

Curriculum Driver

Year 6 Spring Term

Topic Question: 'Can we make a difference?'

Linked texts: Brightstorm by Vashti Hardy
Survivors by David Long
Green & Blue Planet Poems
Floodland by Marcus Sedgwick
Fourteen Wolves by Catherine Barr

Linked people of study: David Attenborough
Trips/Visitors:
Topic Composite/Finale:
Linked Prior Learning:
Future Learning Link:



Geography

Intent: Children will have a greater understanding on environmental issues

Skills, and Knowledge Components Focus

- Know meaning of latitude /longitude, Equator or Tropics of Capricorn and Cancer (inc. Northern and Southern hemispheres) or Arctic and Antarctic Circles or Time zones.
- Know meaning of Biomes and vegetation belts.
- Know about climate change.

Sticky Knowledge:

- I know that invisible lines of latitude and longitude form a grid over the Earth. These lines help to create a co-ordinate to locate a place accurately.
- The Equator is a line of altitude that runs around the middle of the Earth and is halfway between the North Pole and South Pole.
- I know that other important lines of Latitude include; Arctic Circle, Tropic of Cancer, Tropic of Capricorn and the Antarctic Circle.
- I know that climate change is the term used by experts when describing the way that both weather and climate systems are changing as a result of mankind's industrial activity across the world.
- I know that there are different environmental changes that are happening as a result of climate change. These include; glaciers shrinking, rising sea levels, animal species becoming endangered, trees and plants flowering much earlier in the year, plant species shifting locations
- Experts believe that humans are the main reason why the world's climate and weather are changing.
- A key contributing factor is the creation of greenhouse gases caused by human activities. These include; electricity and heat, transportation, manufacturing and construction and agriculture (including fertilisers)
- I know that greenhouse gases make our planet hotter as when they are released into the atmosphere they prevent heat from escaping the Earth.
- An ecosystem is a system of plants and animals which are interconnected and working together.
- Some ecosystems are found under a stone or in a pond and are very small, whereas others are very large and cover the majority of a continent.
- An ecosystem covering a large area of a continent is called a biome.
- A vegetation belt is the plant life within a biome.

Key Vocabulary:

Latitude, longitude, co-ordinates, equator, altitude, Arctic Circle, Tropic of Cancer, Tropic of Capricorn, Antarctic Circle, climate change, environment, endangered, sea levels, greenhouse gases, ecosystems, vegetation belt, biomes

Subject Composite:

Children will design & create a scale 3D model of the Earth showing its latitude and longitude and the effects of climate change to raise awareness and present to another class.

Impact: Children be inspired to explore the world and help climate change.

DTir

Intent: Children will develop the design, make and evaluation skills

Skills, and Knowledge Components Focus

- Apply understanding of how to strengthen, stiffen and reinforce more complex structures.
- Suggest ways of improving own and others' work, using specific criteria.
- Select from and use a wider range of specific materials and components according to their use and aesthetic properties.
- Adapt designs, where necessary, based on design feedback.
- Communicate ideas using cross-section diagrams
- Develop a set of criteria, based on research, to aid design process

Sticky Knowledge:

- I can select materials suitable for my model design
- I can design my models appearance with appealing aesthetics
- I can design how to strengthen and reinforce my structure
- I can create my own design criteria from my research
- I can draw and label cross-section diagrams of my design
- I can evaluate mine and others models against the design criteria

Key Vocabulary:

Materials, structure, strengthen, design criteria, evaluate, reinforce, aesthetic, cross-section diagrams

Subject Composite: Children will design & create a scale 3D model of the Earth showing its latitude and longitude and the effects of climate change to raise awareness.

Impact:

Children will be enthusiastic in designing and making their model and presenting it to another class.

Art

Intent: Children express their feelings about climate change through their art work.

Skills, and Knowledge Components Focus

- Use Art to express an abstract concept e.g war, love, creation.
- Continue to use their sketchbooks to build up ideas and techniques that support thinking through a topic or concept.
- Combine techniques and give reasons for choices.
- Work towards a portfolio of work of which they are proud, giving reasons for their choices, and areas in which they would like to develop.

Sticky Knowledge:

- I can use my sketchbook to practise techniques to build up to a final piece
- I can create a piece of art to reflect my feelings towards climate change

Key Vocabulary: colour, tone, shade, sketch, express, collage

Subject Composite: Children create a collage related to climate change using sustainable/recycled materials

Impact: Children will be able to use art to express themselves and reflect on world issues

Working Scientifically- Year 6

Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate

recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs

Use test results to make predictions to set up further comparative and fair tests

Report and present findings from enquiries, including conclusions, causal relationships and explanations of and a degree of trust in results, in oral and written forms such as displays and other presentations

Identify scientific evidence that has been used to support or refute ideas or arguments

Science - Year 6- Living things and their habitats

Intent: Children will group and classify living things.

Skills, and Knowledge Components Focus

- Describe how living things are classified into broad groups according to common observable characteristics
- Describe how living things are classified based on their similarities and differences
- Give reasons for classifying plants and animals based on specific characteristics

Sticky Knowledge:

- I know living things are classified into groups.
- I know all living things are classified including animals, plants and micro-organisms
- I can classify plants and animals based on specific characteristics
- I can explain the Linnaean System
- I know that Carl Linnaeus created the Linnaean System
- I know can give examples of creatures from each living thing group: birds, insects, amphibians, fish, arachnids, annelids, crustaceans, echinoderms, molluscs
- I can classify living things from my local habitat

Key Vocabulary:

Living things, classification, classified, micro-organisms, bacteria, microscope, species, plants, animals, characteristics, taxonomist, classification key

Subject Composite:

Children will create their own classification key of living things gathered from their local area.

Impact:

Children will have a deeper understanding of the similarities and difference between living things.

Science - Year 6-Evolution and inheritance

Intent: Child will learn how living things adapt and evolve over time based on their environment.

Skills, and Knowledge Components Focus

- Recognise that living things have changed over time and that fossils provide information about living things that inhabited the Earth millions of years ago.
- Recognise that living things produce offspring of the same kind, but normally offspring vary and are not identical to their parents.
- Identify how animals and plants are adapted to suit their environment in different ways and that adaptation may lead to evolution.

Sticky Knowledge:

- I know that evolution means how living things have changed over time
- I know that fossils provide information about living things that inhabited the Earth millions of years ago
- I know that living things produce offspring of the same kind
- I can explain inheritance
- I can explain Charles Darwin's theory of evolution
- I know that offspring vary and are not identical to their parents
- I know that plants and animals adapt to suit their environment
- I know that adaptations over time may lead to evolution

Key Vocabulary:

Evolution, fossils, inheritance, living things, micro-organisms, plants, animals, adaptation, offspring, environment, variations, inheritance, habitat, species, Charles Darwin

Subject Composite:

To create an ebook sharing their understanding of evolution and inheritance

Impact:

Children will have a deeper understanding how living things have adapted over time