Sustainability Problems:</p> <p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to sustainability, such as calculating energy consumption, carbon footprints, or water usage.</p> <p>Apply mental and written methods to solve</p>	<p>conservation.</p> <p>Example Activity: Research and present examples of animal adaptations to different environments, such as camouflage, migration, or hibernation.</p> <p>Objective: Understand life cycles of various organisms and their significance in maintaining ecosystem balance and sustainability.</p> <p>Example Activity: Observe and document the life cycle of a plant or insect species,</p>	<p>Sustainability:</p> <p>Develop coding skills through programming activities that focus on sustainability-related projects, such as creating apps or games that promote environmental awareness, recycling, or renewable energy.</p> <p>Explore algorithms and data representation techniques to analyse and visualise environmental data, such as climate change trends or biodiversity maps.</p>	<p>and conservation, such as crop rotation, irrigation systems, and land management techniques.</p> <p>Investigate how historical events, such as environmental changes, population growth, and resource depletion, influenced agricultural practices and the development of sustainable solutions throughout history.</p> <p>Exploring Conservation</p>	<p>Style:</p> <p>Study famous artists known for their environmental themes or sustainability activism, such as Andy Goldsworthy or Maya Lin, and analyse their artworks.</p> <p>Use inspiration from these artists to develop their own artistic style, incorporating sustainability themes into their creations.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as</p>	<p>Understand the importance of maintaining a healthy work-life balance and setting boundaries to reduce stress.</p> <p>Physical Health and Wellbeing:</p> <p>Healthy Lifestyle Choices:</p> <p>Explore the benefits of regular physical activity, balanced nutrition, and adequate sleep for overall health and wellbeing.</p> <p>Learn about the importance of personal hygiene practices, including handwashing, dental care, and regular exercise, in preventing illness and promoting</p>
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<p>perspectives of various animals.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, using sustainability as a central theme.</p> <p>Example Task: Compose a persuasive letter to local authorities advocating for the protection of a nearby park or natural habitat.</p> <p>Objective: Develop narrative writing skills by crafting stories that incorporate sustainable practices and environmental themes.</p> <p>Example Task: Write a short story about a group of</p>	<p>sustainability-related problems efficiently and accurately, recognizing the importance of numerical literacy in making informed decisions about environmental issues.</p> <p>Fractions:</p> <p>Understanding Fractions in Sustainability Contexts:</p> <p>Learn about equivalent fractions in the context of sustainable practices, such as comparing different proportions of renewable and non-renewable</p>	<p>noting the stages of growth, reproduction, and decay.</p> <p>Objective: Learn about the human body and its interactions with the environment, focusing on health, nutrition, and sustainable living practices.</p> <p>Example Activity: Discuss the importance of a balanced diet and regular exercise for maintaining personal health and well-being, and explore ways to reduce the ecological footprint through sustainable lifestyle choices.</p> <p>Chemistry:</p>	<p>Digital Citizenship and Ethical Considerations :</p> <p>Learn about internet safety practices to protect personal information and prevent cyber threats.</p> <p>Explore digital citizenship concepts, including responsible technology use, online etiquette, and the importance of respecting intellectual property rights.</p> <p>Discuss ethical considerations related to technology use, such as the</p>	<p>and Sustainability Across Different Historical Periods and Civilizations:</p> <p>Examine the conservation efforts and sustainable practices of Ancient Egypt, focusing on the preservation of the Nile River ecosystem, sustainable agriculture along the Nile floodplain, and the development of irrigation systems.</p> <p>Investigate the environmental impact of the Roman Empire,</p>	<p>rhythm, pitch, dynamics, tempo, and texture through the sounds of natural resources like wind, water, and animal calls.</p> <p>Experiment with creating music using found objects from nature, such as sticks, rocks, and leaves, to understand the connection between music and the environment.</p> <p>Exploring Music Genres and Instruments Related to Sustainability:</p> <p>Explore different genres of music that highlight environmental</p>	<p>wellbeing.</p> <p>Promoting Outdoor and Nature Activities:</p> <p>Engage in outdoor activities that promote physical fitness, such as hiking, cycling, gardening, or nature walks, to connect with the natural environment and enhance personal wellbeing.</p> <p>Understand the mental health benefits of spending time outdoors, including stress reduction, improved mood, and increased resilience.</p> <p>Social Skills:</p> <p>Effective Communication:</p>
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<p>friends organising a beach cleanup and the impact it has on their community.</p> <p>Objective: Structure writing effectively, organising ideas coherently to communicate messages about sustainability.</p> <p>Example Task: Create an informative brochure about renewable energy sources, organising information into sections such as solar power, wind energy, and hydroelectricity.</p> <p>Objective: Use descriptive language to evoke empathy and understanding of environmental issues.</p>	<p>energy sources.</p> <p>Explore fractions in relation to sustainable consumption and production, such as understanding portions of recycled materials in products or fractions of land devoted to agriculture and conservation.</p> <p>Geometry:</p> <p>Exploring Sustainable Shapes and Structures:</p> <p>Investigate the geometry of natural and man-made structures, such as the symmetry of leaves, the angles of solar</p>	<p>Objective: Learn about the properties of materials and how they affect their sustainability and environmental impact.</p> <p>Example Activity: Conduct experiments to investigate the properties of different materials (e.g., biodegradable vs. non-biodegradable) and discuss their implications for waste management and recycling.</p> <p>Objective: Understand changes of state and their relevance to energy consumption and</p>	<p>ethical implications of data collection, privacy violations, and the impact of technology on social and environmental justice.</p> <p>Design and Technology (D&T):</p> <p>Sustainable Product Design:</p> <p>Engage in designing products with sustainability in mind, considering factors such as material selection, energy efficiency, recyclability, and lifecycle analysis.</p>	<p>including deforestation, land degradation, and the implementation of conservation laws such as the Lex Acilia de Calendis, which regulated the use of public lands.</p> <p>Analyse the sustainability practices of the Viking Age, such as their use of natural resources, waste management systems, and sustainable farming techniques in Scandinavian societies.</p> <p>Explore the</p>	<p>themes, such as folk music with lyrics about nature conservation or world music inspired by indigenous cultures.</p> <p>Learn to play musical instruments commonly associated with sustainability and environmental awareness, such as acoustic guitars, hand drums, or traditional indigenous instruments.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Sustainability</p>	<p>Develop effective communication skills, including active listening, expressing feelings assertively, and communicating needs and boundaries respectfully.</p> <p>Practise empathetic listening and learn to offer support and encouragement to others in need.</p> <p>Conflict Resolution:</p> <p>Learn strategies for resolving conflicts peacefully and constructively, including negotiation, compromise, and seeking win-win solutions.</p> <p>Understand the importance of</p>
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<p>Example Task: Write a poem describing the beauty of a natural landscape threatened by pollution or climate change, emphasising the need for conservation efforts.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about sustainability topics, demonstrating understanding through active participation.</p> <p>Example Activity: Participate in a group discussion about the impact of plastic pollution on marine life, sharing</p>	<p>panels, or the properties of sustainable building designs.</p> <p>Explore transformations of shapes in relation to environmental conservation efforts, such as studying the effects of deforestation on the shape of ecosystems or the geometry of urban green spaces.</p> <p>Measurement:</p> <p>Calculating Sustainable Measures:</p> <p>Measure and calculate sustainable quantities such as length, area,</p>	<p>conservation.</p> <p>Example Activity: Investigate the process of water cycle and discuss its role in maintaining ecosystems and sustaining life on Earth, emphasising the importance of water conservation.</p> <p>Objective: Explore chemical reactions and their impact on the environment, emphasising the concept of reducing, reusing, and recycling resources.</p> <p>Example Activity: Conduct experiments to</p>	<p>Explore sustainable design principles, such as biomimicry, cradle-to-cradle design, and upcycling, to create products that minimise environmental impact.</p> <p>Design Process and Problem-Solving:</p> <p>Learn about the design process, including research, ideation, prototyping, testing, and evaluation, to develop sustainable solutions to real-world problems.</p>	<p>Tudor era in England and the conservation efforts of monarchs like Henry VIII and Elizabeth I, including laws protecting forests, wildlife, and water sources.</p> <p>Investigate the environmental consequences of the Industrial Revolution, focusing on pollution, deforestation, and the development of early conservation movements.</p> <p>Examine the role of sustainability and</p>	<p>Focus:</p> <p>Participate in team-building activities that promote collaboration and communication skills while emphasising sustainable practices, such as eco-friendly challenges or outdoor clean-up activities.</p> <p>Explore dance forms inspired by nature, such as animal movements or environmental motifs, to encourage creativity and physical expression while connecting with the natural world.</p>	<p>empathy, perspective-taking, and respecting diverse viewpoints in resolving conflicts.</p> <p>Collaboration:</p> <p>Teamwork and Cooperation:</p> <p>Engage in collaborative activities and projects that require teamwork, cooperation, and shared decision-making.</p> <p>Appreciate the strengths and contributions of each team member and learn to work together towards common goals effectively.</p> <p>Respect for Diversity and</p>
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<p>personal observations and ideas for solutions.</p> <p>Objective: Engage in respectful dialogue with peers, exchanging ideas and perspectives on sustainability issues.</p> <p>Example Activity: Role-play a debate on the pros and cons of using fossil fuels versus renewable energy sources, respecting opposing viewpoints while presenting arguments.</p>	<p>volume, capacity, mass, time, and temperature using appropriate units, focusing on sustainability-related contexts.</p> <p>Apply measurement skills to assess and quantify sustainability indicators, such as measuring the area of wildlife habitats, the volume of recyclable materials, or the mass of carbon emissions.</p> <p>Statistics:</p> <p>Interpreting Sustainability Data:</p> <p>Interpret and present sustainability</p>	<p>observe chemical reactions (e.g., rusting, combustion) and discuss their environmental consequences, highlighting the importance of pollution prevention and waste reduction.</p> <p>Objective: Learn about elements, compounds, and mixtures, and their applications in sustainable technologies and practices.</p> <p>Example Activity: Research and present examples of renewable energy sources (e.g., solar, wind, hydroelectric power) and discuss their</p>	<p>Develop problem-solving skills by identifying environmental challenges and designing innovative solutions using sustainable materials and technologies.</p> <p>Critical Thinking and Evaluation:</p> <p>Evaluate the environmental and social impacts of products and design decisions, considering factors such as carbon footprint, resource use, and social equity.</p>	<p>conservation during World War II, including rationing, recycling campaigns, victory gardens, and the impact of wartime industries on the environment.</p> <p>Understanding the Influence of Historical Events and Figures on Sustainability and Earth:</p> <p>Identify significant figures in history who contributed to environmental conservation and</p>	<p>Drama:</p> <p>Exploring Sustainability Issues Through Drama:</p> <p>Use role-playing and improvisation to explore various sustainability issues, such as climate change, pollution, or biodiversity loss, from different perspectives.</p> <p>Create and perform short dramatic scenes or skits that raise awareness about environmental challenges and inspire positive action, such as recycling campaigns or habitat conservation initiatives.</p>	<p>Inclusion:</p> <p>Celebrate and respect differences in culture, religion, ethnicity, and abilities, promoting an inclusive and supportive environment for all.</p> <p>Challenge stereotypes and prejudices, and foster a culture of acceptance, understanding, and empathy towards diverse individuals and communities.</p> <p>Health Education:</p> <p>Awareness of Drugs, Alcohol, and Tobacco:</p> <p>Understand the risks associated with substance use and abuse, including the effects</p>
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	<p>data using graphs, charts, and tables, such as visualising trends in renewable energy adoption or comparing environmental impacts of different products.</p> <p>Learn about measures of central tendency and dispersion in the context of sustainability, such as analysing average energy consumption or variability in weather patterns over time.</p>	<p>advantages over fossil fuels in terms of sustainability and environmental impact.</p> <p>Physics:</p> <p>Objective: Investigate forces and their effects on objects and the environment, emphasising the importance of energy efficiency and conservation.</p> <p>Example Activity: Explore different types of forces (e.g., gravitational, frictional, magnetic) and their role in everyday activities, and discuss ways to minimise energy consumption and</p>	<p>Reflect on the effectiveness of sustainable design solutions and propose improvements based on feedback and evaluation data.</p>	<p>sustainability, such as John Evelyn, John Muir, Rachel Carson, and Wangari Maathai.</p> <p>Explore important dates and events related to environmental conservation, such as the establishment of the world's first national parks, the creation of environmental protection agencies, and the adoption of international agreements on climate change and biodiversity conservation.</p>		<p>on physical and mental health, relationships, and personal safety.</p> <p>Learn refusal skills and effective strategies for resisting peer pressure to engage in harmful behaviours.</p> <p>Safety Education:</p> <p>Identify potential dangers in the environment, both online and offline, and learn how to stay safe through risk assessment, hazard recognition, and responsible decision-making.</p> <p>Understand the importance of seeking help from trusted adults and authorities in unsafe</p>
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		<p>waste generation.</p> <p>Objective: Learn about different forms of energy (e.g., kinetic, potential, thermal) and their transformations, focusing on renewable energy sources and their role in sustainable development.</p> <p>Example Activity: Investigate the conversion of energy from one form to another (e.g., mechanical to electrical energy in a wind turbine) and discuss the environmental benefits of using renewable energy sources.</p>		<p>Investigate the causes and consequences of mineral discoveries throughout history, including the impact of mining activities on the environment, local communities, and global economies.</p> <p>Analyse the role of inventions and technological advancements in shaping environmental sustainability, such as the development of renewable</p>		<p>situations.</p> <p>Economic Education:</p> <p>Financial Literacy:</p> <p>Develop basic money management skills, including budgeting, saving, and responsible spending, to make informed financial decisions and achieve financial goals.</p> <p>Understand the concepts of income, expenses, saving, and borrowing, and the importance of financial planning for future financial security.</p> <p>Career Education:</p> <p>Explore different careers and professions,</p>
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		<p>Objective: Explore the properties of light, sound, electricity, and magnetism, and their applications in sustainable technologies.</p> <p>Example Activity: Experiment with solar panels to understand how they convert sunlight into electricity, and discuss their potential applications in reducing dependence on fossil fuels.</p> <p>Objective: Learn about Earth and space phenomena and their relevance to sustainability and environmental</p>		<p>energy technologies, water purification systems, and sustainable transportation methods.</p> <p>Reflect on how lessons from the past can inform present-day efforts to address environmental challenges, promote sustainability, and protect the Earth for future generations.</p>		<p>understanding the skills, qualifications, and experiences required for various occupations.</p> <p>Recognize the importance of education, training, and lifelong learning in preparing for future career opportunities and achieving personal and professional goals.</p> <p>Citizenship:</p> <p>Understanding Rights and Responsibilities:</p> <p>Learn about democratic values, human rights, and the responsibilities of being an active and engaged citizen in a democratic society.</p>
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		<p>stewardship.</p> <p>Example Activity: Explore the concept of climate change and its impact on Earth's ecosystems, and discuss ways to mitigate its effects through sustainable practices and policies</p> <p>Physical Geography:</p> <p>Objective: Explore and identify different landforms and their characteristics, including mountains, valleys, plateaus, and plains.</p> <p>Example</p>				<p>Explore the concept of citizenship rights, including the right to vote, freedom of speech, and equal treatment under the law, and the importance of respecting the rights of others.</p> <p>Democracy and Government: Understand the political system, including the roles and functions of government, the electoral process, and the importance of civic participation in shaping public policy and governance.</p> <p>Participate in simulated democratic processes, such as mock elections or student councils, to</p>
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		<p>Activity: Examine photographs, diagrams, and maps of various landforms, discussing their formation processes and geological features.</p> <p>Objective: Understand the factors influencing climate patterns and weather phenomena in different regions.</p> <p>Example Activity: Investigate the factors affecting climate (e.g., latitude, altitude, proximity to water bodies) and analyse climate data to identify patterns and</p>				<p>experience firsthand the principles of democracy and civic engagement.</p> <p>Global Citizenship:</p> <p>Explore global issues such as poverty, climate change, and inequality, and understand their interconnectedness with local and global communities.</p> <p>Develop a sense of global responsibility and empathy towards people and ecosystems worldwide, recognizing the role of individuals and societies in addressing global challenges and promoting sustainable development.</p>
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		<p>trends.</p> <p>Objective: Explore the formation and characteristics of rivers, including their sources, courses, and interactions with the landscape.</p> <p>Example Activity: Study the life cycle of a river, from its source in the mountains to its mouth at the sea, and discuss the processes of erosion, transportation, and deposition.</p> <p>Objective: Investigate the impact of physical geography on human activities and settlement patterns.</p>				
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		<p>Example Activity: Examine how physical features such as mountains, rivers, and coastlines influence where people live, work, and travel, and discuss the challenges and opportunities presented by different environments.</p> <p>Human Geography:</p> <p>Objective: Explore patterns of population distribution and density in different regions and countries.</p> <p>Example Activity: Analyse</p>				
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		<p>population data and demographic trends to identify factors influencing population growth, migration, and urbanisation.</p> <p>Objective: Understand the relationship between settlement patterns and economic activities, including agriculture, industry, and services.</p> <p>Example Activity: Investigate how factors such as natural resources, transportation networks, and market access influence the</p>				
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		<p>location and growth of towns and cities.</p> <p>Objective: Explore global issues such as climate change, sustainability, and environmental degradation from a geographical perspective.</p> <p>Example Activity: Discuss the impacts of climate change on physical and human geography, including changes in weather patterns, sea level rise, and ecosystem disruptions.</p> <p>Map Skills:</p> <p>Objective: Develop</p>				
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		<p>proficiency in using maps and geographic tools to interpret and analyse spatial information.</p> <p>Example Activity: Practise reading and interpreting different types of maps (e.g., topographic maps, thematic maps) to identify features, patterns, and relationships.</p> <p>Objective: Understand and use geographic coordinates, scale, and symbols to locate and describe places on maps.</p> <p>Example Activity: Use</p>				
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		<p>latitude and longitude coordinates to locate specific places on a world map, and use map scales to estimate distances between locations.</p> <p>Objective: Analyse and interpret geographical data, such as population statistics, climate charts, and land use maps.</p> <p>Example Activity: Interpret data from graphs, charts, and tables to analyse spatial patterns and trends related to population, climate, and land</p>				
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		use.				
Environmental Awareness (SUS2)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship
<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on environmental themes.</p> <p>Example Text/Genre: "The</p>	<p>Number and Place Value:</p> <p>Understanding Environmental Numbers:</p> <p>Explore numerical data related to environmental issues such as population</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Study living organisms, including plants, animals, and humans, to understand their roles in</p>	<p>Computing:</p> <p>Understanding Environmental Impact of Computing:</p> <p>Learn about the environmental impact of computer hardware production,</p>	<p>Exploring Key Periods in English History with a Focus on Environmental Sustainability:</p> <p>Investigate key periods in English history, including the</p>	<p>Art and Design:</p> <p>Exploring Environmental Awareness Through Various Artistic Techniques:</p> <p>Use drawing, painting, sculpture, printmaking, and</p>	<p>Mental and Emotional Health:</p> <p>Understanding Emotions:</p> <p>Identify various emotions and learn to express them in healthy ways.</p> <p>Develop strategies to manage emotions</p>

<p>Wild Robot" by Peter Brown - a novel that explores the relationship between technology and nature, promoting empathy for wildlife.</p> <p>Objective: Analyse texts for deeper meaning, focusing on environmental messages and their relevance to real-world issues.</p> <p>Example Text/Genre: Environmental articles from reputable sources such as National Geographic Kids or BBC Earth, analysing the causes and effects of deforestation or climate change.</p> <p>Objective: Identify and examine literary devices used in</p>	<p>growth, carbon emissions, or species populations to develop a deep understanding of numbers and their significance in environmental contexts.</p> <p>Investigate the place value of large numbers representing global environmental indicators, such as the number of trees in a forest or the volume of water in a river.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Applying Mathematical Operations to Environmental</p>	<p>ecosystems and the importance of biodiversity conservation.</p> <p>Example Activity: Explore local ecosystems such as forests, wetlands, or grasslands to identify different species and discuss their interactions and dependencies.</p> <p>Objective: Explore topics such as adaptation and survival strategies in living organisms, emphasising the importance of resilience and biodiversity conservation.</p> <p>Example</p>	<p>usage, and disposal, including energy consumption, electronic waste, and resource depletion.</p> <p>Explore how digital technologies can contribute to environmental sustainability through efficient energy use, virtualisation, and cloud computing.</p> <p>Coding for Environmental Awareness:</p> <p>Develop coding skills through programming activities that address environmental issues, such as creating</p>	<p>Mediaeval period, the Tudor era, and the Industrial Revolution, with a specific focus on environmental sustainability.</p> <p>Explore the agricultural practices of different periods, including strip farming, the impact of corn laws on agricultural production and trade, and the enclosure movement, understanding their environmental implications.</p> <p>Analyse the socio-economic factors</p>	<p>textiles to explore environmental themes such as biodiversity, climate change, and conservation.</p> <p>Experiment with different artistic materials and techniques to create artworks that raise awareness about environmental issues and promote sustainability practices.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study famous artists known for their environmental activism or artworks with</p>	<p>effectively, such as deep breathing exercises and mindfulness techniques.</p> <p>Stress and Anxiety Management:</p> <p>Recognize signs of stress and anxiety and practice relaxation techniques like progressive muscle relaxation and visualisation.</p> <p>Learn coping strategies such as journaling and talking to a trusted adult when feeling overwhelmed.</p> <p>Physical Health and Wellbeing:</p> <p>Healthy Lifestyle Choices:</p> <p>Understand the</p>
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<p>environmental texts to convey complex ideas and emotions.</p> <p>Example Text/Genre: Poetry collections inspired by nature, like "The Lost Words" by Robert Macfarlane and Jackie Morris, exploring the beauty and fragility of the natural world through poetic language.</p> <p>Objective: Make inferences about the environmental impact of characters' actions and decisions in literature.</p> <p>Example Text/Genre: Environmental-themed short stories or fables, such as "The Giving Tree" by Shel Silverstein,</p>	<p>Problems:</p> <p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to environmental conservation, such as calculating the area of land needed for reforestation projects or determining the impact of pollution on ecosystems.</p> <p>Apply mental and written methods to solve environmental-related problems efficiently and accurately, recognizing the role of mathematics in</p>	<p>Activity:</p> <p>Investigate how animals and plants have adapted to their habitats to survive, and discuss the impact of environmental changes on their survival.</p> <p>Objective:</p> <p>Understand life cycles of various organisms and their significance in maintaining ecosystem balance and sustainability.</p> <p>Example Activity:</p> <p>Observe and document the life cycles of plants, insects, or other organisms in a local environment,</p>	<p>simulations to model climate change scenarios or developing apps to promote environmental conservation.</p> <p>Learn about data visualisation techniques to represent environmental data effectively, such as creating graphs or maps to visualise air or water quality data.</p> <p>Digital Citizenship and Ethical Considerations :</p> <p>Understand the importance of responsible technology use and digital</p>	<p>driving changes in agricultural practices and land management throughout English history, and evaluate their long-term effects on the environment, rural communities, and biodiversity.</p> <p>Understanding Conservation and Sustainability Across Various Historical Periods and Civilizations:</p> <p>Examine the conservation efforts and sustainable</p>	<p>ecological themes, such as David Hockney or Ai Weiwei.</p> <p>Use inspiration from these artists to develop their own artistic style, incorporating environmental awareness and sustainability messages into their creations.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating natural resources like stones, water, and wind into</p>	<p>importance of balanced nutrition, regular exercise, and adequate sleep for overall health.</p> <p>Explore different types of physical activities and choose ones that are enjoyable and promote wellbeing.</p> <p>Personal Hygiene:</p> <p>Learn proper hygiene practices, including handwashing, dental care, and bathing, to prevent illness and promote personal well being globally</p> <p>Understand the importance of maintaining cleanliness in personal spaces and surroundings in</p>
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<p>prompting discussions about conservation and sustainability.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, using environmental issues as a central focus.</p> <p>Example Task: Compose a persuasive letter to local government officials advocating for the protection of a local park or wildlife habitat.</p> <p>Objective: Develop narrative writing skills by crafting stories that explore environmental themes and solutions.</p>	<p>addressing environmental challenges.</p> <p>Fractions:</p> <p>Understanding Fractions in Environmental Contexts:</p> <p>Learn about equivalent fractions in the context of environmental sustainability, such as comparing different proportions of renewable and nonrenewable resources or fractions representing parts of a habitat affected by pollution.</p> <p>Explore fractions in relation to</p>	<p>noting stages of growth, reproduction, and decay.</p> <p>Objective: Learn about the human body and its interactions with the environment, focusing on health, nutrition, and sustainable living practices.</p> <p>Example Activity: Discuss the importance of a healthy diet, regular exercise, and proper hygiene for personal health and well-being, and explore ways to reduce the ecological footprint through sustainable lifestyle choices.</p>	<p>citizenship in promoting environmental awareness and sustainability.</p> <p>Explore ethical considerations related to technology use and environmental impact, such as the ethical implications of data collection, privacy violations, and the role of technology in addressing environmental challenges.</p> <p>Design and Technology (D&T):</p> <p>Sustainable Product Design:</p>	<p>practices of Ancient Egypt, such as the management of the Nile River ecosystem, sustainable agriculture along the Nile floodplain, and the use of natural resources in building projects.</p> <p>Investigate the environmental impact of the Roman Empire, including deforestation, land degradation, and the implementation of conservation laws and policies aimed at preserving</p>	<p>musical compositions and improvisations.</p> <p>Experiment with creating music using natural materials and environmental sounds to deepen understanding of the connection between music and the natural world.</p> <p>Exploring Music Genres and Instruments Related to Environmental Awareness:</p> <p>Explore different genres of music that highlight environmental themes, such as world music traditions rooted in nature worship or folk songs with</p>	<p>all nations .</p> <p>Social Skills:</p> <p>Effective Communication:</p> <p>Practise active listening and learn to express thoughts and feelings clearly and respectfully.</p> <p>Develop empathy and understanding towards others' perspectives during communication.</p> <p>Conflict Resolution:</p> <p>Learn strategies for resolving conflicts peacefully, such as negotiation and compromise.</p> <p>Understand the importance of empathy and perspective-taking</p>
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<p>Example Task: Write a short story about a character's journey to protect an endangered species or to restore a polluted ecosystem.</p> <p>Objective: Structure writing effectively to communicate environmental concepts clearly and persuasively.</p> <p>Example Task: Create an informational pamphlet about recycling or renewable energy, organising information into sections and using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to evoke emotions and promote empathy towards the</p>	<p>sustainable consumption and production, such as understanding portions of waste that can be recycled or fractions of land dedicated to conservation efforts.</p> <p>Geometry:</p> <p>Exploring Environmental Shapes and Structures:</p> <p>Investigate the geometry of natural and man-made structures in the environment, such as the shapes of leaves, the angles of solar panels, or the properties of sustainable</p>	<p>Chemistry:</p> <p>Objective: Learn about the properties of materials and their impact on the environment, emphasising the concept of reduce, reuse, and recycle.</p> <p>Example Activity: Investigate the properties of different materials (e.g., plastic, paper, metal) and discuss their environmental implications, including recycling options and biodegradability.</p> <p>Objective: Understand changes of state and their</p>	<p>Engage in designing products with environmental sustainability in mind, considering factors such as material selection, energy efficiency, recyclability, and lifecycle analysis.</p> <p>Explore sustainable design principles and techniques, such as eco-friendly materials, renewable energy sources, and sustainable manufacturing processes.</p> <p>Environmental Research and Prototyping:</p>	<p>natural resources.</p> <p>Explore the sustainability practices of the Viking Age, including their use of renewable energy sources, waste management systems, and sustainable farming techniques in Scandinavian societies and why they came to England looking for land.</p> <p>Analyse the Tudor era in England and the conservation efforts of monarchs like Henry VIII and</p>	<p>ecological messages.</p> <p>Learn to play musical instruments commonly associated with environmental awareness, such as traditional indigenous instruments or those made from sustainable materials.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Environmental Focus:</p> <p>Participate in outdoor physical activities that promote environmental awareness and</p>	<p>in resolving disagreements.</p> <p>Collaboration:</p> <p>Teamwork and Cooperation:</p> <p>Engage in group activities and projects to develop collaboration skills and appreciate the value of teamwork.</p> <p>Respect others' opinions and contributions during group work.</p> <p>Respect for Diversity and Inclusion:</p> <p>Appreciate and celebrate differences in culture, religion, ethnicity, and abilities within the community.</p>
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<p>environment.</p> <p>Example Task: Write a descriptive poem about a natural landscape or endangered animal species, focusing on sensory details to create vivid imagery.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about environmental topics, contributing insights and asking questions.</p> <p>Example Activity: Participate in a class debate about the importance of protecting biodiversity, considering different viewpoints and supporting</p>	<p>building designs.</p> <p>Explore transformations of shapes in relation to environmental conservation efforts, such as studying the effects of deforestation on the shape of ecosystems or the geometry of wildlife habitats.</p> <p>Measurement:</p> <p>Calculating Environmental Measures:</p> <p>Measure and calculate environmental quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate</p>	<p>relevance to energy consumption and conservation.</p> <p>Example Activity: Explore the water cycle and discuss its role in maintaining ecosystems and sustaining life on Earth, emphasising the importance of water conservation.</p> <p>Objective: Explore chemical reactions and their impact on the environment, focusing on pollution prevention and waste reduction.</p> <p>Example Activity: Conduct</p>	<p>Conduct research on environmental issues and identify opportunities for innovative product designs that address sustainability challenges.</p> <p>Use the design process to prototype and test environmentally friendly products, incorporating feedback and iterative improvements to enhance sustainability.</p> <p>Problem-Solving and Critical Thinking:</p> <p>Develop</p>	<p>Elizabeth I, including laws protecting forests, wildlife, and water sources, and their impact on the environment.</p> <p>Examine the environmental consequences of the Industrial Revolution, focusing on pollution, resource depletion, and the development of early conservation movements and legislation.</p> <p>Investigate the role of sustainability and conservation during World</p>	<p>appreciation, such as nature walks, tree planting, or wildlife observation.</p> <p>Incorporate environmental stewardship principles into team-building exercises and outdoor adventure activities, fostering a sense of responsibility for the natural world.</p> <p>Drama:</p> <p>Exploring Environmental Sustainability Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore sustainability</p>	<p>Foster an inclusive environment where everyone feels valued and respected.</p> <p>Health Education:</p> <p>Drugs, Alcohol, and Tobacco Education:</p> <p>Learn about the risks associated with substance use and develop refusal skills to resist peer pressure.</p> <p>Understand the importance of making informed decisions regarding substance use.</p> <p>Promoting Outdoor and Nature Activities:</p> <p>Spend time outdoors and engage in activities</p>
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<p>arguments with evidence.</p> <p>Objective: Engage in respectful dialogue with peers, exchanging ideas and collaborating on environmental projects.</p> <p>Example Activity: Work in small groups to brain buzz talk solutions to local environmental challenges, actively listening to each other's suggestions and building on ideas collaboratively.</p>	<p>units, focusing on environmental contexts.</p> <p>Apply measurement skills to assess and quantify environmental indicators, such as measuring the area of protected habitats, the volume of greenhouse gas emissions, or the mass of recycled materials.</p> <p>Statistics:</p> <p>Interpreting Environmental Data:</p> <p>Interpret and present environmental data using graphs, charts, and tables, such as visualising</p>	<p>experiments to observe chemical reactions (e.g., rusting, combustion) and discuss their environmental consequences, highlighting the importance of using eco-friendly products and reducing chemical pollution.</p> <p>Objective: Learn about elements, compounds, and mixtures, and their applications in sustainable technologies and practices.</p> <p>Example Activity: Investigate renewable energy sources such as solar, wind, and hydroelectric</p>	<p>problem-solving skills by identifying environmental problems and proposing creative solutions using technology and design.</p> <p>Apply critical thinking skills to evaluate the environmental impact of products and design decisions, considering factors such as carbon footprint, resource use, and ecological footprint.</p>	<p>War II, including rationing, recycling campaigns, and the impact of wartime industries on the environment.</p> <p>Exploring Significant Figures, Events, and Inventions in Environmental History:</p> <p>Identify significant figures in environmental history, such as John Evelyn, John Muir, Rachel Carson, and Wangari Maathai, and their contributions to</p>	<p>issues such as pollution, deforestation, or renewable energy.</p> <p>Create and perform dramatic scenes or skits that raise awareness about environmental challenges and inspire action towards sustainable living and conservation efforts.</p>	<p>that promote connection with nature, such as hiking, gardening, or birdwatching.</p> <p>Recognize the mental and physical health benefits of spending time in nature.</p> <p>Safety Education:</p> <p>Identify potential dangers in the environment and learn safety measures to stay safe both online and offline.</p> <p>Understand the importance of seeking help from trusted adults in unsafe situations.</p> <p>Economic Education:</p>
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	<p>trends in air pollution levels or comparing biodiversity indices in different ecosystems.</p> <p>Learn about measures of central tendency and dispersion in the context of environmental data analysis, such as analysing average temperatures or variability in precipitation patterns over time.</p>	<p>power, and discuss their advantages over fossil fuels in terms of sustainability and environmental impact.</p> <p>Physics:</p> <p>Objective: Investigate forces and their effects on objects and the environment, emphasising the importance of energy efficiency and conservation.</p> <p>Example Activity: Explore different types of forces (e.g., gravity, friction, magnetism) and their role in everyday activities, and discuss ways to minimise energy</p>		<p>environmental conservation and sustainability.</p> <p>Explore important dates and events related to environmental conservation, such as the establishment of the world's first national parks, the adoption of environmental protection laws, and the signing of international agreements on climate change and biodiversity conservation.</p> <p>Investigate the causes and consequences</p>		<p>Financial Literacy:</p> <p>Learn basic money management skills, including budgeting, saving, and responsible spending.</p> <p>Understand the importance of financial planning for future financial security.</p> <p>Careers Education:</p> <p>Explore different career paths and learn about the skills and qualifications needed for various professions.</p> <p>Understand the importance of education and training in preparing for future career opportunities.</p>
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		<p>consumption and waste generation.</p> <p>Objective: Learn about different forms of energy (e.g., kinetic, potential, thermal) and their transformations, focusing on renewable energy sources and their role in sustainable development.</p> <p>Example Activity: Investigate the conversion of energy from one form to another (e.g., mechanical to electrical energy in a wind turbine) and discuss the environmental benefits of using renewable energy</p>		<p>of mineral discoveries throughout history, including their impact on the environment, local communities, and global economies.</p> <p>Analyse the role of inventions and technological advancements in shaping environmental sustainability, such as the development of renewable energy technologies, water conservation methods, and sustainable transportation systems.</p>		<p>Citizenship:</p> <p>Rights and Responsibilities:</p> <p>Understand democratic values, human rights, and the importance of being an active and responsible citizen.</p> <p>Learn about the rights and responsibilities of individuals within the community and society.</p> <p>Democracy and Government:</p> <p>Learn about the political system, including elections, and the role of citizens in shaping society.</p> <p>Understand the importance of civic engagement and</p>
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		<p>sources.</p> <p>Objective: Explore the properties of light, sound, electricity, and magnetism, and their applications in sustainable technologies.</p> <p>Example Activity: Experiment with solar panels to understand how they convert sunlight into electricity, and discuss their potential applications in reducing dependence on fossil fuels.</p> <p>Objective: Learn about Earth and space phenomena and their relevance to environmental sustainability and</p>		<p>Reflect on how lessons from the past can inform present-day efforts to address environmental challenges, promote sustainability, and protect the Earth for future generations.</p>		<p>participation in democracy.</p> <p>Global Citizenship:</p> <p>Learn about global issues such as poverty, climate change, and inequality, and understand their interconnectedness with local and global communities.</p> <p>Develop empathy and a sense of responsibility towards addressing global challenges and promoting sustainable development.</p>
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		<p>stewardship.</p> <p>Example Activity: Discuss the impacts of human activities on Earth's climate and ecosystems, and explore ways to mitigate these impacts through sustainable practices and policies</p> <p>Physical Geography:</p> <p>Objective: Explore various landforms and understand their significance in shaping ecosystems and landscapes.</p> <p>Example Activity: Read "The Fantastic Flying Books of Mr. Morris Lessmore" by</p>				
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		<p>William Joyce to explore the beauty and diversity of landscapes around the world. Discuss how different landforms like mountains, rivers, and deserts support different ecosystems and wildlife.</p> <p>Objective: Investigate climate patterns and their impact on environments and human activities.</p> <p>Example Activity: Read "The Water Princess" by Susan Verde to learn about the challenges of accessing clean water in arid regions. Discuss</p>				
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		<p>the importance of water conservation and sustainable practices in combating desertification and drought.</p> <p>Objective: Understand the role of rivers in shaping landscapes, supporting biodiversity, and providing essential resources.</p> <p>Example Activity: Read "The River" by Gary Paulsen to follow the journey of a boy and his dog along a river. Discuss the importance of rivers for transportation, agriculture, and</p>				
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		<p>recreation, and the threats they face from pollution and habitat destruction.</p> <p>Human Geography:</p> <p>Objective: Explore population distribution and its impact on resource use and environmental sustainability.</p> <p>Example Activity: Read "Where the Forest Meets the Sea" by Jeannie Baker to learn about the rich biodiversity of tropical rainforests and the threats they face from deforestation and</p>				
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		<p>habitat loss. Discuss the importance of conserving rainforests for biodiversity and climate regulation.</p> <p>Objective: Investigate settlement patterns and urbanization, and their implications for the environment and quality of life.</p> <p>Example Activity: Read "The Curious Garden" by Peter Brown to explore the transformation of an urban landscape into a green oasis. Discuss the benefits of urban green spaces for</p>				
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		<p>air quality, biodiversity, and community well-being, and the role of citizens in promoting sustainable urban development.</p> <p>Objective: Understand economic activities and their environmental impact, and explore sustainable alternatives.</p> <p>Example Activity: Read "The Lorax" by Dr. Seuss to learn about the consequences of industrialization and resource exploitation on the environment. Discuss</p>				
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		<p>sustainable practices such as renewable energy, recycling, and fair trade, and their role in promoting environmental stewardship.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to explore geographical features, analyse spatial data, and understand environmental issues.</p> <p>Example Activity: Use maps and atlases to locate different biomes and ecosystems around the world, and discuss their</p>				
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		<p>biodiversity and conservation status.</p> <p>Objective: Understand the importance of coordinates, scale, and symbols in interpreting maps and geographical data related to environmental awareness.</p> <p>Example Activity: Read "Me on the Map" by Joan Sweeney to learn about different map scales and how to locate places using coordinates. Practice using a map key to interpret symbols and understand geographical</p>				
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		<p>features.</p> <p>Objective: Analyse geographical data related to climate change, pollution, and habitat loss, and explore solutions for environmental sustainability.</p> <p>Example Activity: Read "Here We Are: Notes for Living on Planet Earth" by Oliver Jeffers to understand the interconnectedness of humans and the environment. Discuss the importance of conservation, recycling, and protecting natural resources for future generations.</p>				
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Environmental Stewardship (SUS3)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship
<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on environmental stewardship and sustainability.</p> <p>Example Text/Genre: "The</p>	<p>Number and Place Value:</p> <p>Understanding Environmental Numbers:</p> <p>Explore numerical data related to environmental stewardship, such as population growth of</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Study living organisms, including plants, animals, and humans, to understand their roles in ecosystems and the importance of biodiversity conservation.</p>	<p>Computing:</p> <p>Understanding Environmental Impact of Computing:</p> <p>Learn about the environmental impact of computer hardware production, usage, and disposal,</p>	<p>Exploring Key Periods in English History with a Focus on Environmental Changes and Agricultural Practices:</p> <p>Investigate key periods in English history, including the Mediaeval</p>	<p>Art and Design:</p> <p>Exploring Environmental Stewardship Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to depict environmental</p>	<p>Mental and Emotional Health:</p> <p>Understanding Emotions:</p> <p>Identify and label a range of emotions, including those related to environmental concerns such as sadness over deforestation or joy</p>

<p>Lorax" by Dr. Seuss - a classic children's book that emphasises the importance of environmental conservation and stewardship.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the values and principles of environmental stewardship conveyed through literature.</p> <p>Example Text/Genre: Biographies or autobiographies of environmental activists like Wangari Maathai or Greta Thunberg, examining their commitment to protecting the environment and inspiring change.</p>	<p>endangered species, carbon emissions, or renewable energy production, to develop a deep understanding of numbers and their significance in environmental contexts.</p> <p>Investigate the place value of large numbers representing environmental indicators, such as the number of trees planted in a reforestation project or the volume of water saved through conservation efforts.</p> <p>Addition, Subtraction, Multiplication,</p>	<p>Example Activity: Investigate local ecosystems and identify different species of plants and animals, discussing their interactions and dependencies.</p> <p>Objective: Explore topics such as adaptation and survival strategies in living organisms, emphasising the importance of resilience and biodiversity conservation.</p> <p>Example Activity: Research and present examples of animal adaptations to different</p>	<p>including energy consumption, electronic waste, and resource depletion.</p> <p>Explore strategies for minimising environmental impact in computing, such as energy-efficient hardware design, responsible disposal practices, and sustainable sourcing of materials.</p> <p>Coding for Environmental Stewardship:</p> <p>Develop coding skills through programming activities that promote</p>	<p>period, the Tudor era, and the Industrial Revolution, with a specific focus on environmental changes and agricultural practices.</p> <p>Explore how environmental changes, such as deforestation, soil degradation, and changes in land use, influenced agricultural practices like strip farming, the impact of corn laws on agricultural production and trade, and the enclosure movement.</p>	<p>themes such as conservation, biodiversity, and renewable energy.</p> <p>Experiment with sustainable art materials and techniques, such as recycled paper, natural dyes, and eco-friendly sculpture materials, to promote environmental stewardship.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists who advocate for environmental stewardship through their artwork, such as Andy Goldsworthy</p>	<p>in nature.</p> <p>Practice mindfulness exercises to manage emotional responses to environmental issues, such as deep breathing during moments of eco-anxiety.</p> <p>Stress and Anxiety Management:</p> <p>Develop strategies to cope with environmental stressors, such as creating a calming nature-inspired space for relaxation.</p> <p>Engage in eco-therapy activities like nature walks or gardening to alleviate stress and anxiety.</p> <p>Physical Health</p>
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<p>Objective: Identify and examine literary devices used in texts to convey messages about environmental responsibility.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "The Waste Land" by T.S. Eliot or "The Peace of Wild Things" by Wendell Berry, exploring humanity's relationship with nature and the need for stewardship.</p> <p>Objective: Make inferences about characters' actions and motivations in environmental literature, understanding the importance of responsible behaviour towards the environment.</p>	<p>and Division:</p> <p>Applying Mathematical Operations to Environmental Problems:</p> <p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to environmental stewardship, such as calculating the impact of recycling efforts on reducing waste or determining the efficiency of energy-saving measures.</p> <p>Apply mental and written methods to solve environmental-rel</p>	<p>environments, discussing how human activities can impact these adaptations.</p> <p>Objective: Understand life cycles of various organisms and their significance in maintaining ecosystem balance and sustainability.</p> <p>Example Activity: Observe and document the life cycles of plants, insects, or other organisms in a local environment, noting stages of growth, reproduction, and decay.</p> <p>Objective: Learn about the human</p>	<p>environmental stewardship, such as creating applications to monitor energy usage, manage waste, or promote sustainable lifestyles.</p> <p>Learn about algorithms and data analysis techniques used in environmental monitoring and management, such as analysing climate data or optimising energy efficiency.</p> <p>Digital Citizenship and Ethical Considerations :</p> <p>Understand the</p>	<p>Analyse the relationship between environmental stewardship and agricultural policies throughout English history, considering the balance between economic interests and environmental sustainability.</p> <p>Understanding Environmental Stewardship Across Various Historical Periods and Civilizations:</p> <p>Examine environmental stewardship practices in</p>	<p>or Christo and Jeanne-Claude.</p> <p>Use the inspiration from these artists to develop their own artistic style that reflects their commitment to environmental conservation and sustainability.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by creating music using natural resources like stones, water, and wind.</p>	<p>and Wellbeing:</p> <p>Healthy Lifestyle Choices:</p> <p>Understand the connection between personal health and environmental stewardship, such as the impact of diet choices on sustainability.</p> <p>Adopt eco-friendly lifestyle habits, such as reducing single-use plastics and choosing sustainable food options, to promote personal and environmental health.</p> <p>Personal Hygiene:</p> <p>Recognize the importance of maintaining personal hygiene to prevent pollution</p>
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<p>Example Text/Genre: Short stories or fables that illustrate the consequences of environmental degradation and the benefits of stewardship, such as "The Tortoise and the Hare" or "The Ant and the Grasshopper."</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, promoting the principles of environmental stewardship through various genres.</p> <p>Example Task: Compose a persuasive letter to local businesses or community leaders</p>	<p>ated problems efficiently and accurately, recognizing the role of mathematics in promoting sustainable practices.</p> <p>Fractions:</p> <p>Understanding Fractions in Environmental Contexts:</p> <p>Learn about equivalent fractions in the context of environmental conservation, such as comparing different proportions of recyclable materials in waste streams or fractions representing</p>	<p>body and its interactions with the environment, focusing on health, nutrition, and sustainable living practices.</p> <p>Example Activity: Discuss the importance of a healthy diet, regular exercise, and proper hygiene for personal health and well-being, and explore ways to reduce the ecological footprint through sustainable lifestyle choices.</p> <p>Chemistry:</p> <p>Objective: Learn about the properties of materials and their impact on the environment,</p>	<p>ethical implications of technology use on environmental stewardship, including issues related to data privacy, security, and digital rights.</p> <p>Explore how digital citizenship principles can support environmental stewardship, such as promoting responsible use of technology for environmental advocacy and activism.</p> <p>Design and Technology (D&T):</p> <p>Sustainable Product Design:</p>	<p>Ancient Egypt, including the management of natural resources like the Nile River, sustainable agriculture techniques, and the preservation of wildlife and habitats.</p> <p>Investigate the environmental policies and practices of the Roman Empire, such as the construction of aqueducts, the regulation of mining activities, and the establishment of protected areas like parks and forests.</p>	<p>Experiment with composing music inspired by natural sounds and rhythms to deepen their connection to the environment and promote environmental stewardship.</p> <p>Exploring Music Genres and Instruments Related to Environmental Stewardship:</p> <p>Explore different musical genres rooted in environmental stewardship, such as indigenous music traditions that celebrate nature and promote environmental harmony.</p>	<p>and protect ecosystems, such as proper disposal of waste products.</p> <p>Practise eco-friendly personal hygiene habits, such as using biodegradable toiletries and conserving water during hygiene routines.</p> <p>Social Skills:</p> <p>Communication:</p> <p>Communicate feelings and concerns about environmental issues effectively with peers and adults.</p> <p>Participate in discussions about environmental stewardship, expressing opinions and ideas while</p>
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<p>urging them to adopt eco-friendly practices and reduce their environmental footprint.</p> <p>Objective: Develop narrative writing skills by creating stories that highlight the importance of environmental stewardship and sustainability.</p> <p>Example Task: Write a short story about a group of friends working together to protect a local ecosystem from pollution or habitat destruction.</p> <p>Objective: Structure writing effectively to convey messages of environmental responsibility clearly and persuasively.</p>	<p>portions of habitats protected from development.</p> <p>Explore fractions in relation to sustainable consumption and production, such as understanding proportions of organic versus non-organic agricultural practices or fractions of energy generated from renewable sources.</p> <p>Geometry:</p> <p>Exploring Environmental Shapes and Structures:</p> <p>Investigate the geometry of natural and man-made</p>	<p>emphasising the concept of reduce, reuse, and recycle.</p> <p>Example Activity: Investigate the properties of different materials (e.g., plastic, paper, metal) and discuss their environmental implications, including recycling options and biodegradability.</p> <p>Objective: Understand changes of state and their relevance to energy consumption and conservation.</p> <p>Example Activity: Explore</p>	<p>Engage in designing products with a focus on environmental stewardship, considering factors such as eco-friendly materials, energy efficiency, and end-of-life disposal.</p> <p>Learn about sustainable design principles and techniques, such as cradle-to-cradle design, biomimicry, and circular economy concepts.</p> <p>Environmental Impact Assessment:</p> <p>Conduct</p>	<p>Explore Viking Age societies and their approach to environmental stewardship, including sustainable farming methods, land management practices, and the conservation of natural resources.</p> <p>Analyze Tudor-era shipbuilding and agricultural practices in England, considering their impact on the environment and efforts to balance economic growth with</p>	<p>Learn to play musical instruments associated with indigenous communities and environmental awareness, such as drums, flutes, or string instruments made from sustainable materials.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Environmental Focus:</p> <p>Participate in physical activities that promote environmental stewardship, such as outdoor team-building exercises, nature hikes, or beach</p>	<p>listening respectfully to others.</p> <p>Collaboration:</p> <p>Work collaboratively with peers on environmental projects, such as community clean-ups or school garden initiatives.</p> <p>Respect diverse perspectives within the group and actively contribute to shared goals for environmental conservation.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Differences:</p> <p>Celebrate cultural diversity by learning about traditional environmental practices from</p>
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<p>Example Task: Create an informational booklet or poster about the impact of plastic pollution on marine life, organising information logically and using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to evoke empathy and inspire action towards environmental stewardship.</p> <p>Example Task: Write a descriptive poem celebrating the beauty of nature and advocating for its protection, using vivid imagery and sensory details to engage the reader.</p> <p>Speaking and</p>	<p>structures relevant to environmental stewardship, such as the shapes of leaves optimised for sunlight absorption, the angles of solar panels for maximum efficiency, or the properties of sustainable architecture designs.</p> <p>Explore transformations of shapes in the context of environmental conservation efforts, such as studying the impact of urban development on natural landscapes or the geometry of</p>	<p>the water cycle and discuss its role in maintaining ecosystems and sustaining life on Earth, emphasising the importance of water conservation.</p> <p>Objective: Explore chemical reactions and their impact on the environment, focusing on pollution prevention and waste reduction.</p> <p>Example Activity: Conduct experiments to observe chemical reactions (e.g., rusting, combustion) and discuss their environmental consequences,</p>	<p>environmental impact assessments for design projects, evaluating the lifecycle environmental impacts of products and design decisions.</p> <p>Use tools and methods to quantify environmental impacts, such as life cycle assessment (LCA), carbon footprinting, and environmental risk assessment.</p> <p>Problem-Solving and Critical Thinking:</p> <p>Apply problem-solving skills to identify environmental</p>	<p>environmental preservation.</p> <p>Examine the environmental consequences of the Industrial Revolution, focusing on pollution, resource depletion, and the emergence of early environmental movements advocating for stewardship of natural resources.</p> <p>Investigate environmental stewardship efforts during World War II, such as conservation campaigns, recycling initiatives, and the</p>	<p>clean-ups.</p> <p>Incorporate principles of sustainability and conservation into outdoor adventure activities, fostering a sense of responsibility for protecting the natural environment.</p> <p>Drama:</p> <p>Exploring Environmental Stewardship Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore sustainability issues such as climate change, pollution, or habitat</p>	<p>different cultures around the world.</p> <p>Embrace inclusivity in environmental stewardship efforts, ensuring that everyone feels welcome and valued regardless of background or ability.</p> <p>Health Education:</p> <p>Drugs, Alcohol, and Tobacco Education:</p> <p>Understand the environmental impact of substance use and advocate for eco-friendly alternatives.</p> <p>Learn about the environmental consequences of tobacco production and the importance of protecting</p>
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<p>Listening:</p> <p>Objective: Listen attentively to discussions about environmental stewardship, actively participating and contributing ideas.</p> <p>Example Activity: Engage in a class debate about the role of individuals and communities in promoting environmental sustainability, considering different perspectives and sharing personal experiences.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing ways to become better stewards of the environment.</p>	<p>wildlife corridors for habitat connectivity.</p> <p>Measurement:</p> <p>Calculating Environmental Measures:</p> <p>Measure and calculate environmental quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate units, focusing on applications relevant to environmental stewardship.</p> <p>Apply measurement skills to assess and quantify environmental impacts and benefits, such as</p>	<p>highlighting the importance of using eco-friendly products and reducing chemical pollution.</p> <p>Objective: Learn about elements, compounds, and mixtures, and their applications in sustainable technologies and practices.</p> <p>Example Activity: Investigate renewable energy sources such as solar, wind, and hydroelectric power, and discuss their advantages over fossil fuels in terms of sustainability and environmental</p>	<p>challenges and propose innovative solutions through design and technology.</p> <p>Use critical thinking skills to evaluate the environmental consequences of design choices and make informed decisions to minimise negative impacts and promote sustainability.</p>	<p>repurposing of resources for wartime needs.</p> <p>Exploring Significant Figures, Events, and Inventions in Environmental History:</p> <p>Identify significant figures in environmental stewardship, such as conservationists, scientists, and policymakers, and their contributions to preserving natural resources and promoting sustainable practices.</p> <p>Explore</p>	<p>destruction.</p> <p>Create and perform dramatic scenes or skits that raise awareness about environmental stewardship and inspire action towards protecting the planet and preserving natural resources.</p>	<p>ecosystems from pollution.</p> <p>Promoting Healthy Lifestyles:</p> <p>Advocate for outdoor and nature-based activities as part of a healthy lifestyle, promoting physical activity and connection with the natural world.</p> <p>Educate peers and community members about the benefits of spending time in nature for mental and physical wellbeing.</p> <p>Safety Education:</p> <p>Identify potential environmental hazards in the local community and develop strategies to mitigate risks,</p>
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<p>Example Activity: Work in small groups to brainstorm and plan a school-wide initiative to reduce waste or promote recycling, listening to each other's suggestions and finding common ground.</p>	<p>measuring the area of land restored through reforestation projects, the volume of water conserved through rainwater harvesting, or the mass of pollutants removed through filtration systems.</p> <p>Statistics:</p> <p>Interpreting Environmental Data:</p> <p>Interpret and present environmental data using graphs, charts, and tables, such as visualising trends in air quality levels or comparing energy consumption</p>	<p>impact.</p> <p>Physics:</p> <p>Objective: Investigate forces and their effects on objects and the environment, emphasising the importance of energy efficiency and conservation.</p> <p>Example Activity: Explore different types of forces (e.g., gravity, friction, magnetism) and their role in everyday activities, and discuss ways to minimise energy consumption and waste generation.</p> <p>Objective: Learn about different forms of energy (e.g., kinetic,</p>		<p>important dates and events related to environmental conservation, such as the establishment of national parks, the enactment of environmental protection laws, and the adoption of international agreements on climate change and biodiversity conservation.</p> <p>Investigate the causes and consequences of mineral discoveries throughout history, including their impact on the environment,</p>		<p>such as organising safety patrols for littered areas.</p> <p>Learn about online safety practices related to environmental activism and engage in digital citizenship to promote positive online behaviours.</p> <p>Economic Education:</p> <p>Financial Literacy:</p> <p>Understand the economic implications of environmental stewardship, such as the cost-effectiveness of renewable energy sources.</p> <p>Explore sustainable consumer choices and budgeting</p>
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	<p>patterns in different sectors.</p> <p>Learn about measures of central tendency and dispersion in the context of environmental data analysis, such as analysing average water usage or variability in temperature fluctuations over time.</p>	<p>potential, thermal) and their transformations, focusing on renewable energy sources and their role in sustainable development.</p> <p>Example Activity: Investigate the conversion of energy from one form to another (e.g., mechanical to electrical energy in a wind turbine) and discuss the environmental benefits of using renewable energy sources.</p> <p>Objective: Explore the properties of light, sound, electricity, and magnetism, and their</p>		<p>human societies, and global economies.</p> <p>Analyse the role of inventions and technological advancements in advancing environmental stewardship, such as renewable energy technologies, pollution control measures, and sustainable transportation systems.</p> <p>Reflect on how historical events and figures have influenced present-day efforts to address</p>		<p>strategies that prioritise environmentally friendly products and services.</p> <p>Careers Education:</p> <p>Explore career paths related to environmental stewardship, such as environmental science, conservation, or sustainable agriculture.</p> <p>Develop skills needed for future employment in green industries, such as problem-solving, critical thinking, and environmental literacy.</p> <p>Citizenship:</p> <p>Rights and</p>
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		<p>applications in sustainable technologies.</p> <p>Example Activity: Experiment with solar panels to understand how they convert sunlight into electricity, and discuss their potential applications in reducing dependence on fossil fuels.</p> <p>Objective: Learn about Earth and space phenomena and their relevance to environmental sustainability and stewardship.</p> <p>Example Activity: Discuss the impacts of</p>		<p>environmental challenges, promote sustainability, and practise responsible stewardship of the Earth's resources.</p>		<p>Responsibilities:</p> <p>Advocate for environmental rights, such as access to clean air and water, as fundamental human rights.</p> <p>Take responsibility for personal actions that impact the environment and advocate for policies that promote environmental justice and equity.</p> <p>Democracy and Government:</p> <p>Participate in environmental advocacy efforts, such as writing letters to elected officials or participating in environmental awareness campaigns.</p>
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		<p>human activities on Earth's climate and ecosystems, and explore ways to mitigate these impacts through sustainable practices and policies.</p> <p>Physical Geography:</p> <p>Objective: Understand the importance of protecting and preserving natural landforms and ecosystems.</p> <p>Example Activity: Read "The Salamander Room" by Anne Mazer to explore the interconnectedness of ecosystems and the importance of habitat</p>				<p>Understand the role of citizens in influencing government policies and shaping environmental regulations at the local, national, and global levels.</p> <p>Global Citizenship:</p> <p>Learn about global environmental issues, such as climate change and biodiversity loss, and their interconnectedness with social and economic factors.</p> <p>Advocate for global solutions to environmental challenges, such as supporting international agreements and initiatives aimed at addressing climate</p>
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		<p>conservation. Discuss ways to protect natural areas from human impact and promote biodiversity.</p> <p>Objective: Investigate the impacts of climate change on physical geography and natural environments.</p> <p>Example Activity: Read "The Tantrum That Saved the World" by Megan Herbert to learn about climate change and its effects on ecosystems and wildlife. Discuss actions individuals and communities can take to mitigate climate change and adapt to its</p>				<p>change and promoting sustainable development.</p>
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		<p>impacts.</p> <p>Objective: Explore the role of rivers and mountains in providing essential resources and supporting human activities.</p> <p>Example Activity: Read "The River at Green Knowe" by Lucy M. Boston to follow the adventures of a boy living by a river. Discuss the importance of rivers for freshwater supply, transportation, and recreation, and the need to protect river ecosystems from pollution and habitat</p>				
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		<p>degradation.</p> <p>Human Geography:</p> <p>Objective: Understand the impacts of human activities on the environment and natural resources.</p> <p>Example Activity: Read "The Wump World" by Bill Peet to explore the consequences of pollution and overconsumption on a fictional planet. Discuss sustainable alternatives to resource exploitation and the importance of responsible stewardship.</p> <p>Objective: Investigate</p>				
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		<p>settlement patterns and urbanisation, and their implications for environmental sustainability.</p> <p>Example Activity: Read "The Lorax" by Dr. Seuss to learn about the environmental impacts of urban development and industrialization. Discuss the importance of sustainable urban planning, green infrastructure, and community engagement in creating resilient and livable cities.</p> <p>Objective: Explore economic activities and their environmental consequences,</p>				
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		<p>and promote sustainable practices.</p> <p>Example Activity: Read "The Great Kapok Tree" by Lynne Cherry to understand the economic and ecological value of rainforests. Discuss sustainable forestry practices, eco-tourism, and fair trade as ways to support local economies while protecting the environment.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to identify and analyze environmental</p>				
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		<p>issues and conservation efforts.</p> <p>Example Activity: Use maps and atlases to locate protected areas, wildlife reserves, and conservation projects around the world, and discuss their significance for biodiversity conservation and habitat restoration.</p> <p>Objective: Understand the importance of spatial data and geographic information systems (GIS) in environmental management and planning.</p>				
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		<p>Example Activity: Read "Mapping Penny's World" by Loreen Leedy to learn about the use of maps and technology in exploring and documenting the environment. Discuss how GIS can help monitor environmental changes, plan conservation strategies, and inform decision-making.</p> <p>Objective: Analyse geographical data related to climate change, habitat loss, and pollution, and explore solutions for environmental stewardship.</p> <p>Example</p>				
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		<p>Activity: Read "Here We Are: Notes for Living on Planet Earth" by Oliver Jeffers to understand the interconnectedness of humans and the environment. Discuss the importance of individual and collective action in promoting environmental stewardship and sustainability.</p>				
Waste Management (SUS4)						
English	Mathematics	Science and Science Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship

<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on waste management and environmental conservation.</p> <p>Example Text/Genre: "Here Comes the Garbage Barge!" by Jonah Winter - a picture book based on a true story about waste disposal, prompting discussions about responsible waste management practices.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the causes and effects of waste pollution and the</p>	<p>Number and Place Value:</p> <p>Understanding Waste Quantities:</p> <p>Develop a deep understanding of numbers and their relationships by exploring numerical data related to waste management, such as the volume of waste generated by households, the population's recycling rate, or the capacity of landfill sites.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Calculating Waste</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the impact of waste on living organisms and ecosystems, exploring topics such as adaptation, habitats, and life cycles in the context of waste management.</p> <p>Example Activity: Investigate how waste pollution affects local ecosystems, discussing the adaptation strategies of organisms and the consequences of</p>	<p>Computing:</p> <p>Understanding E-Waste Management:</p> <p>Learn about electronic waste (e-waste) generated from computer hardware and peripherals, including the environmental and health hazards associated with improper disposal.</p> <p>Explore strategies for managing e-waste, such as recycling, refurbishment, and responsible disposal practices, and understand the</p>	<p>Exploring Waste Management and Archaeology in English History:</p> <p>Investigate key periods in English history, such as the Mediaeval period, the Tudor era, and the Industrial Revolution, with a specific focus on waste management practices and their archaeological evidence.</p> <p>Explore archaeological sites and artefacts related to waste</p>	<p>Art and Design:</p> <p>Exploring Waste Management Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to raise awareness about waste management issues such as recycling, composting, and reducing single-use plastics.</p> <p>Experiment with incorporating recycled materials into artworks to demonstrate creative ways of reusing waste materials and</p>	<p>Mental and Emotional Health:</p> <p>Understanding Waste-related Emotions:</p> <p>Identify emotions related to waste management, such as concern for the environment or frustration with littering.</p> <p>Develop coping strategies to manage emotions associated with waste, such as participating in community clean-up activities or advocating for recycling.</p> <p>Stress and Anxiety Management:</p> <p>Learn about the environmental</p>
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<p>importance of waste reduction.</p> <p>Example Text/Genre: Articles from environmental magazines or websites discussing topics such as recycling, composting, and landfill management.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about waste management and environmental sustainability.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "The Three Rs" by Shel Silverstein, exploring the concepts of reduce, reuse, and recycle</p>	<p>Reduction Targets:</p> <p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to waste management, such as calculating the reduction in waste volume achieved through recycling programs or determining the cost savings from waste reduction initiatives.</p> <p>Fractions:</p> <p>Understanding Waste Composition:</p> <p>Learn about equivalent</p>	<p>habitat destruction.</p> <p>Objective: Explore the life cycles of materials and waste products, emphasising the importance of reducing, reusing, and recycling resources.</p> <p>Example Activity: Examine the life cycle of common materials such as paper, plastic, and glass, and discuss strategies for minimising waste generation and promoting recycling.</p> <p>Objective: Learn about the human body's interactions with waste and</p>	<p>role of regulations and policies in e-waste management.</p> <p>Coding for Waste Reduction:</p> <p>Develop coding skills through programming activities aimed at reducing waste generation and promoting recycling and reuse.</p> <p>Create applications or games that raise awareness about waste management practices, encourage recycling behaviour, or facilitate the</p>	<p>management, such as middens (ancient garbage dumps), cesspits, and landfill sites, to understand how past societies disposed of waste and managed environmental sanitation.</p> <p>Analyse the types of waste generated in different historical periods, including organic waste, household refuse, industrial byproducts, and their impact on the environment</p>	<p>promoting environmental sustainability.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study famous artists who address waste management and environmental sustainability in their work, such as Vik Muniz or Chris Jordan.</p> <p>Use inspiration from these artists to develop their own artistic style that reflects their concerns about waste management and encourages positive environmental</p>	<p>impact of waste pollution and its effects on mental wellbeing.</p> <p>Practice stress-relief techniques when dealing with waste-related concerns, such as mindfulness exercises or creative expression through art.</p> <p>Physical Health and Wellbeing:</p> <p>Healthy Lifestyle Choices:</p> <p>Understand the connection between waste management and personal health, such as the importance of proper waste disposal for preventing pollution-related</p>
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<p>through poetic language.</p> <p>Objective: Make inferences about characters' attitudes towards waste management and the environment in literature, understanding the implications of their actions.</p> <p>Example Text/Genre: Short stories or novels that address waste pollution and its impact on communities, such as "Flush" by Carl Hiaasen or "Trash" by Andy Mulligan.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for responsible waste</p>	<p>fractions in the context of waste composition, such as comparing the proportions of different materials in the waste stream (e.g., plastics, paper, glass).</p> <p>Explore fractions in relation to waste reduction strategies, such as understanding the fraction of recyclable materials diverted from landfill or the percentage of compostable waste in organic waste streams.</p> <p>Geometry:</p> <p>Designing Waste</p>	<p>environmental pollutants, focusing on health impacts and the importance of waste reduction.</p> <p>Example Activity: Discuss the effects of pollution on human health, including respiratory problems, water contamination, and food safety issues, and explore ways to minimise exposure to harmful substances.</p> <p>Chemistry:</p> <p>Objective: Understand the properties of materials and their impact on waste</p>	<p>exchange of reusable items within communities.</p> <p>Data Analysis for Waste Tracking:</p> <p>Learn about algorithms and data representation techniques used in waste management, such as data visualisation, statistical analysis, and predictive modelling.</p> <p>Use coding skills to develop applications for tracking and analysing waste generation patterns, identifying areas for improvement,</p>	<p>and public health.</p> <p>Understanding Waste Management Practices Across Various Historical Periods and Civilizations:</p> <p>Examine waste management practices in Ancient Egypt, including the disposal of household waste, the management of human waste through sewage systems, and the reuse of organic materials for agriculture.</p> <p>Investigate</p>	<p>actions.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by creating music using natural materials found in waste, such as buckets, bottles, or recycled percussion instruments.</p> <p>Experiment with composing music inspired by waste management themes, such as songs about recycling or reducing waste, to raise awareness</p>	<p>illnesses.</p> <p>Adopt waste-reducing habits at home and school, such as reducing food waste through meal planning or using reusable water bottles instead of single-use plastics.</p> <p>Personal Hygiene:</p> <p>Recognize the importance of waste management for maintaining cleanliness and hygiene in the environment.</p> <p>Practise proper waste disposal methods to prevent contamination and promote a healthy living environment.</p> <p>Social Skills:</p>
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<p>management practices through various genres.</p> <p>Example Task: Compose a persuasive letter to classmates or school administrators encouraging the implementation of a recycling program or reducing single-use plastics.</p> <p>Objective: Develop narrative writing skills by creating stories that explore the consequences of improper waste disposal and the importance of recycling.</p> <p>Example Task: Write a short story about a character who learns the value of reducing waste and adopts</p>	<p>Containers:</p> <p>Explore shapes and properties of waste containers and recycling bins, considering factors such as volume, capacity, and efficiency of space utilisation.</p> <p>Use geometry concepts to design waste collection systems that optimise space and encourage proper waste sorting and disposal practices.</p> <p>Measurement:</p> <p>Calculating Waste Volumes and Capacities:</p> <p>Measure and calculate the</p>	<p>management practices, including recycling and disposal.</p> <p>Example Activity: Investigate the properties of different materials (e.g., biodegradable vs. non-biodegradable) and discuss their suitability for recycling or composting.</p> <p>Objective: Explore changes of state in waste materials and their implications for waste management and environmental sustainability.</p> <p>Example Activity:</p>	<p>and optimising waste management processes.</p> <p>Design and Technology (D&T):</p> <p>Sustainable Product Design for Waste Reduction:</p> <p>Engage in designing products with a focus on waste reduction and circular economy principles, considering factors such as material selection, durability, and end-of-life recyclability.</p> <p>Explore design strategies for minimising</p>	<p>waste disposal methods in the Roman Empire, such as public toilets, sewage systems, and the regulation of waste collection and disposal in urban areas.</p> <p>Explore Viking Age societies and their waste management practices, including the use of middens for organic waste disposal, recycling of materials, and the disposal of human waste.</p> <p>Analyse waste management strategies in Tudor England, including the</p>	<p>and promote sustainable behaviours.</p> <p>Exploring Music Genres and Instruments Related to Waste Management:</p> <p>Explore different musical genres that address waste management and environmental issues, such as protest songs or music from cultures that prioritise sustainability, like indigenous communities.</p> <p>Learn to play musical instruments made from recycled materials or sustainable sources, such as</p>	<p>Communication:</p> <p>Communicate waste-related concerns and ideas effectively with peers, teachers, and community members.</p> <p>Engage in discussions about waste management practices, expressing opinions while actively listening to others' perspectives.</p> <p>Collaboration:</p> <p>Work collaboratively with classmates on waste reduction initiatives, such as organising recycling drives or implementing composting programs.</p> <p>Respect diverse</p>
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<p>sustainable habits, inspiring others to do the same.</p> <p>Objective: Structure writing effectively to convey messages about waste management clearly and persuasively.</p> <p>Example Task: Create an informative poster or infographic explaining the process of recycling and the environmental benefits of waste reduction, using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to raise awareness of waste pollution and inspire action towards waste management.</p>	<p>volume and capacity of waste containers, landfill sites, and recycling facilities using appropriate units, such as cubic metres or litres.</p> <p>Apply measurement skills to estimate and quantify waste volumes generated by households, businesses, or communities over time.</p> <p>Statistics:</p> <p>Analysing Waste Data:</p> <p>Interpret and present data on waste generation, recycling rates, and landfill</p>	<p>Observe the melting and freezing of different substances, discussing how temperature changes affect waste treatment processes such as incineration or composting.</p> <p>Objective: Learn about chemical reactions involved in waste treatment and disposal methods, emphasising environmentally friendly approaches.</p> <p>Example Activity: Investigate the decomposition of organic waste through composting,</p>	<p>packaging waste, reducing product obsolescence, and promoting repairability and upgradability.</p> <p>Waste Audit and Reduction Strategies:</p> <p>Conduct waste audits to assess the types and quantities of waste generated in design and technology projects, including both material waste and digital waste.</p> <p>Develop waste reduction strategies, such as material reuse, recycling, composting, and waste</p>	<p>disposal of household waste, recycling practices, and efforts to regulate pollution from industries and urban areas.</p> <p>Examine the environmental impact of waste generation during the Industrial Revolution, including pollution from factories, urban overcrowding, and the development of early waste disposal technologies.</p> <p>Investigate waste</p>	<p>bamboo flutes or guitars made from reclaimed wood.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Waste Management Focus:</p> <p>Participate in physical activities that promote waste management practices, such as litter clean-ups, recycling sorting games, or composting demonstrations.</p> <p>Incorporate principles of waste reduction and environmental stewardship into team-building</p>	<p>viewpoints on waste management within the group and collaborate to find solutions that benefit the community.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Differences:</p> <p>Recognize cultural and social differences in waste management practices and attitudes.</p> <p>Appreciate the diversity of perspectives on waste management and learn from different cultural approaches to environmental stewardship.</p>
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<p>Example Task: Write a descriptive poem about a polluted beach or litter-strewn park, emphasizing the need for conservation and responsible waste disposal practices.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about waste management, actively participating and contributing ideas for solutions.</p> <p>Example Activity: Engage in a class debate about the best ways to reduce household waste, considering factors such as recycling, composting, and</p>	<p>capacities using graphs, charts, and tables.</p> <p>Learn about measures of central tendency and dispersion in the context of waste data analysis, such as analysing the average amount of waste produced per capita or the variability in recycling rates across different regions.</p>	<p>discussing the role of microorganisms in breaking down organic matter into nutrient-rich soil.</p> <p>Physics:</p> <p>Objective: Investigate forces and energy involved in waste disposal processes, such as landfill management and waste incineration.</p> <p>Example Activity: Explore the physics of landfill compaction and discuss how gravity and mechanical forces are used to reduce waste volume and</p>	<p>minimization techniques, and implement them in design projects.</p> <p>Problem-Solving and Critical Thinking:</p> <p>Apply problem-solving skills to identify waste management challenges and propose innovative solutions through design and technology.</p> <p>Use critical thinking skills to evaluate the environmental and social impacts of waste management practices and make informed decisions to</p>	<p>management efforts during World War II, such as recycling campaigns, rationing of resources, and the reuse of materials for wartime production.</p> <p>Exploring Significant Figures, Events, and Inventions in Waste Management History:</p> <p>Identify significant figures in waste management history, such as sanitation engineers, public health advocates, and</p>	<p>exercises and outdoor adventure activities, fostering a sense of responsibility for waste management and environmental protection.</p> <p>Drama:</p> <p>Exploring Waste Management Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore waste management issues such as landfill pollution, plastic waste, or electronic waste.</p> <p>Create and perform dramatic scenes or skits that raise</p>	<p>Health Education:</p> <p>Drugs, Alcohol, and Tobacco Education:</p> <p>Understand the environmental impact of waste from tobacco products, plastic packaging, and other consumables.</p> <p>Advocate for waste reduction strategies that promote healthier lifestyles and reduce environmental pollution.</p> <p>Healthy Lifestyles:</p> <p>Promote outdoor activities and nature-based experiences as alternatives to wasteful or sedentary habits.</p>
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<p>consumer behaviour.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing strategies for promoting waste reduction and recycling.</p> <p>Example Activity: Work in small groups to plan and present a skit or role-play about the importance of proper waste management, highlighting practical tips for reducing waste in everyday life.</p>		<p>minimise environmental impact.</p> <p>Objective: Understand the properties of light, sound, and electricity in waste management technologies, such as recycling sorting facilities and waste-to-energy plants.</p> <p>Example Activity: Visit a recycling facility or waste-to-energy plant to observe how light sensors, conveyor belts, and electromagnets are used to separate and process different</p>	<p>minimise waste generation and promote sustainability.</p>	<p>policymakers, and their contributions to improving waste disposal practices and environmental sanitation.</p> <p>Explore important dates and events related to waste management, such as the development of sewage systems, the invention of waste disposal technologies, and the enactment of environmental protection laws.</p> <p>Investigate the causes and consequences of mineral</p>	<p>awareness about waste management challenges and encourage proactive solutions, such as recycling programs or community clean-up initiatives.</p>	<p>Educate peers and community members about the health benefits of spending time outdoors and engaging in eco-friendly activities.</p> <p>Safety Education:</p> <p>Identify potential hazards associated with waste, such as sharp objects or toxic materials, and learn how to handle them safely.</p> <p>Practice safety protocols for waste disposal and recycling, including proper use of protective equipment and handling procedures.</p> <p>Economic</p>
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		<p>types of waste materials.</p> <p>Objective: Learn about Earth and space phenomena related to waste management, such as global waste distribution and environmental pollution.</p> <p>Example Activity: Investigate the sources and impacts of marine debris and discuss ways to prevent ocean pollution through waste reduction and recycling initiatives.</p> <p>Physical Geography:</p> <p>Objective:</p>		<p>discoveries throughout history, including their impact on waste generation, resource extraction, and environmental degradation.</p> <p>Analyse the role of inventions and technological advancements in advancing waste management practices, such as sanitation systems, waste-to-energy technologies, and recycling processes.</p> <p>Reflect on how lessons from the past can inform</p>		<p>Education:</p> <p>Financial Literacy:</p> <p>Understand the economic costs of waste management, including waste collection, disposal, and environmental cleanup.</p> <p>Explore sustainable consumer choices that reduce waste and save money, such as buying products with minimal packaging or repairing items instead of replacing them.</p> <p>Careers Education:</p> <p>Different Careers:</p> <p>Explore careers in waste management and environmental conservation, such</p>
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		<p>Understand the environmental impact of waste disposal on landforms and ecosystems.</p> <p>Example Activity: Read "Michael Recycle" by Ellie Bethel to explore the concept of recycling and its importance in reducing waste and protecting the environment. Discuss how improper waste disposal can lead to pollution of land, water, and air.</p> <p>Objective: Investigate the connection between waste management and climate change.</p> <p>Example</p>		<p>present-day efforts to address waste management challenges, promote recycling and resource recovery, and mitigate environmental pollution and public health risks.</p>		<p>as waste management specialists, environmental engineers, or sustainability consultants.</p> <p>Develop skills needed for future employment in waste-related fields, such as problem-solving, critical thinking, and teamwork.</p> <p>Citizenship:</p> <p>Rights and Responsibilities:</p> <p>Recognize the right to a clean and healthy environment as a fundamental human right.</p> <p>Understand individual and collective responsibilities for</p>
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		<p>Activity: Read "Compost Stew: An A to Z Recipe for the Earth" by Mary McKenna Siddals to learn about composting and organic waste management. Discuss how reducing methane emissions from landfills and promoting composting can help mitigate climate change.</p> <p>Objective: Explore the impact of waste on rivers and oceans, and the importance of marine conservation.</p> <p>Example Activity: Read "The Adventures</p>				<p>waste management and environmental stewardship in the local community and beyond.</p> <p>Democracy and Government:</p> <p>Advocate for policies and regulations that promote responsible waste management practices and environmental protection.</p> <p>Participate in civic engagement activities, such as contacting elected officials or participating in community clean-up events, to address waste-related issues.</p> <p>Global Citizenship:</p>
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		<p>of a Plastic Bottle: A Story About Recycling" by Alison Inches to follow the journey of a plastic bottle from use to disposal. Discuss the consequences of plastic pollution on marine life and ecosystems, and the importance of reducing single-use plastics.</p> <p>Human Geography:</p> <p>Objective: Understand the social, economic, and environmental aspects of waste generation and disposal.</p> <p>Example Activity: Read</p>				<p>Learn about global waste management challenges and their impact on human health and the environment.</p> <p>Advocate for global cooperation and solutions to address waste pollution, such as international agreements on recycling and waste reduction initiatives.</p>
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		<p>"Trash!" by Sharon Darrow to explore the lives of people living near a landfill and the challenges they face. Discuss the importance of waste reduction, recycling, and waste-to-energy technologies in addressing these challenges.</p> <p>Objective: Investigate the role of communities and governments in waste management and recycling initiatives.</p> <p>Example Activity: Read "The Day the Crayons Quit" by Drew Daywalt to understand the</p>				
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		<p>concept of resource reuse and recycling. Discuss how individuals, schools, and local authorities can work together to reduce waste and promote recycling.</p> <p>Objective: Explore global issues such as waste trade, electronic waste, and plastic pollution.</p> <p>Example Activity: Read "One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia" by Miranda Paul to learn about community-led recycling initiatives in</p>				
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		<p>Africa. Discuss the global impact of plastic pollution and the importance of international cooperation in addressing the issue.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to identify waste disposal sites and recycling facilities.</p> <p>Example Activity: Use maps and atlases to locate landfills, recycling centres, and waste-to-energy plants in the local area, and discuss their proximity to communities and</p>				
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		<p>environmental considerations.</p> <p>Objective: Understand the spatial distribution of waste generation and recycling rates.</p> <p>Example Activity: Analyse maps and charts showing waste generation and recycling rates in different regions, and discuss factors influencing these patterns such as population density, urbanisation, and economic development.</p> <p>Objective: Analyse geographical data related to waste management,</p>				
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		<p>recycling rates, and environmental indicators.</p> <p>Activity: Collect and analyse data on waste generation, recycling rates, and landfill capacity in the local area, and use GIS tools to create maps and visualisations to communicate findings and propose solutions.</p>				
Energy Conservation (SUS5)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE)

						Citizenship
<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on energy conservation and sustainability.</p> <p>Example Text/Genre: "The Magic School Bus and the Electric Field Trip" by Joanna Cole - a children's book that educates about energy sources and conservation through an engaging story.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the importance of energy conservation for environmental protection and</p>	<p>Number and Place Value:</p> <p>Understanding Energy Quantities:</p> <p>Develop a deep understanding of numbers and their relationships by exploring numerical data related to energy conservation, such as energy consumption rates, renewable energy capacities, or carbon emissions.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Calculating</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the importance of energy conservation for living organisms and ecosystems, exploring topics such as adaptation and habitats in the context of energy efficiency.</p> <p>Example Activity: Investigate how animals adapt their behaviour to conserve energy during periods of scarcity, such as hibernation or torpor.</p>	<p>Computing:</p> <p>Understanding Energy Consumption of Devices:</p> <p>Learn about the energy consumption of different computer hardware components, including processors, graphics cards, and peripherals, and how they contribute to overall energy usage.</p> <p>Explore methods for measuring and monitoring energy usage, such as software</p>	<p>Exploring Energy Conservation and Archaeology in English History:</p> <p>Investigate key periods in English history, such as the Mediaeval period, the Tudor era, and the Industrial Revolution, with a specific focus on energy conservation practices and their archaeological evidence.</p> <p>Explore archaeological sites and</p>	<p>Art and Design:</p> <p>Exploring Energy Conservation Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to visually represent energy conservation practices such as renewable energy sources, energy-efficient technologies, and reducing carbon emissions.</p> <p>Experiment with artistic materials and techniques that convey the importance of</p>	<p>Mental and Emotional Health:</p> <p>Understanding Energy-related Emotions:</p> <p>Identify emotions related to energy conservation, such as concern for the environment or frustration with energy waste.</p> <p>Develop coping strategies to manage emotions associated with energy usage, such as practising mindfulness or engaging in activities that promote relaxation and stress reduction.</p> <p>Stress and Anxiety</p>

<p>resource sustainability.</p> <p>Example Text/Genre: Articles from science magazines or websites discussing renewable energy sources like solar power and wind energy, and their role in reducing carbon emissions.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about energy conservation and its impact on society.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "The Sun's Energy" by Amanda Gorman, exploring the beauty and significance of renewable energy</p>	<p>Energy Savings:</p> <p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to energy conservation, such as calculating the savings in energy consumption achieved through energy-efficient appliances or renewable energy installations.</p> <p>Apply mental and written methods to solve energy-related problems efficiently and accurately, recognizing the importance of numerical literacy</p>	<p>Objective: Explore the energy requirements of living organisms and their interactions with the environment, focusing on sustainable practices for maintaining energy balance.</p> <p>Example Activity: Discuss the role of photosynthesis in capturing and storing solar energy, and explore how energy flows through food chains and ecosystems.</p> <p>Chemistry:</p> <p>Objective: Learn about the properties of</p>	<p>utilities and built-in system tools, and understand the importance of energy efficiency in reducing environmental impact.</p> <p>Coding for Energy-Efficient Software:</p> <p>Develop coding skills through programming activities aimed at optimising software for energy efficiency.</p> <p>Implement algorithms and programming techniques that minimise computational resources, reduce power consumption,</p>	<p>artefacts related to energy conservation, such as early forms of insulation, efficient heating systems, and renewable energy technologies, to understand how past societies utilised and preserved energy resources.</p> <p>Analyse the impact of energy conservation on the development of urban centres, industrial production, and the sustainability of</p>	<p>energy conservation, such as using light and shadow effects to highlight energy-saving behaviours or creating artworks that promote sustainable transportation methods.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists who address energy conservation and environmental sustainability in their work, such as Olafur Eliasson or Chris Jordan.</p> <p>Use inspiration from these artists to develop their</p>	<p>Management:</p> <p>Learn about the environmental impact of energy consumption and its effects on mental wellbeing.</p> <p>Practice stress-relief techniques when dealing with energy-related concerns, such as engaging in outdoor activities or creative expression through art or music.</p> <p>Physical Health and Wellbeing:</p> <p>Healthy Lifestyle Choices:</p> <p>Understand the connection between energy conservation and personal health, such as the importance of reducing energy</p>
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<p>sources.</p> <p>Objective: Make inferences about characters' actions and attitudes towards energy conservation in literature, understanding the benefits of sustainable energy practices.</p> <p>Example Text/Genre: Short stories or novels that address energy conservation and its effects on communities, such as "The Boy Who Harnessed the Wind" by William Kamkwamba.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for</p>	<p>in promoting sustainable energy practices.</p> <p>Fractions:</p> <p>Understanding Energy Efficiency:</p> <p>Learn about equivalent fractions in the context of energy efficiency, such as comparing different proportions of energy-efficient versus conventional lighting technologies.</p> <p>Explore fractions in relation to energy conservation strategies, such as understanding the fraction of energy saved</p>	<p>materials and their impact on energy conservation, including insulation and heat transfer.</p> <p>Example Activity: Investigate the thermal conductivity of different materials and discuss their suitability for insulating buildings and conserving heat energy.</p> <p>Objective: Understand changes of state in materials and their implications for energy usage and conservation.</p> <p>Example</p>	<p>and promote energy conservation in software applications and systems.</p> <p>Digital Citizenship and Ethical Considerations :</p> <p>Learn about digital citizenship and ethical considerations related to energy use in computing, including the environmental impact of data centres, cloud computing, and internet infrastructure.</p> <p>Explore ways to promote responsible energy use in</p>	<p>natural resources in different historical periods.</p> <p>Understanding Energy Conservation Practices Across Various Historical Periods and Civilizations:</p> <p>Examine energy conservation practices in Ancient Egypt, including the use of passive solar design in architecture, efficient irrigation techniques, and the development of renewable energy sources</p>	<p>own artistic style that raises awareness about energy conservation and encourages positive environmental actions.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating sounds of natural resources like wind, water, and sunlight into musical compositions and improvisations.</p> <p>Experiment with</p>	<p>consumption for mitigating climate change and improving air quality.</p> <p>Adopt energy-saving habits at home and school, such as turning off lights when not in use, unplugging electronics, and using energy-efficient appliances.</p> <p>Personal Hygiene:</p> <p>Recognize the importance of energy conservation for maintaining a clean and healthy environment.</p> <p>Practice energy-efficient habits in personal hygiene routines, such as taking shorter showers and</p>
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<p>energy conservation through various genres.</p> <p>Example Task: Compose a persuasive letter to local authorities or school administrators proposing the implementation of energy-saving initiatives, such as installing solar panels or promoting energy-efficient appliances.</p> <p>Objective: Develop narrative writing skills by creating stories that highlight the importance of energy conservation and sustainable living.</p> <p>Example Task: Write a short story about a character who invents a device to harness</p>	<p>through insulation upgrades or the percentage of renewable energy in a household's energy mix.</p> <p>Geometry:</p> <p>Designing Energy-Efficient Spaces:</p> <p>Explore shapes and properties of buildings and structures, considering factors such as insulation, orientation, and window placement to optimise energy efficiency.</p> <p>Use geometry concepts to design energy-efficient</p>	<p>Activity: Explore the energy changes involved in phase transitions (e.g., melting, freezing) and discuss ways to minimise energy consumption through efficient heating and cooling systems.</p> <p>Objective: Learn about chemical reactions involved in energy production and consumption, focusing on renewable and non-renewable energy sources.</p> <p>Example Activity: Investigate the combustion of fossil fuels and discuss the</p>	<p>digital technology, such as through energy-efficient programming practices, power management features, and sustainable data storage solutions.</p> <p>Design and Technology (D&T):</p> <p>Designing Energy-Efficient Products:</p> <p>Engage in designing products with a focus on energy efficiency and sustainable design principles, considering factors such as</p>	<p>such as wind and water power.</p> <p>Investigate energy conservation efforts in the Roman Empire, such as the construction of aqueducts, the use of thermal baths, and the implementation of energy-efficient building materials and techniques.</p> <p>Explore Viking Age societies and their energy conservation practices, including the use of wood and peat for heating, the</p>	<p>creating music inspired by energy conservation themes, such as compositions that evoke the tranquillity of renewable energy sources like wind turbines or the rhythmic patterns of solar energy production.</p> <p>Exploring Music Genres and Instruments Related to Energy Conservation:</p> <p>Explore different musical genres that advocate for energy conservation and environmental sustainability, such as eco-conscious folk music or compositions</p>	<p>using cold water when possible.</p> <p>Social Skills:</p> <p>Communication:</p> <p>Communicate energy-saving tips and ideas effectively with peers, family members, and community members.</p> <p>Engage in discussions about energy conservation practices, expressing opinions while actively listening to others' perspectives.</p> <p>Collaboration:</p> <p>Work collaboratively with classmates on energy-saving initiatives, such as organising energy audits or</p>
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<p>renewable energy and its positive impact on their community.</p> <p>Objective: Structure writing effectively to convey messages about energy conservation clearly and persuasively.</p> <p>Example Task: Create an informational brochure or poster about the benefits of energy-saving practices, organising information logically and using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to raise awareness of energy conservation and inspire action towards sustainable living.</p>	<p>systems, such as solar panel arrays or wind turbine placements, that maximise renewable energy generation potential.</p> <p>Measurement:</p> <p>Calculating Energy Metrics:</p> <p>Measure and calculate energy-related quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate units, focusing on applications relevant to energy conservation.</p> <p>Apply</p>	<p>environmental impacts of carbon emissions, emphasising the importance of transitioning to cleaner energy alternatives.</p> <p>Physics:</p> <p>Objective: Investigate forces and energy transformations in everyday activities, emphasising the importance of energy conservation principles.</p> <p>Example Activity: Explore simple machines such as levers and pulleys and discuss how they can be used to reduce the amount of energy required to</p>	<p>power consumption, renewable energy sources, and lifecycle energy use.</p> <p>Explore design strategies for optimising energy efficiency in electronic devices, such as low-power components, energy-saving features, and intelligent power management systems.</p> <p>Prototyping and Testing for Energy Conservation:</p> <p>Use prototyping tools and techniques to create models and prototypes of</p>	<p>development of efficient sailing vessels, and the conservation of natural resources for long-term sustainability.</p> <p>Analyse energy conservation strategies in Tudor England, including the regulation of fuel consumption, the promotion of energy-efficient technologies, and efforts to mitigate environmental pollution from energy production.</p> <p>Examine the energy</p>	<p>inspired by the sounds of nature.</p> <p>Learn to play musical instruments commonly associated with energy conservation efforts, such as acoustic guitars or hand percussion instruments made from sustainable materials.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Energy Conservation Focus:</p> <p>Participate in physical activities that promote energy conservation</p>	<p>implementing energy-efficient technologies.</p> <p>Respect diverse viewpoints on energy conservation within the group and collaborate to find solutions that benefit the community.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Differences:</p> <p>Recognize cultural and social differences in energy consumption patterns and attitudes.</p> <p>Appreciate the diversity of perspectives on energy conservation and learn from different cultural</p>
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<p>Example Task: Write a descriptive poem about the power of renewable energy sources like the sun or wind, using imagery and metaphor to convey their importance in preserving the planet.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about energy conservation, actively participating and contributing ideas for reducing energy consumption.</p> <p>Example Activity: Engage in a class debate about the advantages and disadvantages of different energy</p>	<p>measurement skills to assess and quantify energy consumption, renewable energy generation, and energy savings in various contexts, such as households, communities, or industries.</p> <p>Statistics:</p> <p>Analysing Energy Data:</p> <p>Interpret and present data on energy consumption, renewable energy production, and energy efficiency using graphs, charts, and tables.</p>	<p>perform work.</p> <p>Objective: Understand the properties of light, sound, and electricity and their role in energy conservation technologies.</p> <p>Example Activity: Investigate energy-efficient lighting options such as LEDs and discuss their advantages over traditional incandescent bulbs in terms of energy consumption and longevity.</p> <p>Objective: Learn about Earth's energy resources and their sustainable use,</p>	<p>energy-efficient products, including circuit design, electronic components, and user interfaces.</p> <p>Conduct tests and evaluations to measure the energy consumption and performance of prototypes, identify areas for improvement, and refine designs to maximise energy conservation.</p> <p>Problem-Solving and Critical Thinking:</p> <p>Apply problem-solving skills to identify energy conservation</p>	<p>developments of the Industrial Revolution, including the exploitation of coal and steam power, the invention of energy-saving machines and processes, and the environmental consequences of rapid industrialization.</p> <p>Investigate energy conservation efforts during World War II, such as rationing of fuel and electricity, the development of alternative energy sources, and the promotion</p>	<p>principles, such as low-impact exercises, energy-efficient sports, or eco-friendly outdoor adventures.</p> <p>Incorporate principles of energy conservation into team-building exercises and outdoor activities, encouraging participants to minimise energy usage and embrace sustainable practices.</p> <p>Drama:</p> <p>Exploring Energy Conservation Through Drama:</p> <p>Use drama</p>	<p>approaches to sustainable living.</p> <p>Health Education:</p> <p>Drugs, Alcohol, and Tobacco Education:</p> <p>Understand the environmental impact of energy sources, such as fossil fuels, and their contribution to air and water pollution.</p> <p>Advocate for renewable energy sources and policies that promote clean energy alternatives.</p> <p>Healthy Lifestyles:</p> <p>Promote outdoor activities and nature-based experiences as alternatives to energy-intensive or</p>
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<p>sources, considering factors such as environmental impact and cost-effectiveness.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing strategies for promoting energy conservation at home and in the community.</p> <p>Example Activity: Work in small groups to brainstorm and present ideas for energy-saving initiatives, such as organising a school-wide energy audit or starting a campaign to encourage bike commuting.</p>	<p>Learn about measures of central tendency and dispersion in the context of energy data analysis, such as analysing average energy consumption per capita or the variability in renewable energy output over time.</p>	<p>including renewable energy sources such as solar, wind, and hydroelectric power.</p> <p>Example Activity: Explore the principles of solar energy capture and discuss the potential for solar panels to provide clean, renewable energy for homes and communities.</p> <p>Objective: Understand the role of energy conservation in mitigating climate change and reducing environmental impacts.</p> <p>Example Activity:</p>	<p>challenges in product design and development.</p> <p>Use critical thinking skills to evaluate the environmental and economic impacts of energy-efficient design choices and make informed decisions to optimize energy use and promote sustainability.</p>	<p>of energy-efficient practices for wartime production.</p> <p>Exploring Significant Figures, Events, and Inventions in Energy Conservation History:</p> <p>Identify significant figures in energy conservation history, such as inventors, engineers, and environmentalists, and their contributions to improving energy efficiency and promoting sustainable energy</p>	<p>techniques such as role-playing, improvisation, and storytelling to explore energy conservation issues such as energy waste, renewable energy solutions, and the impact of energy consumption on the environment.</p> <p>Create and perform dramatic scenes or skits that raise awareness about the importance of energy conservation and inspire individuals to adopt energy-saving behaviours in their daily lives.</p>	<p>sedentary habits.</p> <p>Educate peers and community members about the health benefits of reducing energy consumption and living sustainably.</p> <p>Safety Education:</p> <p>Identify potential hazards associated with energy usage, such as electrical accidents or indoor air pollution.</p> <p>Practice safety protocols for energy-efficient practices, including proper installation and maintenance of energy-saving devices.</p> <p>Economic Education:</p>
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		<p>Investigate the carbon footprint of different energy sources and discuss strategies for reducing energy consumption and promoting energy efficiency in daily life.</p> <p>Physical Geography:</p> <p>Objective: Understand the connection between energy consumption and environmental impacts on landforms and ecosystems.</p> <p>Example Activity: Read "The Magic School Bus and the Electric Field Trip" by Joanna Cole to explore</p>		<p>practices.</p> <p>Explore important dates and events related to energy conservation, such as the invention of energy-saving technologies, the establishment of energy</p> <p>Explore important dates and events related to energy conservation, such as the invention of energy-saving technologies, the establishment of energy efficiency standards, and the adoption of</p>		<p>Financial Literacy:</p> <p>Understand the economic costs of energy consumption, including utility bills and environmental externalities.</p> <p>Explore energy-saving strategies that can lead to cost savings, such as investing in energy-efficient home upgrades or transportation alternatives.</p> <p>Careers Education:</p> <p>Different Careers:</p> <p>Explore careers in renewable energy, energy efficiency, and environmental conservation.</p> <p>Develop skills</p>
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		<p>the concept of electricity and its environmental implications. Discuss the importance of energy conservation in reducing the need for fossil fuel extraction and minimising habitat destruction.</p> <p>Objective: Investigate the impact of energy production on climate change and natural resources.</p> <p>Example Activity: Read "The Great Kapok Tree" by Lynne Cherry to understand the importance of rainforests in regulating climate</p>		<p>renewable energy policies.</p> <p>Investigate the causes and consequences of energy discoveries throughout history, including their impact on economic development</p>		<p>needed for future employment in energy-related fields, such as problem-solving, critical thinking, and innovation.</p> <p>Citizenship:</p> <p>Rights and Responsibilities:</p> <p>Recognize the right to a clean and sustainable environment as a fundamental human right.</p> <p>Understand individual and collective responsibilities for energy conservation and environmental stewardship in the local community and beyond.</p> <p>Democracy and Government:</p>
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		<p>and supporting biodiversity. Discuss the environmental consequences of fossil fuel combustion and the benefits of renewable energy sources.</p> <p>Objective: Explore the role of rivers and mountains in generating renewable energy.</p> <p>Example Activity: Read "The Boy Who Harnessed the Wind" by William Kamkwamba to learn about a young inventor's journey to bring electricity to his village using wind power. Discuss the potential of</p>				<p>Advocate for policies and regulations that promote clean energy initiatives and energy efficiency standards.</p> <p>Participate in civic engagement activities, such as contacting elected officials or participating in energy conservation campaigns, to address energy-related issues.</p> <p>Global Citizenship:</p> <p>Learn about global energy challenges, such as access to energy resources and energy poverty.</p> <p>Advocate for global cooperation and solutions to address</p>
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		<p>hydropower and wind energy in providing clean and sustainable electricity to communities.</p> <p>Human Geography:</p> <p>Objective: Understand the social and economic implications of energy consumption and access.</p> <p>Example Activity: Read "One Hen: How One Small Loan Made a Big Difference" by Katie Smith Milway to learn about the impact of renewable energy initiatives on poverty alleviation and community</p>				<p>energy inequality and promote sustainable energy access for all.</p>
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		<p>development. Discuss the importance of access to affordable and clean energy for sustainable development.</p> <p>Objective: Investigate the relationship between energy consumption and urbanisation.</p> <p>Example Activity: Read "The Curious Garden" by Peter Brown to explore the transformation of urban landscapes into green spaces. Discuss the role of green infrastructure and energy-efficient buildings in reducing energy consumption and</p>				
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		<p>enhancing urban livability.</p> <p>Objective: Explore global issues such as energy inequality and energy poverty.</p> <p>Example Activity: Read "Lights Out: A Cyberattack, a Nation Unprepared, Surviving the Aftermath" by Ted Koppel to understand the vulnerabilities of energy infrastructure and the importance of energy resilience. Discuss strategies for ensuring equitable access to reliable and clean energy for</p>				
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		<p>all communities.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to identify sources of energy production and consumption.</p> <p>Example Activity: Use maps and satellite imagery to locate power plants, renewable energy installations, and energy-intensive industries in the local area, and discuss their environmental and social impacts.</p> <p>Objective: Understand the spatial</p>				
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		<p>distribution of energy resources and energy-related infrastructure.</p> <p>Example Activity: Analyse maps showing the distribution of fossil fuel reserves, renewable energy potential, and energy transmission networks, and discuss how geography influences energy production and distribution patterns.</p> <p>Objective: Analyse geographical data related to energy consumption, greenhouse gas emissions, and energy efficiency</p>				
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		<p>measures.</p> <p>Example Activity: Collect and analyse data on household energy use, transportation patterns, and energy-saving initiatives in the local area, and use GIS tools to create maps and visualisations to communicate findings and propose solutions.</p>				
Biodiversity and Ecosystems (SUS6)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music/ Dance/ Drama	Personal, Social, Health and Economic Education (PSHE) Citizenship

<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on biodiversity and ecosystems.</p> <p>Example Text/Genre: "The Hidden Life of Trees" by Peter Wohlleben - a non-fiction book that explores the interconnectedness of forests and the diverse life forms within them.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the importance of biodiversity for ecosystem health and balance.</p>	<p>Number and Place Value:</p> <p>Understanding Ecosystem Numbers:</p> <p>Develop a deep understanding of numbers and their relationships by exploring numerical data related to biodiversity and ecosystems, such as species populations, habitat sizes, or ecosystem services.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Calculating Ecosystem Changes:</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the concept of biodiversity and its importance in maintaining healthy ecosystems.</p> <p>Example Activity: Explore local habitats such as woodlands, ponds, or meadows to observe and identify different species of plants and animals, discussing their roles within the ecosystem.</p> <p>Objective: Explore the adaptations of</p>	<p>Computing:</p> <p>Understanding Biodiversity Data Representation :</p> <p>Learn about the role of computer algorithms and data representation in modelling biodiversity and ecosystems.</p> <p>Explore how data structures such as arrays, lists, and trees can be used to store and analyse information about species diversity, population dynamics, and ecological</p>	<p>Exploring Biodiversity and Ecosystems in English History with Archaeological Evidence:</p> <p>Investigate key periods in English history, such as the Mediaeval period, Tudor era, and Industrial Revolution, with a focus on biodiversity and ecosystems, supported by archaeological evidence.</p> <p>Explore archaeological sites and artefacts related to</p>	<p>Art and Design:</p> <p>Exploring Biodiversity and Ecosystems Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to depict diverse ecosystems and showcase the richness of biodiversity, including various plant and animal species.</p> <p>Experiment with artistic materials and techniques that capture the interconnectedness of ecosystems, such as using mixed media to</p>	<p>Mental and Emotional Health:</p> <p>Understanding Biodiversity's Role in Mental Wellbeing:</p> <p>Learn about the mental health benefits of connecting with nature and biodiversity, such as reduced stress and improved mood.</p> <p>Develop strategies to manage emotions by spending time in natural environments and observing biodiversity.</p> <p>Stress Reduction Through Nature Exploration:</p> <p>Engage in activities that promote</p>
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<p>Example Text/Genre: Articles from wildlife magazines or websites discussing the threats to biodiversity and the importance of conservation efforts.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about biodiversity and ecosystems.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "The Peace of Wild Things" by Wendell Berry, celebrating the beauty and importance of nature.</p> <p>Objective: Make inferences about the relationships between organisms and their habitats in</p>	<p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to biodiversity and ecosystems, such as calculating changes in species populations over time or estimating the area of habitat lost due to deforestation.</p> <p>Apply mental and written methods to solve ecosystem-related problems efficiently and accurately, recognizing the importance of numerical skills in understanding ecological</p>	<p>living organisms to their habitats and environments.</p> <p>Example Activity: Investigate how different animals are adapted to their habitats (e.g., camouflage, hibernation, migration) and discuss how these adaptations help them survive.</p> <p>Objective: Understand the concept of food chains and food webs, and how energy flows through ecosystems.</p> <p>Example Activity:</p>	<p>interactions.</p> <p>Coding for Environmental Monitoring:</p> <p>Develop coding skills through programming activities aimed at creating software tools for environmental monitoring and conservation. Design algorithms and programs to collect, process, and analyze biodiversity data from sources such as wildlife cameras, environmental sensors, and citizen science projects.</p> <p>Digital Citizenship in Conservation</p>	<p>biodiversity, such as fossil remains, plant pollen samples, and animal bones, to understand the composition and dynamics of past ecosystems.</p> <p>Analyse how changes in land use, human activities, and environmental factors have influenced biodiversity and ecosystem health throughout English history.</p> <p>Understanding Biodiversity and Ecosystems Across</p>	<p>represent habitat diversity or creating intricate patterns inspired by natural forms.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists known for their depictions of nature and biodiversity, such as John James Audubon or Henri Rousseau.</p> <p>Use inspiration from these artists to develop their own artistic style that celebrates biodiversity and raises awareness of the importance of preserving ecosystems.</p>	<p>relaxation and stress reduction in natural settings, such as mindfulness exercises, nature walks, or gardening.</p> <p>Physical Health and Wellbeing:</p> <p>Healthy Lifestyle Choices:</p> <p>Understand the importance of biodiversity for maintaining a healthy environment that supports clean air, water, and soil.</p> <p>Adopt sustainable lifestyle habits that contribute to biodiversity conservation, such as reducing waste, recycling, and supporting local ecosystems.</p> <p>Outdoor Activities</p>
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<p>literature, understanding the delicate balance of ecosystems.</p> <p>Example Text/Genre: Short stories or novels that explore human interactions with the natural world, such as "Island of the Blue Dolphins" by Scott O'Dell.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for the protection of biodiversity and ecosystems through various genres.</p> <p>Example Task: Compose a persuasive letter to local authorities or community leaders</p>	<p>dynamics.</p> <p>Fractions:</p> <p>Understanding Fractional Relationships in Ecosystems:</p> <p>Learn about equivalent fractions in the context of ecosystem diversity, such as comparing the proportions of different species within a habitat or the fractions of land allocated to various ecosystem types.</p> <p>Explore fractions in relation to conservation efforts, such as understanding the fraction of endangered species within a</p>	<p>Construct a food web using local species, discussing the interdependence of organisms and the consequences of changes in population sizes.</p> <p>Objective: Explore the life cycles of organisms and their contributions to ecosystem dynamics.</p> <p>Example Activity: Investigate the life cycles of plants and animals in a local ecosystem, discussing how reproduction and growth contribute to biodiversity and ecosystem stability.</p>	<p>Efforts:</p> <p>Learn about digital citizenship in the context of biodiversity conservation, including ethical considerations related to data privacy, open access, and responsible use of technology in environmental research and management.</p> <p>Explore how digital technologies such as geographic information systems (GIS), remote sensing, and machine learning can support conservation efforts and promote</p>	<p>Various Historical Periods and Civilizations:</p> <p>Examine biodiversity and ecosystem management practices in Ancient Egypt, including the cultivation of diverse crops along the Nile River, the construction of artificial wetlands for waterfowl, and the preservation of natural habitats.</p> <p>Investigate biodiversity conservation efforts in the Roman Empire, such as the</p>	<p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating sounds of nature and diverse ecosystems into musical compositions and improvisations.</p> <p>Experiment with creating music inspired by biodiversity themes, such as compositions that evoke the sounds of different habitats or songs celebrating the beauty of wildlife</p>	<p>for Physical Fitness:</p> <p>Participate in outdoor activities that promote physical fitness and wellbeing, such as hiking, biking, or birdwatching in natural habitats.</p> <p>Social Skills:</p> <p>Communication About Biodiversity:</p> <p>Communicate observations and findings about local biodiversity to peers and community members, fostering appreciation for nature and its importance.</p> <p>Discuss the importance of biodiversity conservation in</p>
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<p>urging them to preserve a nearby wildlife habitat or create a protected area.</p> <p>Objective: Develop narrative writing skills by creating stories that highlight the importance of biodiversity and ecosystems.</p> <p>Example Task: Write a short story about a character's journey to protect an endangered species or restore a damaged ecosystem, emphasizing the interconnectedness of life forms.</p> <p>Objective: Structure writing effectively to convey messages about biodiversity and ecosystems clearly and</p>	<p>population or the percentage of protected areas in a region.</p> <p>Geometry:</p> <p>Analysing Ecosystem Structures:</p> <p>Explore shapes and properties of ecosystems and habitats, considering factors such as connectivity, biodiversity hotspots, and edge effects.</p> <p>Use geometry concepts to analyse ecosystem boundaries, spatial patterns, and landscape features that influence biodiversity</p>	<p>Chemistry:</p> <p>Objective: Learn about the properties of materials and their interactions within ecosystems.</p> <p>Example Activity: Investigate the role of nutrients and chemicals in soil composition and discuss how soil quality affects plant growth and ecosystem health.</p> <p>Objective: Understand changes of state in materials and their impact on ecosystems, such as the water cycle.</p> <p>Example</p>	<p>biodiversity awareness.</p> <p>Design and Technology (D&T):</p> <p>Designing Eco-Friendly Products:</p> <p>Engage in designing products that promote biodiversity and ecosystem health, considering factors such as habitat preservation, wildlife protection, and sustainable resource use.</p> <p>Explore materials and manufacturing processes that minimise</p>	<p>establishment of wildlife reserves, the regulation of hunting and fishing activities, and the cultivation of botanical gardens for scientific study.</p> <p>Explore Viking Age societies and their interaction with ecosystems, including sustainable fishing practices, forest management techniques, and the protection of sacred groves and wildlife habitats.</p> <p>Analyse biodiversity in</p>	<p>diversity.</p> <p>Exploring Music Genres and Instruments Related to Biodiversity and Ecosystems:</p> <p>Explore different musical genres that celebrate biodiversity and environmental themes, such as world music traditions rooted in nature worship or compositions inspired by wildlife documentaries.</p> <p>Learn to play musical instruments commonly associated with biodiversity-rich regions and indigenous cultures, such as percussion</p>	<p>maintaining ecosystem balance and supporting human wellbeing.</p> <p>Collaboration in Biodiversity Conservation Projects:</p> <p>Work collaboratively with classmates and local organizations on biodiversity conservation initiatives, such as planting native species gardens or participating in citizen science projects.</p> <p>Respect diverse perspectives on biodiversity conservation and collaborate effectively to achieve common goals.</p> <p>Diversity and</p>
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<p>persuasively.</p> <p>Example Task: Create an informational booklet or poster about the diversity of life in a particular ecosystem, organising information logically and using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to raise awareness of biodiversity and ecosystems and inspire action towards conservation.</p> <p>Example Task: Write a descriptive poem celebrating the richness of biodiversity in a rainforest or coral reef, using vivid</p>	<p>distribution and ecosystem dynamics.</p> <p>Measurement:</p> <p>Measuring Ecosystem Characteristics:</p> <p>Measure and calculate ecosystem-related quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate units, focusing on applications relevant to biodiversity assessment and ecosystem monitoring.</p> <p>Apply measurement skills to assess and quantify ecosystem</p>	<p>Activity: Explore the processes of evaporation, condensation, and precipitation in the water cycle, discussing their importance for maintaining freshwater habitats and sustaining life.</p> <p>Physics:</p> <p>Objective: Investigate forces and their effects on ecosystems, such as erosion and weathering.</p> <p>Example Activity: Explore the role of gravity, wind, and water in shaping landscapes, discussing how erosion and weathering contribute to</p>	<p>environmental impact and contribute to ecosystem conservation, such as recycled materials, biodegradable components, and eco-friendly production methods.</p> <p>Prototyping Nature-Inspired Solutions:</p> <p>Use design and prototyping tools to develop nature-inspired solutions for biodiversity conservation and ecosystem restoration.</p> <p>Create models and prototypes of products or systems that mimic natural</p>	<p>Tudor England, considering the impact of agricultural expansion, deforestation, and urbanisation on local ecosystems, and efforts to preserve wildlife and natural landscapes.</p> <p>Examine the impact of industrialization on biodiversity during the Industrial Revolution, including habitat destruction, pollution, and the emergence of early conservation movements</p>	<p>instruments mimicking animal sounds or wind instruments imitating bird calls.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Biodiversity Focus:</p> <p>Participate in physical activities that promote appreciation for biodiversity and ecosystems, such as nature walks, wildlife observation, or outdoor scavenger hunts.</p> <p>Incorporate principles of ecosystem conservation into team-building</p>	<p>Inclusion:</p> <p>Appreciating Biodiversity's Diversity:</p> <p>Explore the diversity of life forms within local ecosystems, including plants, animals, and microorganisms.</p> <p>Appreciate and celebrate the cultural and ecological diversity present in natural habitats, recognizing the interconnectedness of all living things.</p> <p>Health Education:</p> <p>Promoting Healthy Lifestyles Through Nature:</p> <p>Learn about the health benefits of spending time in</p>
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<p>imagery and sensory details to evoke the wonders of nature.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about biodiversity and ecosystems, actively participating and contributing ideas for conservation efforts.</p> <p>Example Activity: Engage in a class debate about the benefits and challenges of protecting biodiversity, considering factors such as habitat destruction and species extinction.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively</p>	<p>attributes, such as the area of protected habitats, the volume of water in a wetland ecosystem, or the mass of biomass in a forest ecosystem.</p> <p>Statistics:</p> <p>Interpreting Ecosystem Data:</p> <p>Interpret and present data on biodiversity, ecosystem health, and ecological indicators using graphs, charts, and tables.</p> <p>Learn about measures of central tendency and dispersion in the context of</p>	<p>habitat formation and change.</p> <p>Objective: Understand the properties of light, sound, and energy in ecosystems, and their role in supporting life.</p> <p>Example Activity: Investigate how light levels and temperature affect plant growth and distribution in different habitats, discussing the importance of energy transfer within ecosystems.</p> <p>Objective: Learn about Earth's natural systems and their</p>	<p>processes, promote biodiversity, and address environmental challenges such as habitat loss, pollution, and climate change.</p> <p>Problem-Solving for Environmental Sustainability:</p> <p>Apply problem-solving skills to identify biodiversity and ecosystem conservation challenges and develop innovative solutions.</p> <p>Use critical thinking and creativity to evaluate the effectiveness of design solutions</p>	<p>and wildlife protection laws.</p> <p>Investigate the effects of World War II on ecosystems, such as changes in land use, disruption of natural habitats, and the impact of wartime activities on biodiversity conservation.</p> <p>Exploring Significant Figures, Events, and Inventions in Biodiversity and Ecosystem History:</p> <p>Identify</p>	<p>exercises and outdoor adventure activities, fostering a sense of stewardship for preserving biodiversity and natural habitats.</p> <p>Drama:</p> <p>Exploring Biodiversity and Ecosystems Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore biodiversity and ecosystem-related issues such as habitat loss, species extinction, or ecosystem restoration.</p> <p>Create and perform dramatic</p>	<p>nature, including increased physical activity, reduced stress, and improved mental health.</p> <p>Advocate for policies and programs that prioritise access to green spaces and promote outdoor recreation for community health and wellbeing.</p> <p>Safety in Natural Environments:</p> <p>Identify potential hazards in natural environments and learn how to mitigate risks while exploring outdoor spaces.</p> <p>Develop skills for staying safe in nature, including understanding</p>
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<p>discussing strategies for promoting biodiversity conservation.</p> <p>Example Activity: Work in small groups to brain buzz talk / Ideation and plan a school project or community event aimed at raising awareness of local biodiversity and ecosystem protection.</p>	<p>ecosystem data analysis, such as analysing species richness patterns or the variability in ecosystem productivity across different habitats.</p>	<p>interactions with living organisms.</p> <p>Example Activity: Explore the concept of the water cycle and its role in sustaining terrestrial and aquatic ecosystems, discussing the importance of water conservation and management.</p> <p>Objective: Understand the importance of biodiversity conservation and ecosystem protection for maintaining environmental balance and sustainability.</p> <p>Example</p>	<p>in supporting biodiversity conservation goals and promoting sustainable development practices.</p>	<p>significant figures in biodiversity and ecosystem conservation, such as naturalists, conservationists, and environmental advocates, and their contributions to protecting wildlife and preserving natural habitats.</p> <p>Explore important dates and events related to biodiversity conservation, such as the establishment of national parks, the adoption of wildlife protection</p>	<p>scenes or skits that raise awareness about the importance of biodiversity conservation and highlight the interconnectedness of ecosystems in sustaining life on Earth.</p>	<p>weather patterns, identifying poisonous plants, and recognizing potential wildlife encounters.</p> <p>Economic Education:</p> <p>Understanding the Economic Value of Biodiversity:</p> <p>Learn about the economic importance of biodiversity for supporting industries such as agriculture, tourism, and pharmaceuticals.</p> <p>Explore career opportunities related to biodiversity conservation and environmental stewardship, such as ecotourism, wildlife</p>
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		<p>Activity: Investigate human impacts on local ecosystems (e.g., habitat destruction, pollution) and discuss strategies for biodiversity conservation and habitat restoration.</p> <p>Physical Geography:</p> <p>Objective: Understand the importance of biodiversity in maintaining healthy ecosystems and supporting life on Earth.</p> <p>Example Activity: Read "The Lorax" by Dr. Seuss to explore the</p>		<p>laws, and the signing of international agreements on biodiversity conservation.</p> <p>Investigate the causes and consequences of environmental changes throughout history, including their impact on biodiversity loss, ecosystem resilience, and human well-being.</p> <p>Analyse the role of inventions and technological advancements in addressing biodiversity conservation</p>		<p>conservation, or environmental education.</p> <p>Citizenship:</p> <p>Rights and Responsibilities in Biodiversity Conservation:</p> <p>Understand the rights of future generations to inherit a biodiverse and healthy planet.</p> <p>Recognize individual and collective responsibilities for protecting and conserving biodiversity for the benefit of present and future generations.</p> <p>Democracy and Government in Biodiversity</p>
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		<p>concept of biodiversity and its role in ecosystem resilience. Discuss the interdependence of species and the importance of preserving habitat diversity.</p> <p>Objective: Investigate the relationship between climate, geography, and biodiversity.</p> <p>Example Activity: Read "The Great Kapok Tree" by Lynne Cherry to learn about the biodiversity of tropical rainforests and the impacts of deforestation. Discuss how climate change</p>		<p>challenges, such as habitat restoration techniques, wildlife monitoring technologies, and sustainable land management practices.</p> <p>Reflect on how lessons from the past can inform present-day efforts to address biodiversity loss, promote ecosystem resilience, and conserve natural resources for future generations.</p>		<p>Conservation:</p> <p>Learn about government policies and regulations aimed at protecting biodiversity and natural habitats.</p> <p>Advocate for biodiversity conservation through civic engagement activities, such as contacting elected officials, participating in community conservation efforts, or supporting environmental advocacy organisations.</p> <p>Global Citizenship:</p> <p>Understanding Global Biodiversity Challenges:</p> <p>Explore global</p>
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		<p>affects ecosystems and species distribution, and the importance of conservation efforts.</p> <p>Objective: Explore the diversity of ecosystems around the world, including forests, grasslands, deserts, and wetlands.</p> <p>Example Activity: Read "The Magic School Bus Gets All Dried Up: A Book About Deserts" by Kristin Earhart to learn about the unique characteristics of desert ecosystems and the adaptations of</p>				<p>biodiversity hotspots and learn about threats to biodiversity conservation, such as habitat loss, climate change, and invasive species.</p> <p>Recognize the interconnectedness of local and global ecosystems and the importance of international cooperation in addressing biodiversity conservation challenges.</p>
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		<p>desert plants and animals. Discuss the importance of protecting diverse habitats for biodiversity conservation.</p> <p>Human Geography:</p> <p>Objective: Understand the impact of human activities on biodiversity and ecosystems.</p> <p>Example Activity: Read "The Raft" by Jim LaMarche to explore the transformation of an urban river into a thriving ecosystem. Discuss the importance of habitat restoration, pollution control,</p>				
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		<p>and sustainable land use practices in promoting biodiversity.</p> <p>Objective: Investigate the relationship between population growth, land use change, and habitat loss.</p> <p>Example Activity: Read "The Wump World" by Bill Peet to understand the consequences of overpopulation and habitat destruction on biodiversity. Discuss the importance of balancing human needs with conservation priorities to</p>				
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		<p>ensure sustainable development.</p> <p>Objective: Explore global issues such as deforestation, wildlife trafficking, and invasive species.</p> <p>Example Activity: Read "One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia" by Miranda Paul to learn about community-led efforts to combat plastic pollution and protect wildlife habitats. Discuss the importance of international cooperation in addressing global environmental</p>				
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		<p>challenges.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to identify different ecosystems and biodiversity hotspots.</p> <p>Example Activity: Use maps and atlases to locate major biomes, biodiversity hotspots, and protected areas around the world, and discuss their ecological significance and conservation status.</p> <p>Objective: Understand the spatial distribution of</p>				
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		<p>biodiversity and species richness.</p> <p>Example Activity: Analyse maps showing species distributions, habitat fragmentation, and biodiversity indicators, and discuss how geography influences biodiversity patterns and conservation priorities.</p> <p>Objective: Analyse geographical data related to habitat loss, deforestation rates, and conservation efforts.</p> <p>Example</p>				
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		<p>Activity: Collect and analyse data on deforestation rates, wildlife populations, and conservation projects in different regions, and use GIS tools to create maps and visualisations to communicate findings and propose solutions.</p>				
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<p>Climate Change and Adaptation (SUS7)</p>						
<p>English</p>	<p>Mathematics</p>	<p>Science and Geography</p>	<p>Computing/ Design and Technology</p>	<p>History</p>	<p>Art and Design/Music</p>	<p>Personal, Social, Health and Economic Education (PSHE) Citizenship</p>

<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on climate change and adaptations.</p> <p>Example Text/Genre: "The Magic School Bus and the Climate Challenge" by Joanna Cole - a children's book that educates about climate change and its impacts through an engaging story.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the causes and effects of climate change and the importance of adaptation.</p>	<p>Number and Place Value:</p> <p>Understanding Climate Data:</p> <p>Develop a deep understanding of numbers and their relationships by exploring numerical data related to climate change, such as temperature readings, carbon dioxide levels, or sea level rise measurements.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Calculating Climate Trends:</p> <p>Use addition, subtraction, multiplication,</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the concept of climate change and its impact on living organisms and ecosystems.</p> <p>Example Activity: Investigate how changes in temperature and precipitation patterns affect plant and animal habitats, discussing the consequences of habitat loss and fragmentation.</p> <p>Objective: Explore the adaptations of living organisms to changing</p>	<p>Computing:</p> <p>Understanding Climate Data Representation :</p> <p>Learn about the role of computer algorithms and data representation in modelling climate patterns, trends, and projections.</p> <p>Explore how data structures such as matrices, grids, and time series can be used to store and analyze climate data from various sources, including weather stations, satellites, and</p>	<p>Exploring Climate Change and Adaptation through Archaeological Evidence in English History:</p> <p>Investigate key periods in English history, such as the Mediaeval period, Tudor era, and Industrial Revolution, with a focus on climate change, adaptation, and their archaeological evidence.</p> <p>Explore archaeological sites and artefacts that</p>	<p>Art and Design:</p> <p>Exploring Climate Change and Adaptation Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to visually represent the impacts of climate change, such as rising sea levels, extreme weather events, and habitat loss.</p> <p>Experiment with artistic materials and techniques that convey adaptation strategies, such as creating artworks that depict resilient</p>	<p>Mental and Emotional Health:</p> <p>Understanding Climate Change Anxiety:</p> <p>Learn about the emotional impact of climate change, including anxiety about the future and feelings of helplessness.</p> <p>Develop strategies to cope with climate-related stress and anxiety, such as practising mindfulness, seeking support from peers and adults, and taking action to address environmental concerns.</p> <p>Building Resilience to Climate-related Stressors:</p> <p>Understand the</p>
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<p>Example Text/Genre: Articles from science magazines or websites discussing topics such as greenhouse gases, global warming, and the role of human activities in climate change.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about climate change and adaptation strategies.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "A Song of the Weather" by Adam Lindsay Gordon, exploring the changing climate and its effects on</p>	<p>and division to analyse climate-related data and trends, such as calculating changes in average temperatures over time or estimating carbon emissions per capita.</p> <p>Apply mental and written methods to solve mathematical problems related to climate change, recognizing the importance of numerical literacy in understanding environmental challenges.</p> <p>Fractions:</p> <p>Understanding Fractional</p>	<p>environmental conditions.</p> <p>Example Activity: Research and present examples of animal adaptations to climate change (e.g., changes in migration patterns, shifts in breeding seasons) and discuss how these adaptations help species survive.</p> <p>Objective: Understand the concept of extinction and its relationship to climate change.</p> <p>Example Activity: Discuss how habitat loss, pollution, and climate change contribute to</p>	<p>climate models.</p> <p>Coding for Climate Analysis:</p> <p>Develop coding skills through programming activities aimed at analysing climate data and simulating climate scenarios.</p> <p>Design algorithms and programs to process and visualise climate data, identify trends, and assess the impact of climate change on ecosystems, communities, and infrastructure.</p> <p>Digital</p>	<p>reveal evidence of past climate variations, such as sediment layers, tree rings, and pollen records, to understand how past societies adapted to changing environmental conditions.</p> <p>Analyse how human activities, land use changes, and natural events have influenced climate variability and adaptation strategies throughout English history.</p> <p>Understandin</p>	<p>communities, sustainable infrastructure, and innovative technologies for mitigating climate change effects.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists who address climate change and environmental adaptation in their work, such as Olafur Eliasson or Edward Burtynsky.</p> <p>Use inspiration from these artists to develop their own artistic style that raises awareness about climate change</p>	<p>concept of resilience and its importance in adapting to climate change challenges.</p> <p>Develop resilience-building skills, such as problem-solving, positive thinking, and seeking social support, to navigate climate-related stressors effectively.</p> <p>Physical Health and Wellbeing:</p> <p>Promoting Climate-friendly Lifestyle Choices:</p> <p>Learn about the connections between personal lifestyle choices and climate change, such as diet, transportation, and energy consumption.</p> <p>Adopt climate-friendly habits that promote personal health and</p>
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<p>nature.</p> <p>Objective: Make inferences about characters' experiences and responses to climate change in literature, understanding the need for adaptation and resilience.</p> <p>Example Text/Genre: Short stories or novels that address climate change and its impacts on communities, such as "Flush" by Carl Hiaasen or "City of Ember" by Jeanne DuPrau.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for climate action and adaptation through</p>	<p>Changes in Climate:</p> <p>Learn about equivalent fractions in the context of climate indicators, such as comparing the fractions of greenhouse gases in the atmosphere or the fractions of ice coverage in polar regions.</p> <p>Explore fractions in relation to climate adaptation strategies, such as understanding the fraction of renewable energy sources in a country's energy mix or the percentage of land allocated to carbon sequestration</p>	<p>species extinction, and explore conservation efforts aimed at protecting endangered species.</p> <p>Objective: Learn about the human body's responses to climate-related health risks.</p> <p>Example Activity: Investigate the health impacts of extreme weather events (e.g., heatwaves, floods) and discuss strategies for staying safe and healthy in a changing climate.</p> <p>Chemistry:</p> <p>Objective: Learn about the</p>	<p>Citizenship in Climate Action:</p> <p>Learn about digital citizenship in the context of climate change mitigation and adaptation, including ethical considerations related to data accuracy, transparency, and accessibility.</p> <p>Explore how digital technologies such as data analytics, remote sensing, and geographic information systems (GIS) can support climate resilience efforts and empower communities to take action against climate</p>	<p>g Climate Change and Adaptation Across Various Historical Periods and Civilizations:</p> <p>Examine evidence of climate change and adaptation in Ancient Egypt, including the impact of Nile River flooding patterns, shifts in agricultural practices, and the development of water management systems like canals and reservoirs.</p> <p>Investigate climate variability and</p>	<p>impacts and promotes adaptive solutions.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating sounds of natural resources affected by climate change, such as melting glaciers, changing bird migrations, or shifting weather patterns, into musical compositions and improvisations.</p> <p>Experiment with creating music</p>	<p>wellbeing, such as choosing sustainable transportation options, reducing meat consumption, and conserving energy at home.</p> <p>Engaging in Outdoor Activities for Physical Health:</p> <p>Participate in outdoor activities that promote physical health and connect with nature, such as hiking, gardening, or participating in community clean-up events.</p> <p>Understand the importance of nature for physical and mental wellbeing and advocate for the protection of natural spaces.</p> <p>Social Skills:</p> <p>Effective Communication</p>
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<p>various genres.</p> <p>Example Task: Compose a persuasive letter to local government officials or community leaders urging them to take action on climate change and implement adaptation measures.</p> <p>Objective: Develop narrative writing skills by creating stories that highlight the challenges of climate change and the importance of adaptation.</p> <p>Example Task: Write a short story about characters facing extreme weather events or environmental changes and their</p>	<p>projects.</p> <p>Geometry:</p> <p>Analysing Geospatial Climate Data:</p> <p>Explore shapes and properties of geographical features affected by climate change, such as coastlines, glaciers, and ecosystems.</p> <p>Use geometry concepts to analyze spatial patterns and changes in landforms, habitats, and climate zones influenced by climate variability and adaptation efforts.</p>	<p>properties of greenhouse gases and their role in climate change.</p> <p>Example Activity: Investigate the properties of carbon dioxide and methane and discuss how their accumulation in the atmosphere contributes to global warming.</p> <p>Objective: Understand the concept of the greenhouse effect and its implications for Earth's climate system.</p> <p>Example Activity: Experiment with models to demonstrate how greenhouse</p>	<p>change.</p> <p>Design and Technology (D&T):</p> <p>Designing Climate-Resilient Solutions:</p> <p>Engage in designing products and systems that address the impacts of climate change and promote adaptation strategies.</p> <p>Explore innovative design concepts for climate-resilient infrastructure, renewable energy systems, sustainable agriculture practices, and</p>	<p>adaptation strategies in the Roman Empire, such as the construction of aqueducts, terraced agriculture, and the adoption of drought-resistant crops to cope with changing weather patterns.</p> <p>Explore Viking Age societies and their response to climate fluctuations, including changes in settlement patterns, trade routes, and agricultural practices to adapt to colder</p>	<p>inspired by climate change and adaptation themes, such as compositions that evoke the resilience of indigenous communities facing environmental challenges or the interconnectedness of ecosystems in adapting to climate change effects.</p> <p>Exploring Music Genres and Instruments Related to Climate Change and Adaptation:</p> <p>Explore different musical genres that address climate change and environmental sustainability, such as</p>	<p>About Climate Change:</p> <p>Develop communication skills to express thoughts and feelings about climate change effectively.</p> <p>Practise discussing climate-related topics with peers and family members, sharing information and ideas for collective action.</p> <p>Collaboration in Climate Change Solutions:</p> <p>Work collaboratively with peers on climate-related projects or initiatives, such as organising community events, advocating for environmental policies, or implementing sustainability initiatives at school.</p> <p>Respect diverse</p>
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<p>efforts to adapt and survive.</p> <p>Objective: Structure writing effectively to convey messages about climate change and adaptation clearly and persuasively.</p> <p>Example Task: Create an informational brochure or poster about climate change impacts and adaptation strategies, organising information logically and using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to raise awareness of climate change impacts and adaptation efforts, inspiring action</p>	<p>Measurement:</p> <p>Measuring Climate Parameters:</p> <p>Measure and calculate climate-related quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate units, focusing on applications relevant to climate science and adaptation.</p> <p>Apply measurement skills to assess and quantify climate impacts, such as measuring the length of a coastline affected by sea level rise or calculating the</p>	<p>gases trap heat in the atmosphere, discussing the consequences of increased greenhouse gas emissions for climate stability.</p> <p>Physics:</p> <p>Objective: Investigate the role of energy transfer and heat exchange in Earth's climate system.</p> <p>Example Activity: Explore the processes of conduction, convection, and radiation and discuss how they influence temperature patterns and weather phenomena.</p>	<p>disaster preparedness measures.</p> <p>Prototyping Climate Adaptation Technologies:</p> <p>Use design and prototyping tools to develop climate adaptation technologies and solutions that enhance resilience to extreme weather events, sea-level rise, and other climate-related hazards.</p> <p>Create models and prototypes of products or systems that incorporate climate data, simulation results, and</p>	<p>or warmer climates.</p> <p>Analyze Tudor England's experience with climate change, such as the impact of the Little Ice Age on agriculture, food production, and social structures, and efforts to adapt through technological innovation and social resilience.</p> <p>Examine the influence of industrialization on climate change during the Industrial Revolution, including the release of</p>	<p>eco-conscious folk music or compositions inspired by the sounds of nature.</p> <p>Learn to play musical instruments commonly associated with indigenous cultures and their traditional music related to climate change adaptation, such as drums used in ceremonies honouring resilience or wind instruments mimicking natural phenomena.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Climate Change</p>	<p>perspectives on climate change adaptation and collaborate with others to find innovative solutions to environmental challenges.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Diverse Perspectives on Climate Change:</p> <p>Explore the cultural, socioeconomic, and geographic factors that influence vulnerability to climate change impacts.</p> <p>Appreciate and celebrate the diversity of experiences and perspectives within communities affected by climate change, recognizing the importance of inclusive approaches</p>
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<p>towards resilience and sustainability.</p> <p>Example Task: Write a descriptive poem about a community affected by climate change, highlighting the resilience of its residents and their adaptive strategies to cope with challenges.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about climate change and adaptation, actively participating and contributing ideas for mitigation and resilience.</p> <p>Example Activity: Engage in a class debate about the</p>	<p>volume of ice loss from glaciers.</p> <p>Statistics:</p> <p>Interpreting Climate Data:</p> <p>Interpret and present data on climate change impacts, adaptation strategies, and mitigation efforts using graphs, charts, and tables.</p> <p>Learn about measures of central tendency and dispersion in the context of climate data analysis, such as analyzing the average temperature rise or the variability in precipitation</p>	<p>Objective: Understand the impacts of climate change on Earth's natural systems, such as changes in weather patterns, sea level rise, and ocean acidification.</p> <p>Example Activity: Investigate the causes and consequences of melting ice caps and glaciers, and discuss the implications for global sea levels and coastal communities.</p> <p>Objective: Explore the concept of climate resilience and adaptation strategies for mitigating the</p>	<p>stakeholder input to inform design decisions and improve effectiveness.</p> <p>Problem-Solving for Climate Resilience:</p> <p>Apply problem-solving skills to identify climate-related challenges faced by communities and develop adaptive solutions.</p> <p>Use critical thinking and creativity to evaluate the feasibility, scalability, and sustainability of design solutions in addressing climate impacts and promoting resilience at</p>	<p>greenhouse gases, changes in land use, and the emergence of early climate science and awareness.</p> <p>Investigate how World War II affected climate and adaptation, such as changes in industrial production, transportation systems, and resource management practices in response to wartime demands and climatic disruptions.</p> <p>Exploring Significant Figures,</p>	<p>Focus:</p> <p>Participate in physical activities that promote understanding of climate change impacts and adaptation strategies, such as outdoor adventures that explore changes in local ecosystems or team-building exercises focused on resilience and adaptation.</p> <p>Incorporate principles of climate change adaptation into PE activities, encouraging participants to develop skills for coping with environmental challenges and fostering a sense</p>	<p>to adaptation and resilience-building.</p> <p>Health Education:</p> <p>Understanding Climate-related Health Risks:</p> <p>Learn about the health impacts of climate change, including heat-related illnesses, vector-borne diseases, and mental health effects.</p> <p>Identify strategies for protecting personal health and wellbeing in a changing climate, such as staying informed about climate-related risks and taking proactive measures to minimize exposure.</p> <p>Safety:</p> <p>Understanding Climate-related</p>
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<p>causes and consequences of climate change, considering different perspectives and proposing solutions.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing strategies for adaptation and resilience in the face of climate change.</p> <p>Example Activity: Work in small groups to brainstorm and plan a school project or community initiative aimed at raising awareness of climate change impacts and promoting adaptation measures.</p>	<p>patterns across different regions.</p>	<p>impacts of climate change.</p> <p>Example Activity: Research and present examples of climate adaptation measures (e.g., coastal defence systems, drought-resistant crops) and discuss their effectiveness in building resilience to climate-related hazards.</p> <p>Objective: Understand the role of human activities in driving climate change and the importance of mitigation efforts.</p> <p>Example Activity: Discuss the sources of</p>	<p>local, regional, and global scales.</p>	<p>Events, and Inventions in Climate Change and Adaptation History:</p> <p>Identify significant figures in climate science, adaptation, and environmental advocacy, such as scientists, policymakers, and activists, and their contributions to understanding climate change impacts and adaptation strategies.</p> <p>Explore important dates and events related to climate</p>	<p>of responsibility for protecting the planet.</p> <p>Drama:</p> <p>Exploring Climate Change and Adaptation Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore climate change impacts such as displacement, resource scarcity, and community resilience.</p> <p>Create and perform dramatic scenes or skits that raise awareness about the need for climate change adaptation</p>	<p>Hazards:</p> <p>Identify potential safety hazards associated with climate change, such as extreme weather events, wildfires, and flooding.</p> <p>Learn how to stay safe in climate-related emergencies, including developing emergency preparedness plans and knowing evacuation routes.</p> <p>Economic Education:</p> <p>Financial Literacy for Climate Resilience:</p> <p>Understand the economic implications of climate change, including the costs of adaptation and mitigation measures.</p>
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		<p>greenhouse gas emissions (e.g., burning fossil fuels, deforestation) and explore strategies for reducing carbon footprints and promoting sustainable lifestyles.</p> <p>Physical Geography:</p> <p>Objective: Understand the causes and effects of climate change on physical geography and natural environments.</p> <p>Example Activity: Read "The Tantrum That Saved the World" by Megan Herbert to learn</p>		<p>change and adaptation, such as major climate events, scientific discoveries, and policy initiatives aimed at mitigating climate risks and promoting resilience.</p> <p>Investigate the causes and consequences of climate change throughout history, including their impact on ecosystems, human societies, and the natural environment.</p> <p>Analyse the role of energy discoveries,</p>	<p>measures and inspire action towards building more sustainable and resilient communities.</p>	<p>Learn about sustainable financial practices that support climate resilience, such as budgeting for climate-related expenses, investing in renewable energy, and supporting green businesses.</p> <p>Citizenship:</p> <p>Responsibilities in Climate Change Mitigation and Adaptation:</p> <p>Recognise individual and collective responsibilities for addressing climate change and its impacts.</p> <p>Advocate for climate-friendly policies and practices at the local, national, and global levels, and participate in community-based initiatives to build</p>
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		<p>about climate change and its impacts on ecosystems, weather patterns, and sea levels. Discuss the importance of reducing greenhouse gas emissions and adapting to climate change.</p> <p>Objective: Investigate the role of geography in shaping climate variability and extreme weather events.</p> <p>Example Activity: Read "Thunder Cake" by Patricia Polacco to explore the concept of thunderstorms and severe weather. Discuss how geography influences climate</p>		<p>inventions, and technological advancements in influencing climate change trends and adaptation responses, such as the development of fossil fuel technologies, renewable energy sources, and energy-efficient technologies.</p> <p>Reflect on how lessons from the past can inform present-day efforts to address climate change, promote adaptation and resilience, and mitigate the impacts of</p>		<p>climate resilience.</p> <p>Global Citizenship:</p> <p>Understanding Global Interconnectedness in Climate Change:</p> <p>Explore the interconnected nature of climate change and its impacts on global communities, ecosystems, and economies.</p> <p>Foster empathy and solidarity with communities disproportionately affected by climate change, and advocate for climate justice and equity on a global scale.</p>
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		<p>patterns and the importance of preparedness and resilience in communities.</p> <p>Objective: Explore the impacts of climate change on water resources, including rivers, lakes, and oceans.</p> <p>Example Activity: Read "Water Is Water: A Book About the Water Cycle" by Miranda Paul to understand the water cycle and the effects of climate change on precipitation patterns and water availability. Discuss the importance of water</p>		<p>global warming on societies and ecosystems.</p>		
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		<p>conservation and sustainable water management practices.</p> <p>Human Geography:</p> <p>Objective: Understand the social and economic implications of climate change on human populations.</p> <p>Example Activity: Read "The Water Princess" by Susan Verde to learn about the challenges of water scarcity and access faced by communities in developing countries. Discuss the importance of climate justice</p>				
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		<p>and equitable adaptation strategies.</p> <p>Objective: Investigate the relationship between climate change and migration, displacement, and human settlements.</p> <p>Example Activity: Read "The Lotus Seed" by Sherry Garland to explore the resilience of Vietnamese refugees in adapting to a new climate and environment. Discuss the impacts of climate-induced migration on communities and the need for</p>				
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		<p>inclusive and sustainable urban planning.</p> <p>Objective: Explore global issues such as climate diplomacy, international cooperation, and sustainable development goals.</p> <p>Example Activity: Read "Here We Are: Notes for Living on Planet Earth" by Oliver Jeffers to understand the interconnectedness of humans and the environment. Discuss the importance of global cooperation in addressing climate change and achieving</p>				
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		<p>sustainable development goals.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to identify climate zones, weather patterns, and climate-related hazards.</p> <p>Example Activity: Use maps and weather charts to locate different climate zones, track seasonal variations, and analyse climate-related hazards such as hurricanes, droughts, and heatwaves.</p> <p>Objective:</p>				
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		<p>Understand the spatial distribution of climate change impacts and vulnerability.</p> <p>Example Activity: Analyse maps showing the vulnerability of communities to climate change impacts such as sea-level rise, flooding, and food insecurity, and discuss factors contributing to vulnerability and resilience.</p> <p>Objective: Analyse geographical data related to climate change mitigation and adaptation efforts.</p> <p>Example</p>				
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		<p>Activity: Collect and analyse data on renewable energy capacity, carbon emissions, and adaptation projects in different regions, and use GIS tools to create maps and visualisations to communicate findings and propose solutions.</p>				
<p>Food and Agriculture (SUS8)</p>						
<p>English</p>	<p>Mathematics</p>	<p>Science and Geography</p>	<p>Computing/ Design and Technology</p>	<p>History</p>	<p>Art and Design/Music</p>	<p>Personal, Social, Health and Economic Education (PSHE) Citizenship</p>

<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on food and agriculture.</p> <p>Example Text/Genre: "The Omnivore's Dilemma for Kids: The Secrets Behind What You Eat" by Michael Pollan - a non-fiction book that educates about food production and its impacts on health and the environment.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the connections between food choices, agriculture practices, and their effects on individuals</p>	<p>Number and Place Value:</p> <p>Understanding Food Quantities:</p> <p>Develop a deep understanding of numbers and their relationships by exploring numerical data related to food production and consumption, such as crop yields, livestock populations, or food prices.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Calculating Food Production:</p> <p>Use addition,</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the importance of agriculture in providing food for human consumption and sustaining livelihoods.</p> <p>Example Activity: Investigate different types of agricultural practices (e.g., crop farming, animal husbandry) and discuss their roles in food production and distribution.</p> <p>Objective: Explore the life cycles of plants</p>	<p>Computing:</p> <p>Data Analysis for Agricultural Trends:</p> <p>Learn how computer algorithms and data representation are utilised in analysing agricultural data, including crop yields, soil health, weather patterns, and market trends.</p> <p>Develop skills in using spreadsheets, databases, and statistical software to organise, analyse, and visualise agricultural data</p>	<p>Exploring Food and Agriculture through Archaeological Evidence in English History:</p> <p>Investigate key periods in English history, such as the Mediaeval period, Tudor era, and Industrial Revolution, with a focus on food and agriculture, supported by archaeological evidence.</p> <p>Explore archaeological sites and artefacts related to food production,</p>	<p>Art and Design:</p> <p>Exploring Food and Agriculture Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to depict various aspects of food and agriculture, such as farming practices, crop diversity, food production, and culinary traditions.</p> <p>Experiment with artistic materials and techniques that highlight sustainable agriculture practices, such as using natural dyes for textile artworks</p>	<p>Mental and Emotional Health:</p> <p>Understanding the Relationship Between Food and Mood:</p> <p>Learn about how different foods and nutrients can affect mood and mental health.</p> <p>Develop strategies for managing emotions through healthy eating habits, such as consuming balanced meals rich in fruits, vegetables, and whole grains.</p> <p>Physical Health and Wellbeing:</p> <p>Promoting Healthy Eating Habits:</p> <p>Understand the</p>
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<p>and communities.</p> <p>Example Text/Genre: Articles from agricultural magazines or websites discussing topics such as sustainable farming, food security, and nutrition.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about food and agriculture.</p> <p>Example Text/Genre: Food-themed poetry, such as "The Apple Tree" by John Keats, exploring the significance of agriculture and the harvest in human life.</p> <p>Objective: Make inferences about characters'</p>	<p>subtraction, multiplication, and division to solve mathematical problems related to food and agriculture, such as calculating total crop harvests, determining livestock feed requirements, or estimating food distribution logistics.</p> <p>Apply mental and written methods to solve food-related problems efficiently and accurately, recognizing the importance of numerical skills in agricultural management.</p>	<p>and animals involved in agriculture, emphasising their importance in food production.</p> <p>Example Activity: Observe and document the growth stages of a crop plant (e.g., from seed germination to flowering and fruiting) and discuss factors that influence plant growth and yield.</p> <p>Objective: Learn about the role of pollinators in agriculture and the importance of biodiversity conservation.</p> <p>Example</p>	<p>sets.</p> <p>Coding for Agricultural Automation:</p> <p>Explore coding concepts and programming languages used in developing agricultural automation systems, such as monitoring sensors, irrigation controllers, and robotic machinery.</p> <p>Develop basic coding skills to write scripts or programs that automate routine tasks in farming operations, such as data logging, pest monitoring, and greenhouse</p>	<p>storage, and consumption, such as grain storage facilities, agricultural tools, and kitchen implements, to understand the role of agriculture in past societies.</p> <p>Analyse how changes in agricultural practices, technology, and environmental conditions have influenced food production, dietary habits, and social structures throughout English history.</p> <p>Understandin</p>	<p>or creating sculptures from recycled agricultural materials.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists who have explored themes related to food, agriculture, and rural life in their work, such as Grant Wood or Frida Kahlo.</p> <p>Use inspiration from these artists to develop their own artistic style that reflects their appreciation for the importance of food and agriculture in society and the</p>	<p>importance of a balanced diet for overall health and wellbeing.</p> <p>Learn about portion control, food groups, and the benefits of eating a variety of nutrient-rich foods for physical health.</p> <p>Engaging in Physical Activity on Farms and Gardens:</p> <p>Participate in agricultural activities such as planting, harvesting, or tending to crops in community gardens or school farms.</p> <p>Experience the physical benefits of outdoor work and the connection between agriculture and personal</p>
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<p>experiences and attitudes towards food and agriculture in literature, understanding the importance of sustainable food systems.</p> <p>Example Text/Genre: Short stories or novels that address issues such as food insecurity, agricultural sustainability, or farm life, such as "Charlotte's Web" by E.B. White or "Seedfolks" by Paul Fleischman.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for sustainable food and agriculture practices through various genres.</p>	<p>Fractions:</p> <p>Understanding Fractional Relationships in Agriculture:</p> <p>Learn about equivalent fractions in the context of agricultural practices, such as comparing different proportions of crop varieties planted or the fractions of land allocated to different agricultural activities.</p> <p>Explore fractions in relation to food processing and distribution, such as understanding the fraction of food wasted in supply chains or</p>	<p>Activity: Explore the role of bees, butterflies, and other pollinators in plant reproduction and discuss strategies for supporting pollinator populations in agricultural landscapes.</p> <p>Objective: Understand the concept of food chains and webs in agricultural ecosystems, including the interactions between producers, consumers, and decomposers.</p> <p>Example Activity: Construct a food web using organisms found in a farm</p>	<p>climate control.</p> <p>Digital Tools for Farm Management:</p> <p>Learn about the use of digital tools and mobile applications in farm management, including crop planning, inventory tracking, and financial analysis.</p> <p>Explore how cloud computing, Internet of Things (IoT) devices, and mobile technologies can improve efficiency and decision-making in agricultural production.</p>	<p>g Food and Agriculture Across Various Historical Periods and Civilizations:</p> <p>Examine food and agricultural practices in Ancient Egypt, including the cultivation of staple crops like wheat and barley along the Nile River, the development of irrigation systems, and the use of agricultural surpluses for trade and taxation.</p> <p>Investigate the agricultural innovations of the Roman</p>	<p>environment.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating sounds of nature and agricultural activities into musical compositions and improvisations.</p> <p>Experiment with creating music inspired by food and agriculture themes, such as compositions that celebrate farming rhythms or songs that honour traditional food</p>	<p>wellbeing.</p> <p>Social Skills:</p> <p>Effective Communication in Farming and Agriculture:</p> <p>Practice communicating with peers and adults while working on agricultural projects or participating in farm visits.</p> <p>Express thoughts, ideas, and concerns related to food production and agriculture, and listen to others' perspectives with respect.</p> <p>Collaboration in Agricultural Activities:</p> <p>Work collaboratively with classmates or</p>
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<p>Example Task: Compose a persuasive letter to school administrators or policymakers advocating for the inclusion of more locally sourced and sustainable food options in school lunches.</p> <p>Objective: Develop narrative writing skills by creating stories that explore themes related to food production, agriculture, and the relationship between humans and the natural world.</p> <p>Example Task: Write a short story about a character's experiences working on a family farm or participating in a community garden, highlighting the</p>	<p>the percentage of organic versus conventional farming practices.</p> <p>Geometry:</p> <p>Analysing Agricultural Patterns:</p> <p>Explore shapes and properties of agricultural landscapes, considering factors such as field shapes, irrigation systems, and crop arrangements.</p> <p>Use geometry concepts to analyse spatial patterns and transformations in agricultural land use, such as identifying</p>	<p>ecosystem, discussing the flow of energy and nutrients through the food chain.</p> <p>Chemistry:</p> <p>Objective: Learn about the properties of soil and its importance in agriculture.</p> <p>Example Activity: Investigate the composition of soil (e.g., sand, silt, clay) and discuss how soil properties affect plant growth and nutrient uptake.</p> <p>Objective: Understand the role of nutrients and fertilisers in plant nutrition and</p>	<p>Design and Technology (D&T):</p> <p>Designing Sustainable Farming Systems:</p> <p>Engage in designing products and systems that promote sustainable agriculture practices, including organic farming, permaculture, and agroforestry.</p> <p>Explore innovative design concepts for farm infrastructure, equipment, and tools that enhance soil health, water conservation,</p>	<p>Empire, such as the adoption of crop rotation, the use of fertilisers, and the establishment of large-scale farming estates (latifundia) to meet the demands of urban populations.</p> <p>Explore Viking Age societies and their agricultural strategies, including the cultivation of crops in marginal lands, the domestication of animals for food and labour, and the importance of maritime trade</p>	<p>cultures and farming communities.</p> <p>Exploring Music Genres and Instruments Related to Food and Agriculture:</p> <p>Explore different musical genres that reflect agricultural traditions and food cultures, such as folk music celebrating harvest festivals or songs inspired by rural life.</p> <p>Learn to play musical instruments commonly associated with agricultural communities and their cultural expressions, such as folk</p>	<p>community members on agricultural projects, such as planning and maintaining a school garden or organising a farmers' market.</p> <p>Learn to appreciate the value of teamwork in achieving common goals related to food and agriculture.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Cultural Diversity in Food Choices:</p> <p>Explore the diversity of food cultures and traditions within the local community and globally.</p> <p>Appreciate and celebrate the cultural significance</p>
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<p>importance of sustainable agriculture practices.</p> <p>Objective: Structure writing effectively to convey messages about food and agriculture clearly and persuasively.</p> <p>Example Task: Create an informational pamphlet or infographic about the benefits of organic farming, organising information logically and using visuals to enhance understanding.</p> <p>Objective: Utilise descriptive language to raise awareness of food and agriculture issues and inspire action towards sustainable practices.</p> <p>Example Task:</p>	<p>geometric shapes of fields or assessing the symmetry of crop rows.</p> <p>Measurement:</p> <p>Measuring Agricultural Outputs:</p> <p>Measure and calculate agricultural-related quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate units, focusing on applications relevant to food production and distribution.</p> <p>Apply measurement skills to assess and quantify agricultural</p>	<p>soil fertility.</p> <p>Example Activity: Conduct experiments to observe the effects of different types of fertilisers (e.g., organic vs. synthetic) on plant growth, discussing their advantages and disadvantages.</p> <p>Physics:</p> <p>Objective: Investigate the role of forces and energy in agricultural machinery and equipment.</p> <p>Example Activity: Explore the mechanics of simple machines used in agriculture (e.g.,</p>	<p>and biodiversity.</p> <p>Prototyping Agricultural Technologies:</p> <p>Use design and prototyping tools to develop agricultural technologies and solutions that address specific challenges in food production, such as crop pests, soil erosion, and water scarcity.</p> <p>Create models and prototypes of farm equipment, irrigation systems, and renewable energy solutions to test functionality and effectiveness in real-world</p>	<p>for accessing food resources.</p> <p>Analyze Tudor England's agricultural system, including the enclosure of common lands, the expansion of sheep farming for wool production, and the impact of agrarian reforms on rural communities and land use patterns.</p> <p>Examine the transformation of agriculture during the Industrial Revolution, including the mechanisation</p>	<p>instruments like the banjo or accordion.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Food and Agriculture Focus:</p> <p>Participate in physical activities that promote understanding of food production and agricultural practices, such as gardening, farm visits, or outdoor cooking activities.</p> <p>Incorporate principles of healthy eating and sustainable food systems into PE activities, encouraging</p>	<p>of different foods, recipes, and cooking techniques, promoting inclusivity and diversity in food-related activities.</p> <p>Health Education:</p> <p>Understanding Food Safety and Hygiene:</p> <p>Learn about food safety practices, including proper handling, storage, and preparation of food to prevent foodborne illnesses.</p> <p>Develop skills in maintaining personal hygiene while handling food, promoting health and safety in food-related activities.</p> <p>Economic</p>
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<p>Write a descriptive poem celebrating the beauty of a bountiful harvest or the joys of growing food in a garden, using imagery and sensory details to evoke the experience.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about food and agriculture, actively participating and contributing ideas for promoting sustainable food systems.</p> <p>Example Activity: Engage in a class debate about the advantages and challenges of organic farming versus conventional agriculture, considering factors</p>	<p>outputs, such as measuring the length of irrigation canals, calculating the area of farmland under cultivation, or determining the volume of harvested crops.</p> <p>Statistics:</p> <p>Interpreting Agricultural Data:</p> <p>Interpret and present data on food production, agricultural yields, and supply chain metrics using graphs, charts, and tables.</p> <p>Learn about measures of central tendency and dispersion in the context of</p>	<p>levers, pulleys) and discuss how they make farm work easier and more efficient.</p> <p>Objective: Understand the importance of light and water in plant growth and agriculture.</p> <p>Example Activity: Investigate the effects of light intensity and water availability on plant growth using controlled experiments, discussing the role of photosynthesis in food production.</p> <p>Objective: Learn about the role of technology and innovation in modern</p>	<p>conditions.</p> <p>Problem-Solving for Food Security:</p> <p>Apply problem-solving skills to identify food security issues in local and global contexts and develop creative solutions that increase access to nutritious food and reduce food waste.</p> <p>Use critical thinking and collaboration to evaluate the social, economic, and environmental impacts of different agricultural practices and technologies on</p>	<p>of farming processes, the development of agricultural machinery, and the enclosure of agricultural land for commercial production.</p> <p>Investigate how World War II affected food and agriculture, such as changes in agricultural labour patterns, government policies on food rationing and production, and the role of women in maintaining food security during wartime.</p>	<p>participants to explore the connection between physical activity, nutrition, and agriculture.</p> <p>Drama:</p> <p>Exploring Food and Agriculture Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore issues related to food production, distribution, and access, such as food insecurity, food waste, or sustainable farming.</p> <p>Create and perform dramatic scenes or skits that raise</p>	<p>Education:</p> <p>Exploring Careers in Agriculture and Food Production:</p> <p>Learn about various careers in agriculture and food production, including farmers, agricultural scientists, nutritionists, and food technologists.</p> <p>Understand the skills and education required for different careers in the agriculture and food industry, fostering awareness of future career possibilities.</p> <p>Citizenship:</p> <p>Understanding Food Rights and Responsibilities:</p> <p>Learn about</p>
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<p>such as environmental impact, food quality, and economic viability.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing strategies for promoting sustainable food and agriculture practices.</p> <p>Example Activity: Work in small groups to brainstorm and plan a school project or community initiative aimed at promoting local food production, reducing food waste, or supporting farmers practising sustainable agriculture.</p>	<p>agricultural data analysis, such as analysing average crop yields or the variability in food prices over time.</p>	<p>agriculture.</p> <p>Example Activity: Research and present examples of agricultural technologies (e.g., drip irrigation, genetically modified crops) and discuss their potential benefits and risks.</p>	<p>food systems and communities.</p>	<p>Exploring Significant Figures, Events, and Inventions in Food and Agriculture History:</p> <p>Identify significant figures in food and agriculture history, such as agricultural scientists, inventors, and policymakers, and their contributions to improving crop yields, food security, and agricultural sustainability.</p> <p>Explore important dates and events related to food and</p>	<p>awareness about the importance of sustainable agriculture and food justice, inspiring individuals to make informed choices about food consumption and support local and organic farming practices.</p>	<p>food-related rights, such as access to nutritious and affordable food, food security, and the right to food sovereignty.</p> <p>Recognize the responsibilities of individuals and communities in promoting food justice and ensuring equitable access to food resources for all members of society.</p> <p>Global Citizenship:</p> <p>Exploring Global Food Systems and Sustainability:</p> <p>Understand the global food system and its impact on environmental sustainability, food security, and social justice.</p>
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				Analyse how historical events and figures have influenced present-day food and agriculture practices, policies, and sustainability efforts, including efforts to address issues such as food insecurity, soil degradation, and climate change adaptation.		
Water Conservation (SUS9)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE)

						Citizenship
<p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on water conservation.</p> <p>Example Text/Genre: "The Water Princess" by Susan Verde - a picture book based on the childhood experiences of supermodel Georgie Badiel, highlighting the importance of clean water access and conservation in Africa.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the significance of</p>	<p>Number and Place Value:</p> <p>Understanding Water Quantities:</p> <p>Develop a deep understanding of numbers and their relationships by exploring numerical data related to water usage, conservation, and distribution, such as water consumption rates, reservoir capacities, or rainfall measurements.</p> <p>Addition, Subtraction, Multiplication,</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the importance of water conservation for living organisms and ecosystems.</p> <p>Example Activity: Investigate the role of water in supporting plant and animal life, discussing the consequences of water scarcity and pollution on biodiversity.</p> <p>Objective: Explore the adaptations of</p>	<p>Computing:</p> <p>Data Analysis for Water Usage:</p> <p>Learn how computer hardware, software, and algorithms are used to collect, analyse, and visualise data related to water consumption, usage patterns, and resource management.</p> <p>Develop skills in using spreadsheets, databases, and data visualisation tools to identify trends, monitor</p>	<p>Exploring Water Conservation through Archaeological Evidence in English History:</p> <p>Investigate key periods in English history, such as the Mediaeval period, Tudor era, and Industrial Revolution, with a focus on water conservation, supported by archaeological evidence.</p> <p>Explore archaeological sites and</p>	<p>Art and Design:</p> <p>Exploring Water Conservation Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to visually depict the importance of water conservation, highlighting concepts such as water-saving behaviours, water pollution prevention, and sustainable water management.</p> <p>Experiment with artistic materials</p>	<p>Mental and Emotional Health:</p> <p>Understanding the Importance of Water Conservation for Mental Wellbeing:</p> <p>Learn about the psychological benefits of conserving water, including feelings of empowerment and responsibility towards environmental stewardship.</p> <p>Understand the potential stress and anxiety associated with water scarcity and the importance of adopting water-saving behaviours to</p>

<p>water conservation for environmental sustainability and human well-being.</p> <p>Example Text/Genre: Articles from environmental magazines or websites discussing topics such as water scarcity, pollution, and conservation strategies.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about water conservation and its importance.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "The Water Cycle" by Christina Rossetti, exploring the natural</p>	<p>and Division:</p> <p>Calculating Water Usage:</p> <p>Use addition, subtraction, multiplication, and division to solve mathematical problems related to water conservation, such as calculating total water usage in households, determining water flow rates in pipes, or estimating water savings from conservation practices.</p> <p>Apply mental and written methods to solve water-related problems efficiently and</p>	<p>living organisms to different water environments, emphasising their strategies for conserving and utilising water resources.</p> <p>Example Activity: Research and present examples of plants and animals adapted to arid or aquatic habitats, discussing their unique physiological and behavioural adaptations.</p> <p>Objective: Learn about the water cycle and its significance for maintaining freshwater ecosystems and sustaining life on Earth.</p>	<p>water usage, and assess the effectiveness of conservation efforts.</p> <p>Coding for Water Monitoring Systems:</p> <p>Explore coding concepts and programming languages used in developing water monitoring systems, such as IoT sensors, data loggers, and remote sensing technologies.</p> <p>Develop basic coding skills to write scripts or programs that automate data collection, analysis, and reporting for</p>	<p>artefacts related to water management, such as irrigation systems, water wells, and reservoirs, to understand how past societies conserved and managed water resources.</p> <p>Analyse the impact of water conservation practices on agricultural productivity, urban development, and the environment throughout English history.</p> <p>Understanding Water</p>	<p>and techniques that represent water conservation themes, such as using blue hues to symbolise water, incorporating recycled materials into artworks, or creating sculptures that depict water-saving devices.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists who have addressed water conservation and environmental themes in their work, such as Christo and Jeanne-Claude or Andy</p>	<p>mitigate these concerns.</p> <p>Physical Health and Wellbeing:</p> <p>Promoting Hydration and Water-Related Health:</p> <p>Learn about the role of water in maintaining physical health, including hydration, digestion, and temperature regulation.</p> <p>Understand the importance of drinking clean and safe water for personal hygiene and overall well being.</p> <p>Social Skills:</p> <p>Effective Communication about Water</p>
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<p>processes of water and the need to protect this vital resource.</p> <p>Objective: Make inferences about characters' experiences and attitudes towards water conservation in literature, understanding the importance of responsible water use.</p> <p>Example Text/Genre: Short stories or novels that address water-related issues, such as "A Long Walk to Water" by Linda Sue Park, which tells the story of a Sudanese girl's journey to access clean water.</p> <p>Writing:</p>	<p>accurately, recognizing the importance of numerical skills in managing water resources.</p> <p>Fractions:</p> <p>Understanding Fractional Water Conservation:</p> <p>Learn about equivalent fractions in the context of water conservation efforts, such as comparing different water-saving devices or the fractions of water recycled in wastewater treatment processes.</p> <p>Explore fractions in relation to water distribution</p>	<p>Example Activity: Create a model of the water cycle and discuss the processes of evaporation, condensation, precipitation, and runoff, highlighting the importance of water conservation in preventing water shortages and droughts.</p> <p>Chemistry:</p> <p>Objective: Understand the properties of water and its importance in various chemical and biological processes.</p> <p>Example</p>	<p>water quality, quantity, and distribution.</p> <p>Digital Tools for Water Conservation:</p> <p>Learn about digital tools and applications that promote water conservation practices, including water usage calculators, leak detection systems, and smart irrigation controllers.</p> <p>Explore how technology can be leveraged to optimise water use efficiency, reduce wastage, and promote sustainable water management</p>	<p>Conservation Across Various Historical Periods and Civilizations:</p> <p>Examine water conservation techniques in Ancient Egypt, including the construction of irrigation canals, the use of basin irrigation for crops, and the development of water storage facilities like cisterns and reservoirs.</p> <p>Investigate water management strategies in the Roman Empire, such as the construction of</p>	<p>Goldsworthy.</p> <p>Use inspiration from these artists to develop their own artistic style that reflects their concerns about water conservation and promotes awareness of the importance of protecting water resources.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating sounds of water and natural resources into</p>	<p>Conservation:</p> <p>Practice communicating with peers, family members, and community members about the importance of water conservation.</p> <p>Express feelings and concerns about water scarcity and collaborate with others to find solutions and promote water-saving behaviours.</p> <p>Collaborative Efforts in Water Conservation Projects:</p> <p>Work cooperatively with classmates or community members to implement water-saving</p>
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<p>Objective: Write for different purposes and audiences, advocating for water conservation through various genres.</p> <p>Example Task: Compose a persuasive letter to local authorities or community leaders urging them to implement water-saving measures, such as rainwater harvesting or water-efficient landscaping.</p> <p>Objective: Develop narrative writing skills by creating stories that highlight the importance of water conservation and the consequences of water misuse.</p> <p>Example Task: Write a short story about characters</p>	<p>and usage, such as understanding the fraction of water lost through leaks in the water supply system or the percentage of water saved through conservation measures.</p> <p>Geometry:</p> <p>Analysing Water Infrastructure:</p> <p>Explore shapes and properties of water-related infrastructure, such as reservoirs, pipelines, and irrigation systems.</p> <p>Use geometry concepts to analyse spatial patterns and</p>	<p>Activity: Investigate the properties of water (e.g., cohesion, adhesion, surface tension) and discuss how these properties influence its role in ecosystems and human activities.</p> <p>Objective: Learn about the chemistry of water treatment and purification processes, emphasising the importance of clean and safe drinking water.</p> <p>Example Activity: Explore the processes of filtration, disinfection, and desalination used in water</p>	<p>practices at home, school, and community levels.</p> <p>Design and Technology (D&T):</p> <p>Designing Water-Saving Devices:</p> <p>Engage in designing products and systems that promote water conservation and efficiency, such as low-flow faucets, water-saving appliances, and rainwater harvesting systems.</p> <p>Explore innovative design concepts for</p>	<p>aqueducts, the regulation of water usage through public fountains and baths, and the implementation of laws to protect water sources.</p> <p>Explore Viking Age societies and their approach to water conservation, including the use of water mills for grinding grain, the construction of drainage systems for agriculture, and the development of maritime technology for navigation and fishing.</p>	<p>musical compositions and improvisations.</p> <p>Experiment with creating music inspired by water conservation themes, such as compositions that evoke the sounds of rivers, rain, or waterfalls, to raise awareness and inspire action towards sustainable water use.</p> <p>Exploring Music Genres and Instruments Related to Water Conservation:</p> <p>Explore different musical genres that celebrate water and environmental sustainability, such as ambient</p>	<p>initiatives, such as organising water-saving campaigns or participating in community clean-up efforts.</p> <p>Respect diverse perspectives on water conservation and engage in constructive dialogue to address challenges and find solutions.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Cultural Perspectives on Water Conservation:</p> <p>Explore cultural attitudes and practices related to water conservation within diverse</p>
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<p>facing water scarcity in their community and their efforts to find sustainable solutions to conserve water resources.</p> <p>Objective: Structure writing effectively to convey messages about water conservation clearly and persuasively.</p> <p>Example Task: Create an informational brochure or poster about water-saving tips and techniques, organising information logically and using visuals to engage the audience.</p> <p>Objective: Utilise descriptive language to raise awareness of water conservation issues and inspire action</p>	<p>transformations in water distribution networks, such as identifying geometric shapes of reservoirs or assessing the symmetry of irrigation canals.</p> <p>Measurement:</p> <p>Measuring Water Usage and Conservation:</p> <p>Measure and calculate water-related quantities such as length, area, volume, capacity, mass, time, and temperature using appropriate units, focusing on applications relevant to water</p>	<p>treatment plants, discussing their role in providing potable water for human consumption.</p> <p>Physics:</p> <p>Objective: Investigate the physics of water flow and distribution, including factors that affect water movement and accessibility.</p> <p>Example Activity: Experiment with different materials to observe how they affect the rate of water absorption and discuss the implications for soil erosion and groundwater</p>	<p>water-efficient gardens, landscapes, and urban infrastructure that minimise runoff, erosion, and water pollution.</p> <p>Prototyping Water Management Solutions:</p> <p>Use design and prototyping tools to develop water management solutions that address specific challenges, such as water scarcity, drought resilience, and flood prevention.</p> <p>Create models and prototypes of rain gardens, permeable pavements, and</p>	<p>Analyze Tudor England's water conservation efforts, including the regulation of water usage in urban areas, the development of water supply systems like wells and conduits, and efforts to prevent water pollution and contamination.</p> <p>Examine the impact of industrialization on water conservation during the Industrial Revolution, including the development of water-powered</p>	<p>music inspired by nature or traditional songs that honour water as a sacred resource.</p> <p>Learn to play musical instruments commonly associated with water-related cultures and traditions, such as percussion instruments used in water rituals or wind instruments mimicking the flow of water.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Water Conservation Focus:</p>	<p>communities.</p> <p>Appreciate and celebrate the cultural significance of water-saving traditions and rituals, promoting inclusivity and diversity in water conservation efforts.</p> <p>Health Education:</p> <p>Understanding the Impact of Water Pollution on Personal Health:</p> <p>Learn about the health risks associated with water pollution, including waterborne diseases and contamination.</p> <p>Develop awareness of the importance of protecting water sources and</p>
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<p>towards responsible water use.</p> <p>Example Task: Write a descriptive poem celebrating the beauty of water and advocating for its conservation, using imagery and sensory details to evoke the importance of this precious resource.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about water conservation, actively participating and contributing ideas for promoting responsible water use.</p> <p>Example Activity: Engage in a class debate about the impact of human activities on water resources,</p>	<p>conservation.</p> <p>Apply measurement skills to assess and quantify water usage, such as measuring the length of water pipes, calculating the area of irrigated fields, or determining the volume of water saved through conservation practices.</p> <p>Statistics:</p> <p>Interpreting Water Data:</p> <p>Interpret and present data on water usage, conservation efforts, and environmental impacts using graphs, charts,</p>	<p>recharge.</p> <p>Objective: Understand the role of energy in water conservation and management, including the use of renewable energy sources for water pumping and treatment.</p> <p>Example Activity: Discuss the energy requirements of water pumping systems and explore alternative energy sources (e.g., solar, wind) for powering water infrastructure in remote or off-grid areas.</p> <p>Objective: Learn about Earth's</p>	<p>green roofs to test their effectiveness in capturing, storing, and filtering rainwater.</p> <p>Problem-Solving for Water Sustainability:</p> <p>Apply problem-solving skills to identify water conservation issues in local and global contexts and develop creative solutions that promote sustainable water use and protection of water resources.</p> <p>Use critical thinking and collaboration to evaluate the</p>	<p>machinery, the construction of canals for transportation, and the emergence of early environmental movements advocating for water quality protection.</p> <p>Investigate water conservation initiatives during World War II, such as water rationing measures, the development of water-saving technologies, and efforts to protect water sources from pollution and contamination.</p> <p>Exploring Significant</p>	<p>Participate in physical activities that promote water conservation practices, such as water-themed relay races, water-saving challenges, or educational activities about watershed protection.</p> <p>Incorporate principles of water stewardship into team-building exercises and outdoor adventure activities, fostering a sense of responsibility for preserving water resources and promoting sustainable water use.</p> <p>Drama:</p>	<p>practicing water conservation to safeguard personal health and wellbeing.</p> <p>Economic Education:</p> <p>Financial Implications of Water Conservation:</p> <p>Understand the economic costs associated with water wastage and inefficient water use.</p> <p>Learn about the financial benefits of water conservation measures, such as reduced utility bills and savings on water-related expenses.</p> <p>Citizenship:</p> <p>Rights and</p>
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<p>considering topics such as pollution, over-extraction, and water management policies.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing strategies for conserving water at home and in the community.</p> <p>Example Activity: Work in small groups to brainstorm and plan a school project or community initiative aimed at raising awareness of water conservation practices and implementing water-saving measures.</p>	<p>and tables.</p> <p>Learn about measures of central tendency and dispersion in the context of water data analysis, such as analysing average water consumption rates or the variability in precipitation patterns over time.</p>	<p>water resources and the importance of sustainable water management practices.</p> <p>Example Activity: Investigate the impacts of human activities (e.g., deforestation, urbanisation, agricultural runoff) on water quality and quantity, and discuss strategies for mitigating pollution and conserving water resources.</p> <p>Physical Geography:</p> <p>Objective: Understand the relationship between physical geography and</p>	<p>social, economic, and environmental impacts of different water management strategies and technologies on ecosystems and communities.</p>	<p>Figures, Events, and Inventions in Water Conservation History:</p> <p>Identify significant figures in water conservation history, such as engineers, urban planners, and environmental activists, and their contributions to improving water management practices and promoting conservation efforts.</p> <p>Explore important dates and events related to water</p>	<p>Exploring Water Conservation Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore water conservation issues such as water scarcity, pollution, or access to clean water.</p> <p>Create and perform dramatic scenes or skits that raise awareness about the importance of water conservation and inspire individuals to take action to protect water resources and promote sustainable water management</p>	<p>Responsibilities in Water Conservation:</p> <p>Recognize the right to clean and safe water as a fundamental human right.</p> <p>Understand the responsibility of individuals and communities to conserve water resources and protect water quality for present and future generations.</p> <p>Global Citizenship:</p> <p>Understanding Global Water Issues and Interconnectedness:</p> <p>Explore global water challenges, such as water scarcity, pollution, and</p>
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		<p>agricultural practices.</p> <p>Example Activity: Read "The Farm That Feeds Us" by Nancy Castaldo to explore how different landforms, climates, and soil types influence agricultural activities. Discuss the importance of soil fertility, water availability, and climate suitability for crop production.</p> <p>Objective: Investigate the role of rivers and mountains in shaping agricultural landscapes and food production.</p>		<p>conservation, such as the construction of major water infrastructure projects, the enactment of water conservation laws, and the implementation of water management policies.</p> <p>Investigate the causes and consequences of water-related inventions and discoveries throughout history, such as the development of water purification technologies, irrigation methods, and flood control</p>	<p>practices.</p>	<p>access disparities.</p> <p>Recognise the interconnectedness of water-related issues with broader global challenges, such as poverty, climate change, and social inequality, fostering a sense of global citizenship and responsibility.</p>
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		<p>Example Activity: Read "The Tale of Peter Rabbit" by Beatrix Potter to learn about farming practices in rural landscapes. Discuss the importance of water management, irrigation systems, and terracing in mountainous regions for sustainable agriculture.</p> <p>Objective: Explore the impact of climate change on agriculture and food security.</p> <p>Example Activity: Read "Before We Eat: From Farm to Table" by Pat</p>		<p>systems.</p> <p>Analyse how historical events and figures have influenced present-day water conservation practices, policies, and sustainability efforts, including efforts to address water scarcity, drought, and climate change adaptation.</p>		
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		<p>Brisson to understand the journey of food from farm to table and the challenges faced by farmers due to climate variability. Discuss adaptation strategies such as crop diversification, agroforestry, and resilient farming practices.</p> <p>Human Geography:</p> <p>Objective: Understand the social and economic factors influencing agricultural systems and food production.</p> <p>Example Activity: Read "The Little House"</p>				
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		<p>by Virginia Lee Burton to explore the transformation of rural landscapes into urban areas and its implications for agriculture. Discuss the importance of preserving agricultural land, supporting small-scale farmers, and ensuring food security.</p> <p>Objective: Investigate the global food system and its impact on local communities and the environment.</p> <p>Example Activity: Read "How Did That Get in My Lunchbox?: The Story of Food" by</p>				
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		<p>Chris Butterworth to learn about the journey of food from farm to fork and the interconnectedness of food production, distribution, and consumption. Discuss the environmental and social costs of industrial agriculture and the benefits of local food systems.</p> <p>Objective: Explore global issues such as food insecurity, hunger, and sustainable food production.</p> <p>Example Activity: Read "The Good Garden: How One Family Went</p>				
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		<p>from Hunger to Having Enough" by Katie Smith Milway to understand the challenges of food insecurity and poverty in developing countries. Discuss the importance of sustainable agriculture, food sovereignty, and equitable access to nutritious food.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to identify agricultural regions, crop distribution, and food supply chains.</p> <p>Example</p>				
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		<p>Activity: Use maps and atlases to locate major agricultural regions, identify crop types, and trace the journey of food from production areas to consumption centres.</p> <p>Objective: Understand the spatial distribution of food insecurity and malnutrition.</p> <p>Example Activity: Analyze maps showing food insecurity indicators such as malnutrition rates, food deserts, and hunger hotspots, and discuss factors contributing to food insecurity</p>				
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		<p>and potential solutions.</p> <p>Objective: Analyse geographical data related to agricultural productivity, land use, and environmental impacts.</p> <p>Example Activity: Collect and analyse data on crop yields, land use change, and agricultural practices in different regions, and use GIS tools to create maps and visualisations to communicate findings and propose solutions.</p>				
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Sustainable Transport and Urban Planning (SUS10)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship
<p>English</p> <p>Reading:</p> <p>Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on sustainable transport and urban planning.</p> <p>Example Text/Genre: "The Great Kapok Tree: A Tale of the Amazon Rain Forest" by Lynne Cherry - a children's book that</p>	<p>Number and Place Value:</p> <p>Understanding Population and Transportation:</p> <p>Develop a deep understanding of numbers by analysing population data and its relationship to transportation needs in urban areas.</p> <p>Explore the</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the impact of transportation on living organisms and ecosystems, including air and noise pollution, habitat fragmentation, and roadkill.</p> <p>Example Activity:</p>	<p>Computing:</p> <p>Transport Data Analysis:</p> <p>Learn how computer hardware, software, and algorithms are utilised to collect, process, and analyse transportation data, including traffic patterns, vehicle emissions, and public transit</p>	<p>Exploring Sustainable Transport and Urban Planning through Archaeological Evidence in English History:</p> <p>Investigate key periods in English history, such as the Mediaeval period, Tudor era, and Industrial</p>	<p>Art and Design:</p> <p>Exploring Sustainable Transport and Urban Planning Through Various Artistic Techniques:</p> <p>Utilise drawing, painting, sculpture, printmaking, and textiles to visually represent concepts of sustainable transport, such as</p>	<p>Mental and Emotional Health:</p> <p>Understanding the Psychological Benefits of Sustainable Transport:</p> <p>Learn about the positive impact of walking, cycling, or using public transport on mental wellbeing, including stress reduction and increased happiness.</p>

<p>highlights the importance of preserving natural habitats and the role of sustainable transportation in protecting the environment.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the connections between sustainable transport choices, urban development, and environmental sustainability.</p> <p>Example Text/Genre: Articles from urban planning magazines or websites discussing topics such as public transportation systems, bike-friendly cities, and pedestrian-friendly urban design.</p>	<p>significance of place value in understanding large numbers associated with transportation metrics like vehicle counts, public transport ridership, or population density.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Calculating Transport Statistics:</p> <p>Master fundamental operations to analyse transportation data, such as adding up vehicle emissions, subtracting travel times between</p>	<p>Investigate the effects of vehicle emissions on air quality and discuss strategies for reducing pollution and promoting cleaner transportation options.</p> <p>Objective: Explore the role of green spaces and urban parks in enhancing biodiversity and providing habitats for wildlife in urban areas.</p> <p>Example Activity: Visit a local park or green space to observe and identify different plant and animal species, discussing their importance for</p>	<p>usage.</p> <p>Develop skills in using programming languages and data visualisation tools to interpret transportation data and identify trends, challenges, and opportunities for sustainable transport solutions.</p> <p>Traffic Simulation Modeling:</p> <p>Explore computational modelling techniques used in urban planning and traffic engineering to simulate and optimise</p>	<p>Revolution, with a focus on sustainable transport and urban planning, supported by archaeological evidence.</p> <p>Explore archaeological sites and artefacts related to transportation infrastructure, such as ancient roads, bridges, and harbours, to understand how past societies planned and developed transportation networks.</p> <p>Analyse the impact of urban planning</p>	<p>cycling, walking, public transportation, and eco-friendly urban design.</p> <p>Experiment with artistic materials and techniques that promote sustainable urban planning, such as creating cityscape artworks that feature green spaces, pedestrian-friendly streets, and energy-efficient buildings.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p> <p>Study renowned artists who have explored themes related to urban landscapes and</p>	<p>Explore strategies for managing emotions and reducing anxiety through activities like walking or cycling in nature.</p> <p>Physical Health and Wellbeing:</p> <p>Promoting Active Transportation for Physical Health:</p> <p>Understand the health benefits of active transportation modes, such as walking and cycling, for cardiovascular fitness, muscle strength, and weight management.</p> <p>Learn about the importance of regular physical activity for overall well being and disease prevention.</p>
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<p>Objective: Identify and examine literary devices used in texts to convey messages about sustainable transport and urban planning.</p> <p>Example Text/Genre: Environmental-themed poetry, such as "The City" by Langston Hughes, exploring the challenges of urbanisation and the importance of sustainable city planning.</p> <p>Objective: Make inferences about characters' experiences and attitudes towards sustainable transport and urban planning in literature, understanding the benefits of eco-friendly</p>	<p>different modes of transport, or multiplying to estimate the total distance traveled by various transport modes.</p> <p>Apply mental and written methods to solve transportation-related problems efficiently, including determining the impact of transportation initiatives on reducing carbon emissions.</p> <p>Fractions:</p> <p>Understanding Proportions in Urban Planning:</p> <p>Learn about equivalent fractions to understand the</p>	<p>urban biodiversity and ecosystem services.</p> <p>Chemistry:</p> <p>Objective: Learn about the properties of materials used in transportation infrastructure and vehicles, including their environmental impacts.</p> <p>Example Activity: Investigate the materials used in road construction (e.g., asphalt, concrete) and discuss their durability, sustainability, and potential for recycling.</p> <p>Objective: Understand the</p>	<p>transportation systems, such as traffic flow, congestion management, and road network design.</p> <p>Develop coding skills to create basic traffic simulation models and scenarios, allowing experimentation with different transport policies and infrastructure changes.</p> <p>Digital Mapping for Urban Planning:</p> <p>Learn about Geographic Information Systems (GIS) and mapping software used in</p>	<p>decisions on transportation accessibility, traffic flow, and the environment throughout English history.</p> <p>Understanding Sustainable Transport and Urban Planning Across Various Historical Periods and Civilizations:</p> <p>Examine sustainable transport and urban planning practices in Ancient Egypt, including the construction of canals for irrigation and transportation, the</p>	<p>transportation in their work, such as Banksy or Christo and Jeanne-Claude.</p> <p>Use inspiration from these artists to develop their own artistic style that raises awareness about sustainable transport and urban planning issues and inspires positive change in their communities.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by</p>	<p>Social Skills:</p> <p>Effective Communication about Sustainable Transport:</p> <p>Practice communicating with peers, family members, and community leaders about the benefits of sustainable transportation options.</p> <p>Express feelings and opinions about transportation choices and engage in constructive discussions about ways to promote sustainable mobility in the community.</p> <p>Collaborative Efforts in Urban Planning Projects:</p> <p>Work collaboratively</p>
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<p>transportation and well-designed urban spaces.</p> <p>Example Text/Genre: Short stories or novels that address urban life and transportation issues, such as "The Giver" by Lois Lowry or "The City of Ember" by Jeanne DuPrau.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for sustainable transport and urban planning through various genres.</p> <p>Example Task: Compose a persuasive letter to city officials or community leaders urging them to invest in public</p>	<p>proportion of green spaces, bike lanes, or pedestrian walkways in urban areas compared to roads and buildings.</p> <p>Explore fractions to compare and order resources allocated to different modes of transportation, such as the fraction of the budget allocated to public transit versus road infrastructure.</p> <p>Geometry:</p> <p>Analysing Urban Infrastructure:</p> <p>Explore shapes and angles in urban planning,</p>	<p>chemistry of fuel combustion and its contribution to air pollution and climate change.</p> <p>Example Activity: Explore the chemical reactions involved in burning fossil fuels (e.g., gasoline, diesel) and discuss the emissions of greenhouse gases and pollutants released during combustion.</p> <p>Physics:</p> <p>Objective: Investigate the physics of transportation systems, including the principles of motion, friction, and energy</p>	<p>urban planning and transportation management.</p> <p>Develop proficiency in using digital mapping tools to analyse spatial data, plan transportation routes, identify bike lanes and pedestrian pathways, and assess accessibility and connectivity in urban areas.</p> <p>Design and Technology (D&T):</p> <p>Designing Sustainable Transport Solutions:</p> <p>Engage in designing</p>	<p>development of urban centres along the Nile River, and the use of animal-drawn carts for goods transport.</p> <p>Investigate the transportation and urban planning strategies of the Roman Empire, such as the construction of roads, aqueducts, and sewage systems, and the development of organised urban layouts with public spaces and amenities.</p> <p>Explore Viking Age societies</p>	<p>incorporating sounds of nature and urban environments into musical compositions and improvisations.</p> <p>Experiment with creating music inspired by sustainable transport and urban planning themes, such as compositions that capture the rhythm of city life or celebrate the benefits of alternative transportation modes like biking and walking.</p> <p>Exploring Music Genres and Instruments Related to Sustainable Transport:</p>	<p>with classmates or community members to develop and implement urban planning initiatives that prioritise sustainable transportation infrastructure, such as bike lanes or pedestrian-friendly streets.</p> <p>Respect diverse perspectives on transportation needs and collaborate with others to find inclusive solutions that benefit the entire community.</p> <p>Diversity and Inclusion:</p> <p>Promoting Inclusive Access to Sustainable Transport:</p> <p>Explore how transportation</p>
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<p>transportation infrastructure or implement bike lanes and pedestrian-friendly measures.</p> <p>Objective: Develop narrative writing skills by creating stories that explore themes related to sustainable transportation and urban design.</p> <p>Example Task: Write a short story about characters who work together to transform their city into a more sustainable and livable place, incorporating elements of green transportation and urban planning.</p> <p>Objective: Structure writing effectively to convey messages about sustainable transport and urban</p>	<p>including the layout of streets, intersections, and public spaces.</p> <p>Use geometry to analyse the symmetry and transformations of urban structures, such as assessing the impact of adding bike lanes or redesigning intersections on traffic flow and safety.</p> <p>Measurement:</p> <p>Measuring Urban Space and Distance:</p> <p>Measure and calculate lengths, areas, and volumes of urban spaces and transportation infrastructure,</p>	<p>transfer.</p> <p>Example Activity: Experiment with toy cars or model trains to explore concepts such as acceleration, deceleration, and energy efficiency in transportation.</p> <p>Objective: Understand the role of energy in transportation and the importance of transitioning to sustainable energy sources.</p> <p>Example Activity: Discuss the advantages of electric vehicles (EVs) over conventional gasoline-powered vehicles in terms of energy efficiency, air quality, and</p>	<p>innovative transportation solutions that promote sustainability, such as electric vehicles, bike-sharing systems, and pedestrian-friendly streetscapes.</p> <p>Use design thinking principles to consider user needs, environmental impact, and social equity when developing transportation prototypes and concepts.</p> <p>Prototyping Urban Infrastructure:</p> <p>Utilise design and prototyping tools to create</p>	<p>and their approach to sustainable transport and urban planning, including the use of waterways for navigation, the establishment of trading centres, and the layout of settlements for defence and resource management.</p> <p>Analyze Tudor England's transportation and urban planning initiatives, including the expansion of road networks, the development of market towns, and efforts to</p>	<p>Explore different musical genres that promote sustainable living and transportation, such as environmental music or songs that advocate for public transit and car-free cities.</p> <p>Learn to play musical instruments commonly associated with urban music scenes and street performances, such as drums, percussion, or brass instruments used in marching bands and parades.</p> <p>Physical Education (PE):</p> <p>Engaging in</p>	<p>choices impact individuals from diverse backgrounds, including those with disabilities, low-income communities, and marginalised groups.</p> <p>Advocate for transportation policies and infrastructure that address the needs of all community members and promote equitable access to sustainable transportation options.</p> <p>Health Education:</p> <p>Understanding the Safety Benefits of Sustainable Transport:</p> <p>Learn about the</p>
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<p>planning clearly and persuasively.</p> <p>Example Task: Create an informational brochure or infographic about the benefits of walking, cycling, and using public transportation, organising information logically and using visuals to engage the audience.</p> <p>Objective: Utilise descriptive language to raise awareness of sustainable transport and urban planning issues and inspire action towards more eco-friendly lifestyles.</p> <p>Example Task: Write a descriptive poem celebrating the</p>	<p>such as determining the area of a park, the volume of a bus shelter, or the length of a bike lane.</p> <p>Use appropriate units to measure capacity in public transportation, mass in vehicle emissions, time in travel schedules, and temperature in relation to climate impacts on transportation systems.</p> <p>Statistics:</p> <p>Interpreting Transport Data:</p> <p>Interpret and present transportation data using graphs, charts,</p>	<p>greenhouse gas emissions.</p> <p>Objective: Learn about the impacts of urban planning on transportation systems and sustainable development.</p> <p>Example Activity: Investigate urban design principles such as mixed land use, compact development, and pedestrian-friendly infrastructure, and discuss their role in promoting sustainable transportation options (e.g., walking, cycling, public transit).</p> <p>Objective: Explore the concept of</p>	<p>physical models and digital simulations of urban infrastructure projects, including bus stops, bike racks, and green transportation hubs.</p> <p>Experiment with materials and fabrication techniques to construct prototypes that demonstrate the functionality, durability, and aesthetic appeal of sustainable transport infrastructure.</p> <p>Problem-Solving for Urban Mobility:</p> <p>Apply problem-solving</p>	<p>regulate urban growth and sanitation.</p> <p>Examine the impact of the Industrial Revolution on transportation and urban planning, including the construction of railways, canals, and urban infrastructure, and the emergence of industrial cities with housing, factories, and transportation hubs.</p> <p>Investigate sustainable transport and urban planning efforts during World War II, such as the</p>	<p>Physical Activities with Sustainable Transport Focus:</p> <p>Participate in physical activities that promote sustainable transportation modes, such as walking and biking tours of local neighbourhoods, public transit scavenger hunts, or community clean-up events.</p> <p>Incorporate principles of urban planning and active transportation into team-building exercises and outdoor adventure activities, fostering a sense of responsibility for promoting sustainable</p>	<p>safety advantages of walking and cycling, such as reduced risk of traffic accidents and improved air quality.</p> <p>Understand the importance of following safety guidelines when using sustainable transportation modes to prevent injuries and promote personal safety.</p> <p>Economic Education:</p> <p>Financial Implications of Sustainable Transport Choices:</p> <p>Explore the economic benefits of sustainable transportation, such as reduced transportation costs, savings on fuel</p>
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<p>beauty of a bike-friendly city or a pedestrian-friendly neighbourhood, using vivid imagery and sensory details to evoke the experience.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about sustainable transport and urban planning, actively participating and contributing ideas for creating more sustainable cities.</p> <p>Example Activity: Engage in a class debate about the advantages and challenges of promoting sustainable transportation options, considering</p>	<p>and tables to analyse trends in traffic patterns, mode shares, and emissions.</p> <p>Learn about measures of central tendency and dispersion to understand the distribution of transportation-related variables, such as average commute times, variability in travel speeds, or the spread of pollution levels across different neighbourhoods.</p>	<p>transportation equity and social justice in urban planning.</p> <p>Example Activity: Discuss the challenges faced by marginalised communities in accessing affordable and reliable transportation options and explore strategies for promoting equity and inclusivity in transportation planning</p> <p>Physical Geography:</p> <p>Objective: Understand the impact of transportation on the physical environment,</p>	<p>skills to analyse transportation challenges in urban areas, such as traffic congestion, air pollution, and carbon emissions.</p> <p>Collaborate with peers to brainstorm and develop creative solutions that address these challenges, considering factors like multimodal transportation, transit-oriented development, and smart city technologies.</p>	<p>development of public transportation systems, the rationing of fuel and resources, and the implementation of wartime urban planning measures to accommodate population influxes and ensure efficient resource allocation.</p> <p>Exploring Significant Figures, Events, and Inventions in Sustainable Transport and Urban Planning History:</p> <p>Identify significant figures in</p>	<p>transport options and reducing carbon emissions.</p> <p>Drama:</p> <p>Exploring Sustainable Transport and Urban Planning Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore issues related to sustainable transport and urban design, such as traffic congestion, air pollution, and access to green spaces.</p> <p>Create and perform dramatic scenes or skits that raise</p>	<p>expenses, and improved affordability for low-income households.</p> <p>Learn about budgeting and money management skills related to transportation expenses, such as calculating the cost-effectiveness of different transportation options.</p> <p>Citizenship:</p> <p>Rights and Responsibilities in Sustainable Urban Planning:</p> <p>Recognise the right of all individuals to access safe, affordable, and sustainable transportation</p>
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factors such as accessibility, affordability, and environmental impact.

Objective: Engage in respectful dialogue with peers, collaboratively discussing strategies for advocating for sustainable transport and urban planning.

Example Activity: Work in small groups to brain buzz talk - Ideation and plan a school project or community initiative aimed at promoting bike usage, improving public transportation, or advocating for green urban design principles.

including landforms, rivers, and mountains.

Example Activity: Read "The Little Engine That Could" by Watty Piper to explore the concept of transportation and its effects on landscapes. Discuss how infrastructure development, such as roads and railways, can disrupt natural habitats and contribute to environmental degradation.

Objective: Investigate the role of geography in determining transportation routes and modes.

sustainable transport and urban planning history, such as engineers, architects, and urban designers, and their contributions to shaping transportation infrastructure and urban development.

Explore important dates and events related to sustainable transport and urban planning, such as the construction of landmark transportation projects, the enactment of urban planning laws, and the

awareness about the benefits of sustainable transportation options and advocate for urban planning policies that prioritise environmental sustainability and community well-being.

options.
Understand the responsibility of citizens to participate in urban planning processes, advocate for sustainable transportation policies, and hold decision-makers accountable for creating inclusive and accessible transportation systems.

Global Citizenship:
Understanding the Global Impact of Transportation Choices:

Explore the global environmental and social implications of transportation systems, such as carbon emissions, air pollution, and

		<p>Example Activity: Read "The Magic School Bus Inside the Earth" by Joanna Cole to learn about different types of transportation and their relationship to geography. Discuss how topography, climate, and natural resources influence transportation decisions.</p> <p>Objective: Explore the relationship between climate change and transportation infrastructure.</p> <p>Example Activity: Read "The Polar Express" by Chris</p>		<p>implementation of transportation policies.</p> <p>Investigate the causes and consequences of energy discoveries, inventions, and technological advancements related to transportation and urban planning, such as the development of steam engines, railway systems, and mass transit vehicles.</p> <p>Analyze how historical events and figures have influenced present-day sustainable</p>		<p>social inequality.</p> <p>Recognize the interconnectedness of transportation with global challenges like climate change and poverty, fostering a sense of global citizenship and responsibility for sustainable mobility solutions.</p>
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		<p>Van Allsburg to understand the impacts of climate change on polar regions and transportation routes. Discuss the importance of sustainable transportation options, such as public transit and cycling, in reducing greenhouse gas emissions.</p> <p>Human Geography:</p> <p>Objective: Understand the social and economic factors influencing transportation patterns and urban development.</p> <p>Example</p>		<p>transport and urban planning practices, policies, and sustainability efforts, including efforts to address congestion, pollution, and climate change in modern cities.</p>		
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		<p>Activity: Read "The Wheels on the Bus" by Raffi to explore the role of transportation in connecting communities and facilitating economic activities. Discuss the challenges of traffic congestion, air pollution, and urban sprawl in modern cities.</p> <p>Objective: Investigate the impact of transportation on population distribution and settlement patterns.</p> <p>Example Activity: Read "Whoever You Are" by Mem Fox to learn about diversity and</p>				
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		<p>inclusivity in communities around the world. Discuss how transportation networks shape where people live, work, and socialise, and the importance of accessible and equitable transportation options.</p> <p>Objective: Explore global issues such as sustainable development, climate resilience, and smart cities.</p> <p>Example Activity: Read "The Boy Who Harnessed the Wind" by William Kamkwamba to understand the importance of renewable energy</p>				
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		<p>and sustainable technology in addressing energy poverty and climate change. Discuss how innovative transportation solutions, such as electric vehicles and green infrastructure, can contribute to a more sustainable future.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to analyse transportation networks and urban landscapes.</p> <p>Example Activity: Use maps and atlases</p>				
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		<p>to identify major transportation routes, including highways, railways, and waterways, and analyse their spatial distribution and connectivity.</p> <p>Objective: Understand the spatial distribution of transportation-related challenges and opportunities.</p> <p>Example Activity: Analyse maps showing traffic congestion, air quality, and public transportation accessibility in different urban areas, and discuss strategies for improving transportation</p>				
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		<p>efficiency and sustainability.</p> <p>Objective:</p> <p>Analyse geographical data related to urban planning and sustainable transportation initiatives.</p> <p>Example Activity: Collect and analyse data on urban population density, land use zoning, and transportation modes in different cities, and use GIS tools to create maps and visualisations to inform urban planning decisions and advocate for sustainable transportation</p>				
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		policies.				
Citizenship / Global Responsibility and Sustainable Development (SUS11)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship
Reading: Objective: Develop reading skills by exploring a range of fiction and non-fiction texts focused on citizenship, global responsibility, and the SDGs. Example	Number and Place Value: Understanding Global Population: Develop a deep understanding of numbers by exploring global population data, including population	Science Biology: Objective: Understand the interconnectedness of living organisms and ecosystems, and their importance for global biodiversity and sustainability.	Computing: Digital Citizenship and Online Safety: Learn about the importance of responsible digital citizenship, including ethical online behaviour, cyberbullying	Exploring Citizenship, Global Responsibilities, and SDGs in English History: Investigate key periods in English history, such as the Mediaeval period, Tudor	Learning Musical Elements Through Natural Resources: Explore musical elements such as rhythm, pitch, dynamics, tempo, and texture by incorporating sounds of nature and diverse cultures into	Mental and Emotional Health: Understanding Global Challenges and Emotional Wellbeing: Explore how global issues such as poverty, climate change, and inequality can impact mental

<p>Text/Genre: "One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia" by Miranda Paul - a children's book that highlights the importance of environmental responsibility and community action.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the values of compassion, empathy, and social justice embedded in narratives about global citizenship.</p> <p>Example Text/Genre: Articles from global citizenship magazines or websites discussing topics such as human rights, environmental sustainability, and</p>	<p>growth rates, population density, and population distribution across different countries and regions.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Financial Literacy and Global Economics:</p> <p>Master fundamental operations to understand global economic concepts, such as calculating currency exchange rates, budgeting for international aid programs, or analysing trade</p>	<p>Example Activity: Explore the concept of ecological balance and discuss how changes in one ecosystem can affect other ecosystems and species worldwide.</p> <p>Objective: Learn about the impact of human activities on the environment and the need for responsible stewardship of natural resources.</p> <p>Example Activity: Investigate the causes and consequences of deforestation,</p>	<p>awareness, and protecting personal information.</p> <p>Develop knowledge of internet safety practices, such as creating secure passwords, recognizing phishing scams, and understanding the consequences of online actions.</p> <p>Coding for Social Good:</p> <p>Use coding skills to develop projects that address global challenges and promote social responsibility, such as creating educational</p>	<p>era, and Industrial Revolution, with a focus on citizenship, global responsibilities, and the concepts aligned with Sustainable Development Goals (SDGs).</p> <p>Explore historical events and movements in English history that demonstrate principles of citizenship, such as the Magna Carta, the development of parliamentary democracy, and the abolitionist movement.</p>	<p>musical compositions and performances.</p> <p>Experiment with creating music that raises awareness about global issues and promotes sustainable development, using musical techniques to convey messages of hope, unity, and action.</p> <p>Exploring Music Genres and Instruments Related to Global Citizenship:</p> <p>Explore different musical genres from around the world that celebrate diversity, inclusivity, and global solidarity,</p>	<p>health and emotional wellbeing.</p> <p>Develop strategies for managing emotions and building resilience in the face of global challenges.</p> <p>Physical Health and Wellbeing:</p> <p>Promoting Healthy Lifestyles in a Global Context:</p> <p>Learn about the connection between personal health and global issues such as access to clean water, nutritious food, and healthcare.</p> <p>Adopt healthy lifestyle choices that contribute to personal wellbeing and support the achievement of</p>
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<p>cultural diversity.</p> <p>Objective: Identify and examine literary devices used in texts to convey messages about citizenship, global responsibility, and the SDGs.</p> <p>Example Text/Genre: Poems about social justice and global solidarity, such as "The Peace of Wild Things" by Wendell Berry, reflecting on humanity's interconnectedness with nature and each other.</p> <p>Objective: Make inferences about characters' actions and attitudes towards citizenship and global responsibility in literature, understanding the impact of individual and collective</p>	<p>balances between countries.</p> <p>Apply mental and written methods to solve mathematical problems related to global financial transactions, including adding, subtracting, multiplying, and dividing amounts in different currencies.</p> <p>Fractions:</p> <p>Understanding Proportions in Sustainable Development Goals (SDGs):</p> <p>Learn about equivalent fractions by relating them to the proportionate representation of</p>	<p>habitat loss, and pollution, and discuss strategies for promoting conservation and restoring degraded ecosystems.</p> <p>Objective: Explore the role of plants and animals in sustainable agriculture and food security.</p> <p>Example Activity: Discuss the importance of biodiversity in crop pollination, soil fertility, and pest control, and explore sustainable farming practices that promote ecosystem health and resilience.</p>	<p>games, apps, or websites focused on environmental conservation, human rights, or cultural diversity.</p> <p>Explore the role of technology in advancing the United Nations' Sustainable Development Goals (SDGs) and develop coding projects aligned with specific SDGs, such as poverty alleviation, quality education, or climate action.</p> <p>Data Ethics and Privacy Awareness:</p> <p>Gain an understanding of data ethics</p>	<p>Analyse the historical context of global responsibilities and SDGs within English society, including the impact of colonialism, imperialism, and international trade on global development and sustainability.</p> <p>Understanding Citizenship, Global Responsibilities, and SDGs Across Various Historical Periods and Civilizations:</p> <p>Examine</p>	<p>such as world music, folk music, or songs of resistance.</p> <p>Learn to play musical instruments commonly associated with global music traditions, such as percussion instruments from Africa, string instruments from Asia, or wind instruments from indigenous cultures.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical Activities with Global Citizenship Focus:</p> <p>Participate in</p>	<p>global health goals outlined in the SDGs.</p> <p>Social Skills:</p> <p>Effective Communication for Global Understanding:</p> <p>Practice expressing feelings and opinions about global issues in a respectful and empathetic manner.</p> <p>Develop communication skills to engage in discussions about diverse perspectives on global challenges and collaborate on solutions.</p> <p>Conflict Resolution and Peaceful Coexistence:</p>
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<p>actions on communities worldwide.</p> <p>Example Text/Genre: Short stories or novels that address themes of social justice, equality, and cooperation, such as "Esperanza Rising" by Pam Muñoz Ryan or "Wonder" by R.J. Palacio.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, advocating for global responsibility and the SDGs through various genres.</p> <p>Example Task: Compose a persuasive letter to policymakers or community leaders</p>	<p>different SDGs in global initiatives.</p> <p>Compare and order fractions representing different aspects of sustainable development, such as comparing the fraction of renewable energy usage to the fraction of fossil fuel consumption.</p> <p>Geometry:</p> <p>Spatial Awareness in Global Mapping:</p> <p>Explore shapes, angles, and symmetry in maps and geographical representations to understand global spatial</p>	<p>Chemistry:</p> <p>Objective: Understand the environmental implications of chemical reactions and waste disposal practices.</p> <p>Example Activity: Investigate the effects of pollution from industrial chemicals, plastics, and household products on water quality and biodiversity, and discuss strategies for reducing chemical pollution and promoting responsible waste management.</p> <p>Objective: Learn</p>	<p>principles and the importance of privacy protection in the digital age.</p> <p>Explore ethical considerations related to data collection, usage, and sharing, and learn how algorithms and artificial intelligence can impact individuals, communities, and society as a whole.</p> <p>Design and Technology (D&T):</p> <p>Designing Solutions for Global Challenges:</p> <p>Engage in</p>	<p>concepts of citizenship in Ancient Egypt, such as the role of pharaohs, nobles, and commoners in society, and explore examples of civic participation, justice, and social responsibility.</p> <p>Investigate the global responsibilities of the Roman Empire, including governance, infrastructure development, and cultural exchange across vast territories, and analyse how these efforts</p>	<p>physical activities that promote teamwork, cooperation, and empathy, fostering a sense of global citizenship and responsibility.</p> <p>Incorporate principles of social justice and human rights into team-building exercises and cooperative games, encouraging participants to work together towards common goals and respect the dignity and rights of others.</p> <p>Drama:</p> <p>Exploring Global Citizenship Through Drama:</p> <p>Use drama</p>	<p>Learn strategies for resolving conflicts peacefully, both at a personal level and in the context of global conflicts and disputes.</p> <p>Understand the importance of promoting peace, tolerance, and understanding among individuals and communities worldwide.</p> <p>Diversity and Inclusion:</p> <p>Appreciating Cultural Diversity and Global Perspectives:</p> <p>Celebrate and learn about the diversity of cultures, religions, languages, and traditions around the</p>
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<p>urging them to take action on issues such as poverty, climate change, or gender equality, aligning proposals with specific SDGs.</p> <p>Objective: Develop narrative writing skills by creating stories that explore themes of citizenship, empathy, and social change.</p> <p>Example Task: Write a short story about characters from different cultures or backgrounds coming together to solve a common problem and promote understanding and cooperation.</p> <p>Objective: Structure writing effectively to convey messages about global</p>	<p>relationships and boundaries.</p> <p>Investigate transformations in map projections and understand how different projections distort shapes and sizes of countries and continents.</p> <p>Measurement:</p> <p>Quantifying Global Resources and Environmental Data:</p> <p>Include measuring and calculating length, area, volume, capacity, mass, time, and temperature using appropriate units to quantify global resources</p>	<p>about the properties of renewable and nonrenewable resources and their role in sustainable development.</p> <p>Example Activity: Explore the advantages and disadvantages of renewable energy sources (e.g., solar, wind, hydroelectric) compared to fossil fuels in terms of environmental impact, energy efficiency, and long-term sustainability.</p> <p>Physics:</p> <p>Objective: Investigate the role of energy in</p>	<p>designing products or solutions that contribute to global sustainability, social justice, or humanitarian efforts.</p> <p>Apply design thinking methodologies to identify real-world problems, conduct research, and develop innovative solutions that address local or global issues, such as access to clean water, renewable energy, or healthcare services.</p> <p>Cultural Sensitivity and</p>	<p>contributed to societal well-being.</p> <p>Explore Viking Age societies and their interactions with neighbouring cultures, including trade, diplomacy, and conflict resolution, and analyse the values of mutual respect, cooperation, and justice.</p> <p>Examine Tudor England's engagement with global trade and exploration, including the impact of overseas colonies, trade routes, and</p>	<p>techniques such as role-playing, improvisation, and storytelling to explore themes of diversity, equality, and social justice.</p> <p>Create and perform dramatic scenes or skits that raise awareness about global issues, inspire empathy and understanding, and empower young people to take action as responsible global citizens committed to building a more sustainable and equitable world.</p>	<p>world.</p> <p>Foster an inclusive mindset that values and respects the contributions of people from all backgrounds to global society.</p> <p>Health Education:</p> <p>Understanding Global Health Challenges and Responsibilities:</p> <p>Learn about global health issues such as infectious diseases, access to healthcare, and maternal and child health.</p> <p>Recognise individual and collective responsibilities in promoting health equity and addressing global</p>
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<p>responsibility and the SDGs clearly and persuasively.</p> <p>Example Task: Create an informational poster or digital presentation about one of the SDGs, providing facts, statistics, and examples of actions individuals can take to contribute to its achievement.</p> <p>Objective: Utilise descriptive language to raise awareness of global issues and inspire action towards positive change.</p> <p>Example Task: Write a descriptive poem about a community project or initiative aimed at achieving one of the</p>	<p>and environmental indicators.</p> <p>Apply measurement skills to analyse global environmental data, such as calculating carbon dioxide emissions per capita or measuring the area of deforested land.</p> <p>Statistics:</p> <p>Data Analysis for Global Trends:</p> <p>Interpret and present data using graphs, charts, and tables to analyse global trends related to citizenship,</p>	<p>sustainable development and climate change mitigation.</p> <p>Example Activity: Discuss the importance of energy conservation, efficiency, and renewable energy technologies in reducing greenhouse gas emissions and promoting climate resilience.</p> <p>Objective: Understand the impacts of human activities on Earth's natural systems and the importance of environmental protection and restoration.</p> <p>Example</p>	<p>Inclusivity:</p> <p>Learn about cultural diversity, equity, and inclusion in design and technology.</p> <p>Explore how products and technologies can be designed to be inclusive and accessible to people from diverse backgrounds, abilities, and cultures, and consider the ethical implications of design decisions on different communities.</p> <p>Community Engagement and Collaboration:</p>	<p>cultural exchange on English society and the wider world.</p> <p>Analyse the role of the Industrial Revolution in shaping global responsibilities, including the expansion of industrial capitalism, colonialism, and the emergence of social and environmental movements advocating for labour rights and sustainability.</p> <p>Investigate the impact of World War II on global citizenship and</p>		<p>health disparities.</p> <p>Economic Education:</p> <p>Financial Literacy for Global Citizenship:</p> <p>Understand the economic dimensions of global issues, including poverty, inequality, and sustainable development.</p> <p>Learn about responsible financial management practices that support personal wellbeing and contribute to global efforts to eradicate poverty and promote economic prosperity for all.</p> <p>Citizenship:</p> <p>Promoting</p>
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<p>SDGs, capturing the spirit of collaboration and hope for a better world.</p> <p>Speaking and Listening:</p> <p>Objective: Listen attentively to discussions about citizenship, global responsibility, and the SDGs, actively participating and contributing ideas for addressing global challenges.</p> <p>Example Activity: Engage in a class debate about the most pressing global issues and the role of individuals, communities, and governments in addressing them.</p> <p>Objective: Engage in respectful dialogue with peers,</p>	<p>SDGs, and global responsibility.</p> <p>Learn about measures of central tendency and dispersion to understand variability in global data, such as analyzing the mean and standard deviation of income levels across different countries or interpreting the median age of populations in various regions.</p>	<p>Activity: Investigate the effects of deforestation, habitat destruction, and climate change on biodiversity and ecosystem services, and discuss ways to mitigate these impacts through conservation and restoration efforts.</p> <p>Objective: Explore the concept of social justice and equity in global development and environmental governance.</p> <p>Example Activity: Discuss the unequal distribution of resources and environmental</p>	<p>Collaborate with peers to design and create products or projects that foster community engagement, civic participation, and social responsibility.</p> <p>Use design and technology skills to develop interactive installations, public art, or digital platforms that promote dialogue, awareness, and action around local or global issues of importance.</p>	<p>responsibilities, including efforts to promote international cooperation, human rights, and peacebuilding in the aftermath of the war.</p> <p>Exploring Significant Figures, Events, and Inventions in Citizenship, Global Responsibilities, and SDGs History:</p> <p>Identify significant figures in the history of citizenship, global responsibilities, and SDGs,</p>		<p>Democratic Values and Human Rights Globally:</p> <p>Explore the principles of democracy, human rights, and social justice in a global context.</p> <p>Understand the importance of active citizenship in advocating for human rights, promoting democracy, and holding governments and institutions accountable for their actions.</p> <p>Engagement in Global Governance and Decision-Making:</p> <p>Learn about the role of citizens in shaping global</p>
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<p>collaboratively discussing strategies for promoting global citizenship and contributing to the achievement of the SDGs.</p> <p>Example Activity: Work in small groups to research and present a project on one of the SDGs, highlighting its importance, challenges, and potential solutions.</p>		<p>burdens among different communities and countries, and explore strategies for promoting equity, inclusivity, and solidarity in achieving the SDGs.</p> <p>Physical Geography:</p> <p>Objective: Understand the interconnectedness between physical geography and global issues such as climate change and sustainability.</p> <p>Example Activity: Read "The Lorax" by Dr. Seuss to explore the concept of environmental</p>		<p>such as political leaders, activists, and advocates for social justice and sustainability.</p> <p>Explore important dates and events related to citizenship and global responsibilities, such as the signing of international treaties, the establishment of global organisations, and the adoption of SDGs by the United Nations.</p> <p>Investigate the causes and consequences of energy</p>		<p>policies and decisions, including participation in international organisations and advocacy networks.</p> <p>Advocate for sustainable development and the achievement of the SDGs through civic engagement and global citizenship actions.</p> <p>Global Citizenship:</p> <p>Understanding Interconnectedness and Interdependence:</p> <p>Explore the interconnected nature of global challenges such as climate change, poverty, and inequality.</p> <p>Recognize the role</p>
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		<p>stewardship and the impact of human activities on natural landscapes. Discuss the importance of protecting ecosystems, conserving natural resources, and mitigating climate change.</p> <p>Objective: Investigate the role of geography in shaping environmental challenges and opportunities on a global scale.</p> <p>Example Activity: Read "Where the Forest Meets the Sea" by Jeannie Baker to understand the significance of</p>		<p>discoveries, inventions, and technological advancements in the context of citizenship, global responsibilities, and sustainability, such as innovations in renewable energy, transportation, and communication technologies.</p> <p>Analyse how historical events and figures have influenced present-day efforts to promote citizenship, global cooperation, and sustainable</p>		<p>of individuals as global citizens in addressing these challenges through collective action and cooperation across borders.</p> <p>Promoting Environmental Sustainability and Social Justice:</p> <p>Learn about the environmental dimensions of global issues and the importance of sustainable development for present and future generations.</p> <p>Advocate for environmental protection, climate action, and social justice as integral components of global citizenship and responsibility.</p>
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		<p>biodiversity and ecosystems in different geographical regions. Discuss the threats to rainforests, coral reefs, and other fragile ecosystems, and the importance of conservation efforts.</p> <p>Objective: Explore the concept of sustainable development and its relationship to physical geography.</p> <p>Example Activity: Read "The Great Kapok Tree: A Tale of the Amazon Rain Forest" by Lynne Cherry to learn about the importance of</p>		<p>development, including initiatives aimed at addressing poverty, inequality, and environmental degradation in local and global contexts.</p>		
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		<p>rainforests and sustainable land use practices. Discuss the Sustainable Development Goals (SDGs) and how they address environmental, social, and economic challenges.</p> <p>Human Geography:</p> <p>Objective: Understand the role of citizenship and global responsibility in addressing human geography issues such as population growth, migration, and urbanisation.</p> <p>Example Activity: Read</p>				
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		<p>"One Plastic Bag: Isatou Ceesay and the Recycling Women of the Gambia" by Miranda Paul to explore the impact of plastic pollution on communities and the environment. Discuss the importance of individual and collective action in promoting sustainability and social justice.</p> <p>Objective: Investigate the spatial distribution of economic activities and its implications for global inequality and sustainability.</p> <p>Example Activity: Read "The Curious</p>				
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		<p>Garden" by Peter Brown to learn about the transformative power of community gardening and urban greening initiatives. Discuss the relationship between economic development, resource exploitation, and environmental degradation, and the need for sustainable livelihoods.</p> <p>Objective: Explore global issues such as climate change, poverty, inequality, and social justice through a geographical lens.</p>				
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		<p>Example Activity: Read "I Am Malala: How One Girl Stood Up for Education and Changed the World" by Malala Yousafzai to understand the importance of education, empowerment, and activism in addressing global challenges. Discuss the role of young people as global citizens and agents of change.</p> <p>Map Skills:</p> <p>Objective: Develop proficiency in using maps to analyse geographical data and visualise global issues.</p>				
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		<p>Example Activity: Use maps and atlases to explore the spatial distribution of SDGs indicators, such as poverty, education, health, and environmental sustainability, and discuss regional disparities and priorities for action.</p> <p>Objective: Understand the significance of geographical data in informing policy-making and advocacy efforts.</p> <p>Example Activity: Analyse maps showing climate change</p>				
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		<p>vulnerability, disaster risk, and environmental degradation, and discuss strategies for building resilience, promoting sustainable development, and achieving the SDGs.</p> <p>Objective: Apply map skills to communicate geographical information and advocate for positive change.</p> <p>Example Activity: Create maps and infographics illustrating the interconnectedness of environmental, social, and economic issues, and propose</p>				
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		solutions for achieving sustainable development and promoting global citizenship.				
Outdoor Learning and Connection to Nature (SUS12)						
English	Mathematics	Science and Geography	Computing/ Design and Technology	History	Art and Design/Music	Personal, Social, Health and Economic Education (PSHE) Citizenship
<p>Reading:</p> <p>Objective: Develop reading skills by exploring a variety of fiction and non-fiction texts that celebrate nature and outdoor experiences.</p> <p>Example</p>	<p>Number and Place Value:</p> <p>Nature Counting and Enumeration:</p> <p>Develop a deep understanding of numbers by counting and</p>	<p>Science</p> <p>Biology:</p> <p>Objective: Understand the diversity of living organisms found in natural habitats and ecosystems.</p>	<p>Computing:</p> <p>Environmental Monitoring and Data Collection:</p> <p>Use sensors and microcontrollers to collect environmental data such as temperature,</p>	<p>Exploring Outdoor Learning and Connection to Nature through Historical Events in English History:</p>	<p>Art and Design:</p> <p>Exploring Outdoor Learning and Nature Through Various Artistic Techniques:</p> <p>Utilise drawing, painting,</p>	<p>Mental and Emotional Health:</p> <p>Nature-Based Stress Reduction:</p> <p>Explore outdoor environments and engage in nature-based activities to reduce</p>

<p>Text/Genre: "My Side of the Mountain" by Jean Craighead George - a novel that follows a young boy living in the wilderness and his connection with nature.</p> <p>Objective: Analyse texts for deeper meaning, focusing on the themes of interconnectedness with nature, environmental stewardship, and the importance of outdoor experiences.</p> <p>Example Text/Genre: Poems by Mary Oliver or Robert Frost that evoke a sense of wonder and appreciation for the natural world.</p> <p>Objective: Identify</p>	<p>enumerating natural elements such as trees, plants, birds, insects, and rocks during outdoor excursions.</p> <p>Practice ordering and rounding numbers when quantifying observations of nature, such as rounding the number of petals on a flower or ordering the sizes of rocks found in a stream.</p> <p>Addition, Subtraction, Multiplication, and Division:</p> <p>Mathematical Problem-Solving in Nature:</p>	<p>Example Activity: Explore local environments such as woodlands, meadows, or ponds to observe and identify different species of plants, animals, and microorganisms.</p> <p>Objective: Explore the adaptations of living organisms to their habitats and environments.</p> <p>Example Activity: Investigate how animals and plants are adapted to specific environmental conditions (e.g., camouflage,</p>	<p>humidity, and air quality during outdoor activities.</p> <p>Develop coding skills to program data logging devices and create algorithms to analyse and visualise collected data, allowing for deeper understanding of local ecosystems and environmental changes.</p> <p>Geospatial Technology and Mapping:</p> <p>Explore the use of geographic information systems (GIS) and mapping software to create interactive maps of outdoor environments, including trails, habitats, and biodiversity</p>	<p>Investigate key periods in English history, such as the Mediaeval period, Tudor era, and Industrial Revolution, with a focus on outdoor learning and connections to nature.</p> <p>Explore historical events and activities that fostered outdoor learning experiences, such as agricultural practices, exploration expeditions, and artistic movements inspired by</p>	<p>sculpture, printmaking, and textiles to capture the beauty and diversity of nature, including landscapes, flora, and fauna encountered during outdoor learning activities.</p> <p>Experiment with artistic materials and techniques that reflect the interconnectedness of all living things in nature, such as creating artworks that depict ecosystems, food chains, and biodiversity.</p> <p>Studying Famous Artists and Developing Personal Artistic Style:</p>	<p>stress and promote mental well-being.</p> <p>Learn techniques such as mindfulness and grounding exercises to manage emotions and cultivate a sense of calmness in natural settings.</p> <p>Physical Health and Wellbeing:</p> <p>Outdoor Physical Activity and Fitness:</p> <p>Participate in outdoor sports, games, and physical exercises to promote physical health and fitness.</p> <p>Learn about the benefits of regular outdoor exercise for overall well-being, including improved cardiovascular</p>
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<p>and examine literary devices used in texts to convey the beauty and significance of nature.</p> <p>Example Text/Genre: Descriptive passages from novels or poems that vividly depict natural settings and engage the senses.</p> <p>Objective: Make inferences about characters' experiences and relationships with nature in literature, understanding the emotional and spiritual connections humans have with the natural world.</p> <p>Example Text/Genre: Short stories or novels that explore characters'</p>	<p>Master fundamental operations to solve mathematical problems encountered in outdoor environments, such as adding the lengths of nature trails, subtracting the number of leaves collected, multiplying to calculate the area of a garden bed, or dividing to distribute resources among plants.</p> <p>Apply mental and written methods to solve nature-related problems efficiently, including mentally estimating</p>	<p>hibernation, root systems) and discuss the importance of these adaptations for survival.</p> <p>Objective: Learn about the interconnectedness of living organisms and their roles within ecosystems.</p> <p>Example Activity: Construct a food web or ecosystem diagram using organisms found in a local habitat, discussing the relationships between producers, consumers, and decomposers.</p> <p>Chemistry:</p>	<p>hotspots.</p> <p>Learn to integrate GPS data, satellite imagery, and environmental data layers to map features, track changes over time, and plan outdoor learning experiences.</p> <p>Citizen Science and Environmental Projects:</p> <p>Participate in citizen science initiatives by using computing tools and digital platforms to contribute data to environmental research projects.</p> <p>Engage in collaborative projects that involve collecting, analysing, and sharing environmental</p>	<p>nature.</p> <p>Analyse the role of nature in shaping cultural traditions, artistic expressions, and leisure activities throughout English history.</p> <p>Understanding Outdoor Learning and Connection to Nature Across Various Historical Periods and Civilizations:</p> <p>Examine outdoor learning practices in Ancient Egypt, such as astronomy observations,</p>	<p>Study renowned artists who have drawn inspiration from nature in their work, such as Claude Monet or Georgia O'Keeffe.</p> <p>Use inspiration from these artists to develop their own artistic style that celebrates the wonders of the natural world and fosters a deeper connection to nature through art.</p> <p>Music:</p> <p>Learning Musical Elements Through Natural Resources:</p> <p>Explore musical elements such as rhythm, pitch, dynamics, tempo,</p>	<p>health and enhanced mood.</p> <p>Social Skills:</p> <p>Nature-Based Communication and Expression:</p> <p>Practise effective communication skills while engaging in outdoor activities, such as hiking, camping, or nature walks.</p> <p>Express feelings and emotions inspired by the natural environment and learn to communicate them effectively with peers and adults.</p> <p>Collaborative Nature-Based Projects:</p> <p>Work collaboratively with peers on</p>
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<p>journeys of self-discovery and personal growth through their interactions with nature.</p> <p>Writing:</p> <p>Objective: Write for different purposes and audiences, expressing personal experiences and reflections on outdoor learning and nature appreciation.</p> <p>Example Task: Write a narrative recount of a memorable outdoor adventure or a descriptive essay about a favourite natural place, focusing on sensory details and emotional responses.</p> <p>Objective: Develop narrative writing skills by crafting</p>	<p>quantities of natural objects or using written methods to calculate measurements.</p> <p>Fractions:</p> <p>Fractional Representation of Natural Resources:</p> <p>Learn about equivalent fractions by dividing natural resources into equal parts, such as dividing a garden into fractional sections for planting different types of vegetables.</p> <p>Compare and order fractions to understand the distribution of</p>	<p>Objective: Understand the properties of natural materials found in outdoor environments, such as rocks, soil, and water.</p> <p>Example Activity: Collect and examine different types of rocks and minerals found in a local area, discussing their properties (e.g., hardness, texture, colour) and geological origins.</p> <p>Objective: Learn about the chemical processes occurring in natural environments, such as weathering,</p>	<p>observations with scientific communities, educators, and conservation organisations.</p> <p>Design and Technology (D&T):</p> <p>Outdoor Product Design and Prototyping:</p> <p>Design and create outdoor learning tools and resources that promote exploration, observation, and interaction with nature.</p> <p>Use a variety of materials and tools to prototype and construct outdoor educational materials, such as nature journals,</p>	<p>agricultural techniques, and religious rituals linked to natural phenomena, and explore how these experiences connected individuals to the natural world.</p> <p>Investigate the connection to nature in the Roman Empire, including the use of public parks, gardens, and outdoor theatres for recreational and educational purposes, and analyse how these spaces facilitated</p>	<p>and texture by listening to and imitating sounds found in nature, such as bird songs, rustling leaves, or flowing water.</p> <p>Experiment with creating music that reflects the rhythms and melodies of the natural world, using instruments and vocal techniques to evoke the sounds of different environments.</p> <p>Exploring Music Genres and Instruments Related to Nature:</p> <p>Explore different musical genres that celebrate nature and</p>	<p>outdoor projects, such as building shelters, creating nature art, or planting trees.</p> <p>Develop teamwork and cooperation skills while respecting diverse perspectives and ideas in the context of outdoor activities.</p> <p>Diversity and Inclusion:</p> <p>Exploring Nature's Diversity:</p> <p>Appreciate and celebrate the biodiversity of natural environments, including different species of plants, animals, and ecosystems.</p> <p>Foster an inclusive attitude towards</p>
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<p>stories that celebrate the beauty of nature and the joys of outdoor exploration.</p> <p>Example Task: Create a fictional story about characters embarking on an outdoor adventure, encountering challenges and learning valuable lessons about resilience and environmental stewardship.</p> <p>Objective: Structure writing effectively to convey the interconnectedness between humans and nature, using descriptive language to evoke a sense of wonder and appreciation.</p> <p>Example Task: Write a persuasive text advocating for</p>	<p>resources in nature, such as comparing the fractions of sunlight received by different plants or ordering fractions of water available in a river ecosystem.</p> <p>Geometry:</p> <p>Geometric Exploration in Nature:</p> <p>Explore shapes, angles, and symmetry found in natural objects and landscapes, such as identifying geometric shapes in leaves, rocks, or animal tracks.</p> <p>Investigate transformations in nature, such</p>	<p>erosion, and decomposition.</p> <p>Example Activity: Investigate the effects of weathering and erosion on rocks and soil through hands-on experiments and observations, discussing the role of water, wind, and temperature changes.</p> <p>Physics:</p> <p>Objective: Investigate the forces and energy transformations occurring in natural phenomena, such as the movement of water, wind, and living</p>	<p>field guides, birdhouses, or insect habitats.</p> <p>Sustainable Design Practices:</p> <p>Explore sustainable design principles and apply them to outdoor product design and fabrication.</p> <p>Consider the environmental impact of materials, manufacturing processes, and product lifecycle, and develop innovative solutions that minimise waste, conserve resources, and support biodiversity.</p> <p>Nature-inspired Design Challenges:</p>	<p>outdoor learning experiences.</p> <p>Explore Viking Age societies and their reliance on nature for survival, including hunting, fishing, and gathering activities, and examine how outdoor experiences shaped Viking culture and worldview.</p> <p>Analyse Tudor England's relationship with nature, including the emergence of botanical gardens, nature poetry, and landscape</p>	<p>environmental sustainability, such as environmental music, nature-inspired classical compositions, or indigenous songs honouring the Earth.</p> <p>Learn to play musical instruments commonly associated with nature-inspired music, such as wooden flutes, drums, or percussion instruments made from natural materials.</p> <p>Physical Education (PE):</p> <p>Engaging in Physical</p>	<p>nature by recognizing and valuing the diversity of life forms and habitats.</p> <p>Health Education:</p> <p>Promotion of Healthy Lifestyles through Nature:</p> <p>Learn about the health benefits of spending time in nature, including improved immune function, reduced risk of obesity, and enhanced mental well-being.</p> <p>Promote outdoor activities and nature-based experiences as integral components of a healthy lifestyle.</p> <p>Outdoor Safety and Risk</p>
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<p>the preservation of a local natural area or the importance of outdoor education, organising arguments logically and providing evidence to support claims.</p> <p>Objective: Utilise descriptive language to capture the essence of nature and convey the emotional impact of outdoor experiences.</p> <p>Example Task: Write a poem inspired by the sights, sounds, and sensations of a natural setting, using imagery and figurative language to evoke a sense of awe and reverence.</p> <p>Speaking and Listening:</p>	<p>as observing how plants grow and change shape over time or identifying symmetrical patterns in butterfly wings.</p> <p>Measurement:</p> <p>Measuring Natural Phenomena:</p> <p>Measure and calculate length, area, volume, capacity, mass, time, and temperature of natural phenomena using appropriate units, such as measuring the length of a river, calculating the area of a forest clearing, or determining the mass of collected</p>	<p>organisms.</p> <p>Example Activity: Explore the forces involved in water flow, such as gravity, surface tension, and friction, by observing streams, rivers, or waterfalls in a local area.</p> <p>Objective: Understand the role of light, sound, and energy in outdoor environments and ecosystems.</p> <p>Example Activity: Observe and document changes in light intensity and sound levels throughout the</p>	<p>Participate in design challenges that draw inspiration from nature, such as biomimicry projects that emulate natural forms, structures, and functions.</p> <p>Encourage creativity and critical thinking by asking students to design outdoor installations, shelters, or play spaces that blend harmoniously with the natural environment and promote environmental stewardship.</p>	<p>painting, and explore how these artistic expressions reflected connections to the natural world.</p> <p>]Examine the impact of the Industrial Revolution on outdoor learning and connections to nature, including changes in land use, urbanisation, and the emergence of environmental movements advocating for nature conservation.</p> <p>Investigate how World War II affected</p>	<p>Activities in Natural Settings:</p> <p>Participate in physical activities that take place outdoors in natural settings, such as nature walks, orienteering, rock climbing, or outdoor yoga.</p> <p>Incorporate principles of outdoor education and environmental stewardship into physical activities, encouraging participants to observe, appreciate, and respect the natural world while engaging in physical exercise.</p> <p>Drama:</p>	<p>Management:</p> <p>Understand potential risks and hazards associated with outdoor environments, such as uneven terrain, wildlife encounters, and weather conditions.</p> <p>Develop skills in risk assessment, hazard identification, and safety protocols to stay safe while enjoying outdoor activities.</p> <p>Economic Education:</p> <p>Sustainable Practices in Outdoor Recreation:</p> <p>Learn about sustainable practices in outdoor recreation, such as</p>
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<p>Objective: Listen attentively to others' experiences and reflections on outdoor learning and nature, showing respect and empathy for diverse perspectives.</p> <p>Example Activity: Engage in group discussions about favourite outdoor activities or memorable nature experiences, actively listening to classmates' stories and sharing one's own.</p> <p>Objective: Engage in respectful dialogue with peers, collaboratively discussing the importance of nature appreciation and environmental conservation.</p> <p>Example Activity:</p>	<p>leaves.</p> <p>Use measurement skills to quantify changes in nature over time, such as measuring the growth of plants or tracking changes in temperature throughout the day.</p> <p>Statistics:</p> <p>Data Interpretation in Nature Studies:</p> <p>Interpret and present data collected during outdoor activities using graphs, charts, and tables to analyse patterns and trends in natural phenomena.</p>	<p>day in an outdoor setting, discussing the impact of sunlight, shadows, and natural sounds on plant and animal behaviour.</p> <p>Objective: Learn about Earth's natural systems and phenomena, including weather patterns, seasons, and celestial events.</p> <p>Example Activity: Observe and record weather conditions and changes in the sky (e.g., clouds, stars, moon phases) over time, discussing the causes and effects of weather and seasonal</p>		<p>outdoor learning experiences, such as the evacuation of children to rural areas, the use of nature for therapeutic purposes, and the incorporation of outdoor education into school curricula during wartime.</p> <p>Exploring Significant Figures, Events, and Inventions in Outdoor Learning and Connection to Nature History:</p> <p>Identify significant figures in</p>	<p>Exploring Interconnectedness to Nature Through Drama:</p> <p>Use drama techniques such as role-playing, improvisation, and storytelling to explore themes of interconnectedness and environmental stewardship.</p> <p>Create and perform dramatic scenes or skits that highlight the importance of preserving nature, protecting biodiversity, and fostering a sense of responsibility for the planet among young learners.</p>	<p>Leave No Trace principles, responsible waste management, and conservation of natural resources.</p> <p>Understand the economic value of nature-based tourism and outdoor recreation industries in supporting local economies and livelihoods.</p> <p>Citizenship:</p> <p>Responsible Stewardship of Natural Resources:</p> <p>Foster a sense of environmental responsibility and stewardship by actively participating in conservation efforts and habitat restoration projects.</p>
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Participate in a class debate about environmental issues, such as habitat destruction or climate change, discussing possible solutions and ways individuals can make a positive impact.

Learn about measures of central tendency and dispersion to understand the variability and distribution of data related to nature, such as calculating the average number of bird species observed or analysing the spread of plant heights in a field.

variations.

Physical Geography:

Objective: Understand the importance of outdoor environments in experiencing and learning about physical geography.

Example Activity: Read "The Wild Robot" by Peter Brown to explore the relationship between nature and technology. Discuss how landscapes are shaped by natural processes such as erosion, weathering, and sedimentation, and the role of humans in

outdoor learning and nature conservation, such as naturalists, environmentalists, and outdoor educators, and explore their contributions to promoting nature appreciation and outdoor experiences.

Explore important dates and events related to outdoor learning and connection to nature, such as the establishment of national parks, the founding of outdoor

Understand the rights and responsibilities of individuals as stewards of the natural world and advocates for environmental sustainability.

Global Citizenship:

Understanding Interconnectedness with Nature:

Explore the interconnectedness of human societies and the natural world, recognizing that actions taken locally can have global implications for biodiversity and ecosystem health.

Foster a sense of global citizenship by understanding the global challenges of environmental

		<p>environmental conservation.</p> <p>Objective: Investigate the diversity of ecosystems and habitats found in outdoor environments.</p> <p>Example Activity: Read "The Secret Garden" by Frances Hodgson Burnett to learn about the beauty and biodiversity of garden ecosystems. Explore different types of habitats, such as forests, wetlands, and meadows, and the plants and animals that inhabit them.</p> <p>Objective: Foster a sense of</p>		<p>education programs, and the development of nature conservation initiatives.</p> <p>Investigate the causes and consequences of energy discoveries, inventions, and technological advancements on outdoor learning and connection to nature, such as the development of outdoor gear, camping equipment, and nature observation tools.</p> <p>Analyse how historical events and</p>		<p>degradation, climate change, and loss of biodiversity, and the importance of collective action to address them.</p>
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		<p>wonder and curiosity about the natural world.</p> <p>Example Activity: Read "The Lost Words" by Robert Macfarlane and Jackie Morris to discover the magic and beauty of words associated with nature. Encourage students to observe and interact with their surroundings, identify plants and animals, and appreciate the interconnectedness of life.</p> <p>Human Geography:</p> <p>Objective: Understand the cultural and</p>		<p>figures have influenced present-day efforts to promote outdoor learning, nature conservation, and environmental stewardship, including initiatives aimed at fostering nature-based education, outdoor recreation, and sustainable land management.</p>		
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		<p>historical significance of outdoor spaces.</p> <p>Example Activity: Read "Island of the Blue Dolphins" by Scott O'Dell to explore the relationship between indigenous peoples and their natural environment. Discuss the importance of preserving cultural heritage and sacred sites, and respecting traditional knowledge and practices.</p> <p>Objective: Investigate the ways in which human activities impact outdoor environments.</p>				
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		<p>Example Activity: Read "Hoot" by Carl Hiaasen to learn about environmental activism and the protection of wildlife habitats. Discuss the importance of responsible outdoor recreation, conservation ethics, and minimising human impact on ecosystems.</p> <p>Objective: Explore global issues such as climate change, biodiversity loss, and environmental sustainability through outdoor experiences.</p>				
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		<p>Example Activity: Read "The Great Kapok Tree: A Tale of the Amazon Rain Forest" by Lynne Cherry to understand the importance of rainforests and the threats they face. Discuss the role of individuals and communities in promoting conservation efforts and advocating for sustainable practices.</p> <p>Map Skills:</p> <p>Objective: Develop map skills through outdoor exploration and navigation.</p>				
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		<p>Example Activity: Use compasses and maps to navigate through outdoor environments, identify landmarks, and locate points of interest. Practice using coordinates, scale, and symbols to interpret maps and plan routes.</p> <p>Objective: Understand the relationship between outdoor environments and geographical data.</p> <p>Example Activity: Collect data on environmental factors such as temperature, precipitation, and</p>				
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		<p>soil quality during outdoor field trips. Analyse geographical data to identify patterns and trends, and draw conclusions about ecosystem health and resilience.</p> <p>Objective: Use mapping tools to document and communicate outdoor experiences.</p> <p>Example Activity: Create field sketches, nature journals, or digital maps to record observations, document biodiversity, and share discoveries with others. Use maps and visualisations to</p>				
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		tell stories about outdoor adventures and inspire others to connect with nature.				
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