



Planet Earth

Science: ELECTRICITY

- Associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit. Compare and give the reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.

CROSS CURRICULAR:

- Create a line graph about number and voltage of cells used in the circuit.
- Comparative line graph about brightness and number of cells
- Write an argument as to who made the biggest contribution – Edison and Tesla
- Write a persuasive argument about different forms of energy production

Science LIVING THINGS AND THEIR HABITATS

- Describe how living things are classified into 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.

CROSS CURRICULAR:

- Solve fraction problems about classifications of animals
- Create a pie chart on different classifications
- Create a fact-file on different classifications
- Write a report on how to preserve habitats and animals

Geography: BIOMES

- Identify the position of the Arctic and the Antarctic circle.
- Know the significance of the Arctic and the Antarctic and how these control the water levels of the world.
- Use the terms 'North Pole' and 'South Pole' to describe where the Arctic and Antarctic are.
- Identify whether the Arctic and Antarctic are habitable.
- Describe and understand the key aspects of climate zones.
- Compare and contrast climates of different countries.
- Identify the five biomes – (aquatic, deserts, forests, grasslands, tundra.)
- Describe the different biomes.
- Use the names of the biomes to describe different areas.
- Compare and contrast the biomes.
- Identify how the biomes have changed over time.
- Investigate how conservation is being used to preserve biomes.

Art: : OBSERVATIONAL DRAWING

- Work from a variety of sources including observation, photographs and digital images.
 - Work in a sustained and independent way to create a detailed drawing.
 - Develop close observational skills using a variety of view finders.
 - Use dry media to make different marks, lines, patterns and shapes within a drawing.
 - Explore colour mixing and blending techniques with coloured pencils.
 - Use different techniques for different purposes (e.g. shading, hatching) within their own work.
 - Begin to use perspective in their work.
- CHALLENGE ACTIVITIES FOR THE MORE ABLE:**
- Make their own viewfinder and evaluate the impact of using different sized/shaped ones.

D.T: MAKE ARCTIC GLOVES

- Create 3D products using pattern pieces and seam allowance.
- Understand pattern layout.
- Decorate textiles appropriately before joining components.
- Pin and tack fabric pieces together.
- Join fabrics using oversewing, back stitch, blanket stitch or machine stitching under close supervision.
- Combine fabrics to create more useful properties.
- Make quality products.

CHALLENGE ACTIVITIES FOR THE MORE ABLE:

- Learn a new type of stitch.
- Evaluate which stitch is the most effective.
- Create a glove for a contrasting environment.

- **Music:** Play and perform in solo and ensemble contexts, using their voices and playing musical instruments with increasing fluency, control and expression.
- Improvise and compose music for a range of purposes using the interrelated dimensions of music.
- Listen with attention to detail and recall sounds with increasing aural memory.
- Use and understand staff and other musical notations.
- Appreciate and understand a wide range of high-quality live and recorded music drawn from different traditions and from great composers and musicians.

Develop an understanding of the history of music

P.E gymnastics, dance, tennis and athletics

R.E - JUDAISM - unit 5 and SIKHISM - unit 5

Computing: Robots, controls and sensors

- Describe and analyse more complex control systems in the real world, including sensors and user interaction
- Use a data logging device as a part of an investigation or experiment in Science or Geography
- Use a control box connected to a computer to control a physical system - eg traffic lights
- Create a simple control system with sensors, inputs and outputs, on screen and/or as a physical system

Work systematically to identify and correct errors and problems in their own and others programs

Entitlement and enrichment: London Zoo (the Rainforest); Victoria and Albert museum.

Topic writing links: (please teach during Friday's literacy lesson and work in topic/Science books

- Write a diary entry from someone at the Antarctic research station.
- Write about the Inuit way of life.
- Write a description of each biome.
- Write a persuasive speech linked to conservation/environmental awareness.
- Write an advert linked into climate change.
- Write a newspaper article linked into conservation.
- Create an information booklet about one of the biomes.
- Send a letter from one of the biomes.
- Choose an animal from a chosen biome and write a descriptive letter for identification purposes.
- Create a video about the life and works of Carl Linnaeus.

Literacy books which link to the topic:

Shackleton's journey.
Byrd and Igloo - A polar adventure.
Sophie Scott goes South.
Frozen secrets: Antarctica revealed.
The Polar Bear Son : An Inuit Tale.
Whale Snow
Arctic Son
Holes
Desert Trek
A Walk in the Desert
Desert Giant