



Year D - Spring Term 2nd Half Save our planet!



This topic aims to focus our children's attention on the importance of trees throughout the world. Through study of the story 'The Lorax' we will explore the issues of forestry and sustainability. This will lead to investigations about how humans use the various materials that trees provide and will inspire a design and marketing project. They will look at trees in many different climates; study their ecosystems and their biology; and explore how they have adapted to suit their environment. Exploring the school grounds and local area will enhance the children's understanding of native British trees. This will provide opportunities for identification, classification and mapping fieldwork and they will produce databases on their classifications. This will lead to studies of global issues, particularly the importance of tropical rainforests.



Enjoy and achieve -Plenty of opportunities to get out and about in local woodlands or even the school grounds, discovering native species and using the outdoors to stimulate investigation, research, imagination and creativity.

Making a positive contribution - relating the issues that arise from the rainforest studies to their own lives - in particular looking at the importance of recycling and issues surrounding destruction of an environment for the people directly related, and the planet as a whole.

Social and Economic well-being - seeing how the people of the rainforests achieve economic well-being and the factors that can affect this. Another important consideration is how close knit tribes live in harmony together. Discussions about their social rules, shared meals and lodgings, hunting for the group all contribute to understanding social structures.

Stay Safe: Discussions about the dangers of drugs are touched upon when children see how cocaine farmers are prominent in areas of the Amazon.



- Local plant / tree classification
- Mapping cemetery
- Tree inspired poetry
- Outdoor art
- Farm Days

English

Facts and debate are the main focus of the literacy of this topic. Through the studies of a life cycle of a tree and the extensive fieldwork of native trees the children will embark on formal writing about trees, woodland habitats and life cycles of trees. They will then use their imaginations, pretending they are a tree and writing their own autobiography about their life. This will then extend to debates and argument writing about various issues surrounding trees and deforestation. After gaining a solid appreciation of trees the children will culminate their studies with a poetry and imagery focus on the beauty of trees.

Cross Curricular Links	Art DT Geography Science
Audience/purpose for writing	Eco- morning. (Link with the ministers)
Reading comprehension and vocab focus	Texts based on a similar theme eg Aubrey and the terrible Ladybirds- Horatio Clare This moose belongs to me- Oliver Jeffers Nonsense words- what do they mean? How can we use inference and deduction to work out new words?
Focus language from text	Rhyme Alliteration
Key Text type features	Auto biography- formal, conjunctions, chronological order Persuasive text- conjunctions, powerful adjectives, facts and reasons, rhetorical questions, emotional language. Poetry - stanza, rhyme patterns

<p>Focus on grammar and punctuation objectives</p>	<p>Modifiers Devices for cohesion Autobiography-</p> <ul style="list-style-type: none"> • Full stops/capital letters • Commas to demarcate clauses • Colons, dashes and semi colons (Y5/6) • Parenthesis <p>Persuasive text-</p> <ul style="list-style-type: none"> • Personal pronouns • Adjectives • Adverbs • Rhetorical questions
<p>Activities to develop grammar objectives</p>	<p>Discrete SPAG lessons Unpick shared texts to find modifiers and cohesive devices.</p>
<p>Writing tasks.</p>	<p>Auto biography Persuasive text Poetry</p>
<p>Home learning</p>	<p>Imagine that you are the little boy at the start of the story. Write a diary entry / description of your visit to the Once-ler. Why did you go? How did you get there? What did you think of the explanation?</p>

Science

The children will look at all stages in the life cycle of plants and compare these to the stages in the life cycles of humans and some rainforest dwellers. They will look at the structure and functions of various plant parts and study conditions needed for growth. This topic will also look at how plants have evolved over time and how adaptations have been made to secure survival of the species.

Programme of Study

Statutory requirements from Upper Key Stage Two Programme of Study

Living things and their habitats

- describe the life process of reproduction in some plants and animals
- describe how living things are classified into broad groups according to common observable characteristics and based on similarities and differences, including micro-organisms, plants and animals
- give reasons for classifying plants and animals based on specific characteristics.

Properties and changes of materials

- explain that some changes result in the formation of new materials, and that this kind of change is not usually reversible, including changes associated with burning and the action of acid on bicarbonate of soda

Evolution and Inheritance

- identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Progression in skills: CHILDREN TO RECAP KNOWLEDGE FROM TERM 1 - EVOLUTION

- From their knowledge of one aspect, children apply that knowledge and predict what will happen to other species e.g. seed dispersal types
- Children draw conclusions from their observations

Working scientifically:

- asking relevant questions and using different types of scientific enquiries to answer them
- making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers
- reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions
- using results to draw simple conclusions, make predictions for new

- planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
- using test results to make predictions to set up further comparative and fair tests
- reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

<p>values, suggest improvements and raise further questions</p> <ul style="list-style-type: none"> identifying differences, similarities or changes related to simple scientific ideas and processes <ul style="list-style-type: none"> using straightforward scientific evidence to answer questions or to support their findings. 		<ul style="list-style-type: none"> identifying scientific evidence that has been used to support or refute ideas or arguments. 	
<ul style="list-style-type: none"> Respond to suggestions. Make predictions. Make observations and comparisons. Use first-hand experience and simple information sources to answer questions. Communicate findings in a variety of ways. With help, identify simple patterns and suggest explanations. 	<ul style="list-style-type: none"> Recognise why it is important to collect data to answer questions. Suggest questions that can be tested. Make relevant observations and comparisons. Explain what the evidence shows in a scientific way and whether it supports predictions. Suggest improvements in their work. 	<ul style="list-style-type: none"> Recognise that scientific ideas are based on evidence and creative thinking. Suggest how to collect evidence. Select suitable equipment. Select information from provided resources. Communicate findings in a variety of ways. Draw conclusions and communicate them in scientific language. Suggest improvements in their work giving reasons. 	<ul style="list-style-type: none"> Consider how scientists have combined evidence from observation with creative thinking to suggest new ideas, explanations and phenomena. Make a variety of relevant observations using simple apparatus correctly. Select information from a range of sources. Make use of ICT. Provide explanations for differences in measurements and observations. Draw conclusions and communicate them in appropriate scientific language. Make practical suggestions for improving methods in their work- giving suggestions
<p>Key vocabulary: root, stem, leaf, photosynthesis, petal, sepal, ovule, ovary, stigma, style, stamen, carpel, anther, filament, germination, pollination, fertilization, seed dispersal, adaptation, evolution</p>			

Geography

Fieldwork will be a key part of this topic. Children will be mapping local woodland and identifying features. They will be reading and producing maps on a range of scales. They will also be looking at the world's distribution of forests and identifying the climatic / geographical features that cause different types of forest to develop. Initial map work will involve looking at "green spaces" around Cury and how and why they have changed over time. They will also be entering into the global debate about deforestation and logging.

Programme of Study

Pupils should extend their knowledge and understanding beyond the local area to include the United Kingdom and Europe, North and South America. This will include the location and characteristics of a range of the world's most significant human and physical features. They should develop their use of geographical knowledge, understanding and skills to enhance their locational and place knowledge.

Pupils should be taught to:

Locational knowledge

- locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries, and major cities
- name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Place knowledge

- understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

Human and physical geography

describe and understand key aspects of:

- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle
- human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water

Geographical skills and fieldwork

- use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied
- use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey maps) to build their knowledge of the United Kingdom and the wider world
- use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

<ul style="list-style-type: none"> • Can confidently use a range of maps and images. • Can confidently use compass directions: North, South, East and West. • Can use letter and number coordinate to locate features on a map. • Can make links to different observations in the local area • Can draw a sketch map with simple annotations showing human and physical features of the local area • Can confidently ask geographical questions about places and environments and express opinions to a range of people • Can present data and findings simply using maps, graphs and digital technologies • Can reach a thoroughly described conclusion to the fieldwork question or prediction 	<ul style="list-style-type: none"> • Can confidently use globes, atlases, images, aerial photos and begin to use computer mapping. • Can identify the eight point compass directions: N, NE, E, SE, SW,W and NW to follow • Can use four-figure grid references to locate features on a map. • Can make clear links between different observations in the local area • Can draw a sketch map with relatively sized features and annotations showing human and physical features of the local area • Can draw an accurate map of a short route using OS symbol. • Can devise and ask questions using geographical vocabulary to recognise that others may think differently • Can measure using simple instruments, digital technologies and can measure more than one aspect at once • Can present data and findings using maps, graphs and digital technologies to show a clear enquiry route from teacher led question to child led conclusion • Can reach a thoroughly described and simply explained conclusion to the fieldwork question or prediction 	<ul style="list-style-type: none"> • Can confidently use an atlas including the contents page and index. • Can confidently use the eight point compass directions: N, NE, E, SE, SW,W and NW. • Can accurately use four- figure grid references on an OS map and attempt six- figure references. • Can make clearly explained links between observations in the local area. • Can devise and ask questions using geographical vocabulary and make notes during the interview to express own opinions and recognise why others may have different points of view • Can measure human and physical features in the local area using a range of appropriate instruments • Can simply justify data collection methods • Can independently present data and findings using maps, graphs and digital technologies to show a clear enquiry route from child led question to child led conclusion • Can reach a described and explained conclusion to the fieldwork question or prediction that is backed up with evidence 	<ul style="list-style-type: none"> • Can confidently use a range of maps, atlases, images, globes and digital mapping. • Can confidently and accurately use the eight point compass directions: N, NE, E, SE, SW,W and NW. • Can accurately use six- figure grid references on an OS map. • Can make clearly explained links between observations in the local area and the wider world to identify patterns • Can draw a variety of maps, sketches and plans with accurate symbols, keys and scale. • Can devise and ask questions using geographical vocabulary and make notes during the interview to express own opinions and recognise why others may have different points of view • Can ask a range of geographical questions to carry out an investigation and explain opinions from a range of different points of view. • Can accurately measure human and physical features in the local area using a range of appropriate instruments • Can confidently justify and evaluate data collection methods • Can independently present data and findings using maps, graphs and digital technologies to show a clear enquiry route from child led question to child led conclusion • Can reach a described and explained conclusion to the fieldwork question or prediction that is backed up with data and evidence
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What could this look like?

- Children identify local trees
- Children mapping the school field creating a key for tree species.
- Children drawing, labeling maps locating world's forests

- Children looking at forest features and linking to science how different tree types grow / are adapted to different regions of the world

Key Vocabulary: biomes, taiga, forest, temperate, deciduous, evergreen, climate, rainforest.

Prior learning: mapping of classroom. Looking at maps of Cornwall (particularly mines) and looking at maps in the archive centre.

Computing

The children will use databases to classify all of the information discovered through their fieldwork in the field. They will use these to produce graphs of their data and to ask questions of their data. They will also use the ipads to film whilst outside and use their movies to enhance their poetry writing. The children will have the opportunity to use light sensors and dataloggers to analyse different conditions for plant growth in the woods.

Throughout the topic digital literacy (e-safety) skills will be developed.

Programme of Study

During their computing studies pupils:

- use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content
- select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.
- Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

Progression in skills:

- I can collect and classify information
- I can set up a database by creating fields, including options for multiple choice and key word answers
- I can populate a database by adding records
- I can use both simple and complex searches, choosing the most appropriate based on the question posed
- I can write questions for others to answer using the database
- I can use the database to produce graphs, selecting the most appropriate to show the required information
- I can take account of lighting and external conditions when filming, and make changes as needed
- I can use camera angles to create different effects when filming
- I can edit my film creatively to combine different forms of media
- I can save and retrieve my work using cloud based technology
- I can use dataloggers and sensors to collect and record accurate information
- I can use the information collected to produce graphs

What could this look like?

- Children will collect information and classify this by creating a database
- Children will set up the database by creating fields and populate it by adding a series of detailed records, using multiple choice and keyword options
- Children will use the database to create graphs and answer questions by searching using both simple and complex searches

- Children film, taking account of lighting, external conditions and camera angles, saving their films using cloud based technology.
- Children combine film clips with their poetry writing
- Children effectively use light sensors to record and measure light, analysing the conditions for plant growth and using the information collected to create graphs

Building on prior knowledge:

Children have used ipads to create mini films of each other reading stories.

Linking to maths work- collecting and interpreting data.

Key vocabulary:

Classify, fields, multiple choice, keywords, simple search, complex search, camera angle, close up, long shot, wide shot, cloud technology

Design and Technology

The children will use creativity and imagination to invent products that could be manufactured from 'Truffula' Trees - the make-believe creation of Dr Seuss in the Lorax. After making initial, independent designs, they will have to 'pitch' to a team, demonstrating through annotated sketches that their idea is fit for purpose and has a focused target audience. When a winning idea is chosen, the team will then work together to create a marketing campaign, including a jingle, radio advert and poster.

National Curriculum

Pupils should be taught to:

- use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups
- generate, develop, model and communicate their ideas through discussion, annotated sketches, cross-sectional and exploded diagrams, prototypes, pattern pieces and computer-aided design

<ul style="list-style-type: none"> • Gather information about the needs and wants of particular individuals and groups • Develop their own design criteria and use these to inform their ideas 	<ul style="list-style-type: none"> • Research designs 	<ul style="list-style-type: none"> • Identify the needs, wants, preferences and values of particular individuals and groups 	<ul style="list-style-type: none"> • Develop a simple design specification to guide their thinking • Recognise when their products have to fulfil conflicting requirements
<ul style="list-style-type: none"> • Share and clarify ideas through discussion • Model their ideas using prototypes and pattern pieces • Use annotated sketches, cross-sectional drawings and diagrams 	<ul style="list-style-type: none"> • Research designs 	<ul style="list-style-type: none"> • Generate innovative ideas, drawing on research 	<ul style="list-style-type: none"> • Make design decisions, taking account of constraints such as time, resources and cost • Develop prototypes

National Curriculum

Pupils should be taught to:

- investigate and analyse a range of existing products

<ul style="list-style-type: none"> • evaluate their ideas and products against their own design criteria and consider the views of others to improve their work <p>understand how key events and individuals in design and technology have helped shape the world</p>			
<ul style="list-style-type: none"> • Identify the strengths and weaknesses of their ideas and products • Consider the views of others, including intended users, to improve their work • Refer back to their design criteria as they design and make • Use their design criteria to evaluate their completed products 	<ul style="list-style-type: none"> • Identify the strengths and weaknesses of their ideas and products • Consider the views of others, including intended users, to improve their work • Refer back to their design criteria as they design • Use their design criteria to evaluate their completed products 	<ul style="list-style-type: none"> • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design 	<ul style="list-style-type: none"> • Critically evaluate the quality of the design, manufacture and fitness for purpose of their products as they design and make • Compare their ideas and products to their original design specification

Art and Design

The children will explore the work of *Georgia O'Keefe* and recreate their own 'paintings in the same style. In addition, the children will be out and about in the school grounds, creating observational drawings, sketches and watercolours of plants and leaves.

Programme of Study

Pupils should be taught:

- to develop their techniques, including their control and their use of materials, with creativity, experimentation and an increasing awareness of different kinds of art, craft and design.
- to create sketch books to record their observations and use them to review and revisit ideas
- to improve their mastery of art and design techniques, including drawing, painting and sculpture with a range of materials [for example, pencil, charcoal, paint, clay]
- about great artists, architects and designers in history - *Georgia O'Keefe*
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<ul style="list-style-type: none"> • Develop sketch books • Use a variety of ways to record ideas including digital cameras and iPads • Develop artistic/visual vocabulary to discuss work 	<ul style="list-style-type: none"> • Begin to suggest improvements to own work • Experiment with a wider range of materials • Present work in a variety of ways 	<ul style="list-style-type: none"> • Select and develop ideas confidently, using suitable materials confidently • Improve quality of sketchbook with mixed media work and annotations • Select own images and starting points for work 	<ul style="list-style-type: none"> • Develop artistic/visual vocabulary when talking about own work and that of others • Begin to explore possibilities, using and combining different styles and techniques
<ul style="list-style-type: none"> • Use sketchbooks to record drawings from observation • Experiment with different tones using graded pencils • Include increased detail within work 	<ul style="list-style-type: none"> • Draw using a variety of tools and surfaces (paint, chalk, pastel, pen and ink) • Use a variety of brushes and experiment with ways of marking with them 	<ul style="list-style-type: none"> • Use first hand observations using different viewpoints, developing more abstract representations • Introduce perspective, 	<ul style="list-style-type: none"> • Investigate proportions • Use a range of mediums on a range of backgrounds • Work indoors and outdoors

<ul style="list-style-type: none"> • Draw on a range of scales 		<p>fore/back and middle ground</p>	
<ul style="list-style-type: none"> • Mix and match colours (create palettes to match images) • Lighten and darken tones using black and white 	<ul style="list-style-type: none"> • Begin to experiment with colour to create more abstract colour palettes (e.g. blues for leaves) 	<ul style="list-style-type: none"> • Build on previous work with colour by exploring intensity • Explore using limited colour palettes 	<ul style="list-style-type: none"> • Investigate working on canvas experiment with colour in creating an effect • Mark make with paint (dashes, blocks of colour, strokes, points) • Develop fine brush strokes

What could this look like?

- Children making real life observations in local gardens and using a variety of techniques to record those observations: pastels, watercolours, pencil sketches, sculptures
- Children analyse Gustav Klimt's painting and decide key style features that make it recognisable.
- Children recreate those features in their paintings.

Progression in skills:

- I can use a variety of artistic media in situ out of doors
- I can make observational artwork from moving real life rather than still life

Attainment Targets:

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

- I can explain key characteristics of Georgia O'Keefe's work
- I can use pastels to make recognisable observational artwork
- I can use watercolours to make recognisable observational artwork

PSHE and Citizenship

The main focus here will be PSHE through issues involving sustainability of the rainforest, including the lives of the forest dwellers, and also an appreciation of the world's natural resources. They will also look at the long-term effects of deforestation, including global warming.

Programme of Study

(Non- Statutory for Primary)

Pupils learn:

Responsibility as citizens and dealing with people

- to talk and write about their opinions, and explain their views on issues that affect themselves and society
- about the range of jobs carried out by people and to understand how they can develop skills to make their own contribution in the future
- to research, discuss and debate topical issues, problems and events
- why and how rules and laws are made and enforced, why different rules are needed in different situations and how to take part in making and changing rules
- that there are different kinds of responsibilities, rights and duties at home, at school and in the community, and that these can sometimes conflict with each other
- to reflect on spiritual, moral, social and cultural issues, using imagination to understand other people's experiences

- to resolve differences by looking at alternatives, making decisions, explaining choices
- that resources can be allocated in different ways and that these economic choices affect individuals, communities and the sustainability of the environment
- to explore how the media present information
- that their actions affect themselves and others, to care about other people's feelings and to try to see things from their point of view
- to think about the lives of people in other places and times, and with different values and customs
- that differences and similarities between people arise from a number of factors, including cultural, ethnic, racial and religious diversity, gender and disability
- consider social and moral dilemmas that they come across in life

Healthy Lifestyle

- which commonly available substances and drugs are legal and illegal, their effects and risks

What could this look like?

- Children watch films about deforestation through logging, oil, gold, ranch farming but also cocaine farming / growth
- Children discuss and debate the issues taking roles from different sides of the debate

Progression in skills:

- To contribute to a simple debate, listening to the views of others
- To make a decision and vote on an issue
- To recognise that every vote counts to the outcome of a debate
- To participate actively in a group discussion or problem-solving activity
- To represent the views of others when sharing information
- To recognise that there are conflicting views and that a compromise may be needed

Key vocabulary: drugs, cocaine, deforestation, sustainability, moral / ethical dilemmas, livelihood, independence

Attainment Targets:

- I can explain why drugs are grown in the rainforest
- I can explain why the situation is difficult to resolve
- I can begin to explain the moral dilemmas around the issue of cocaine growth, deforestation, farmer's livelihoods

Music

The children will use *GarageBand* to create a jingle for their 'Truffula' product

Programme of Study

Pupils should be taught to:

- Sing and play musically with increasing confidence and control.
- Develop an understanding of musical composition, organising and manipulating ideas within musical structures and reproducing sounds from aural memory.
- Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing accuracy, fluency, control and expression.
- Improvise and compose music for a range of purposes using the inter-related dimensions of music.
- Listen with attention to detail and recall sounds with increasing aural memory.
- Use and understand staff and other musical notations.

Progression in skills:

- To develop their own musical composition in response to visual (movie) stimulus
- To compose by developing ideas within musical structures
- To suggest improvements to their own and others' work, commenting on how intentions have been achieved

Key vocabulary: tempo, rhythm, pitch, volume, layers, dynamics,

Attainment Targets:

By the end of each key stage, pupils are expected to know, apply and understand the matters, skills and processes specified in the relevant programme of study.

- I can create a soundtrack to match my forest story / scene