

**Curriculum Driver
Planet Earth...
a force to be reckoned with?**

Year 4/5 Spring Term

Linked people of study: Henri Rousseau, Sir David Attenborough

Linked texts:

Flood (Alvaro F. Vill)

The Rhythm of the Rain Wild is the Wind ,Farther

(Grahame Baker-

Survivors: Extraordinary Tales from the Wild and Beyond (David Long)

Smith)

Trips/Visitors: Shelter Box

Topic Composite/Finale:
Fundraising activity



Geography

Intent: Children have a good understanding of how natural disasters occur.

Skills, and Knowledge Components Focus

- Study mountains, volcanoes, earthquakes and natural disasters.Y4/5
- Use maps, atlases, globes and digital / computer mapping to locate countries and identify features of countries,y4/5 including North and South America.
- Name and locate key topographical features of the UK, including hills, mountains, coasts.
- Know about the water cycle and natural resources (where they come from).

Sticky Knowledge: I know that...

- A volcano is formed when...
 1. Magma rises through cracks or weaknesses in the Earth's crust.
 2. Pressure builds up inside the Earth.
 3. When this pressure is released, e.g. as a result of plate movement, magma explodes to the surface causing a volcanic eruption.
 4. The lava from the eruption cools to form new crust.
 5. Over time, after several eruptions, the rock builds up and a volcano forms.
- An earthquake is the shaking and vibration of the Earth's crust due to movement of the Earth's plates (Plate Tectonics).
- A natural disaster is an event caused by nature.
- A tornado is a violent rotating column of air extending from a thunderstorm to the ground.
- A Tsunami is a large ocean wave usually caused by an underwater earthquake or volcanic explosion.
- The water cycle is the complete journey that water makes from one place to the other and from one state to the other.
- A cycle is a series of events that repeat in the same order.
- Precipitation is the release of water from the sky. It can be a liquid or solid, e.g. rain, sleet, hail and snow.
- Evaporation is the process of turning from liquid into vapour.
- Transpiration is the evaporation of water from plant leaves.
- When water falls from the clouds as rain, snow, hail or sleet and collects in the oceans, rivers, lakes and streams- this is known as 'collection'
- A topographical feature is the arrangement of physical features of an area.

Key Vocabulary: volcano, magma, lava, crater, Earth's crust, eruption, earthquake, Earth's plates, plate tectonics, epicentre, vibration, seismic waves, cycle, water cycle, precipitation, evaporation, transpiration, collection, Tornado, Tsunami, natural disaster, topographical

Subject Composite: Fundraising activity for a disaster charity? Shelter Box?

Impact: Children are aware of how natural disasters can impact on peoples lives. They are aware that these events can cause great financial hardship for the people and communities in the locations where they occur, and they can sometimes even result in loss of life. Children are empathetic and work together to think of ways in which they could support communities and help make a difference.

Science

Intent: Children become experts in the use of classification keys to help group, identify and name a variety of living things. Children learn about the 7 characteristics of living things.

Skills, and Knowledge Components Focus

- Compare and group materials together, according to whether they are solids, liquids or gases
- Observe that some materials change state when they are heated or cooled, and measure or research the temperature at which this happens in degrees Celsius (°C)
- Identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature
- Recognise that living things can be grouped in a variety of ways
- Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment
- Recognise that environments can change and that this can sometimes pose dangers to living things

Sticky Knowledge:

- A solid holds its shape and has a fixed volume.
- A liquid fills up the shape of the bottom of a container. It forms a pool, not a pile and also has a fixed volume.
- A gas can escape from an unsealed container. It fills up the space it is in, and does not have a fixed container.
- A cycle is a series of events that repeat in the same order.
- Precipitation is the release of water from the sky. It can be a liquid or solid, e.g. rain, sleet, hail and snow.
- Evaporation is the process of turning from liquid into vapour.
- Transpiration is the evaporation of water from plant leaves.
- When water falls from the clouds as rain, snow, hail or sleet and collects in the oceans, rivers, lakes and streams- this is known as 'collection'
- All living things, which can also be called organisms, have to do certain things to stay alive. These are the life processes: □ movement □ respiration □ sensitivity □ growth □ reproduction □ excretion □ nutrition
- Living things can be grouped according to different criteria (where they live, what type of organism they are, what features they have). For example, a camel can belong in a group of vertebrates, a group of animals that live in the desert, and a group of animals that have four legs.
- A classification key is a tool that is used to group living things to help us identify them.

Key Vocabulary: solid, liquid, gas, state, degrees Celsius cycle, water cycle, precipitation, evaporation, transpiration, collection, biomes, carnivore, classification key, criteria, deciduous, environment, evergreen, food chain, habitat, invertebrate, life processes, microhabitat, minibeast, nutrition, omnivore, organism, reproduction, respiration, sensitivity, urban, vegetation, vertebrate

Subject Composite: Children to create Stop Animation video showing how habitats are affected by natural disasters?

Impact: Children care about all living things on planet earth and think of how they can help protect and look after living things. They understand that they have a responsibility to help look after and protect living things and their habitats. Children have an awareness of endangered

Art

Intent: Children are inspired by the artist Henri Rousseau. Children create a beautiful tile using Henri Rousseau as inspiration.

Skills, and Knowledge Components Focus

- Develop sculpture techniques by manipulating natural materials to create a structure.
- Be introduced to the work of great designers through history.
- Continue to critique their own work and begin to build a portfolio of work about which they can talk confidently.

Sticky Knowledge:

- Henri Rousseau was a French artist born in 1844.
- Henri Rousseau was inspired by the jungle and often painted nature and animals.

Key Vocabulary: ceramic, slab, decoration, Henri Rousseau, sculpture, raised, indenting, critique

Subject Composite: Children to hold an art gallery showcasing their clay tiles.

Impact: Children realise that they can be inspired by the world around them and use this to develop their ideas and imagination.

DT

Intent: Children to design, make and evaluate a frame structure designed to withstand a natural disaster such as an earthquake.

Skills, and Knowledge Components Focus

- Explain how to make structures stronger, stiffer and more stable using engineered designs (e.g. diagonal struts).
- Explain what they are making, why they are making it and what they will need to use, using the design criteria.
- Adapt designs, if needed, after design discussion.
- Select and name appropriate tools and equipment needed
- Know and choose which equipment is used for cutting, shaping joining and finishing.
- Consider how some people and products have changed the world
- Know the characteristics of materials and components and select, depending on use.
- Use sketches, labelled diagrams and notes to explain their design

Sticky Knowledge:

- A structure is something that is built for a purpose.
- Triangulation involves the use of triangular shapes to give stability to structures.
- Compression - the application of pressure to squeeze an object.
- Strut - a part of a structure under compression.
- Diagonal - a straight line that goes from one corner to another inside a shape.
- Frame structure - a structure made from thin components e.g. tent frame.

Key Vocabulary: structure, stronger, stiffer, triangulation, compression, strut, diagonal, frame structure

Subject Composite: Children to create a frame structure and present to class explaining their design.

Impact: Children understand the importance of the design process and why structures need to be made