EXTREME EARTH: Knowledge & Skills Organiser – Y5/6 (Eagle Owls) Spring 2021

Subjects covered in the national curriculum:

English

Non-Chronological report – (topic knowledge gathering)
Explanation text – following knowledge with more scientific knowledge of how disasters happen.
Narrative – based on class text.

Geography/History

Chn learn about the areas of the Earth that are more prone to natural disasters and why.
They use atlases and maps to locate these countries and study their physical features
Annotate own maps to explain the risks in different areas and what causes them.

Computing

Blogging and weather reports
Game design – Extreme earth

RSE

My relationships –

My beliefs

Maths

Fractions – adding, subtracting, multiplying.
Fractions of quantities and amounts
Decimals and percentages
Data handling – **extreme earth changes in climate.**

RE

Q – What did Jesus do to save Human Beings?

Science

Earth and Space – volcanic activity (Mars and Moon)
Animals including humans – Adaptations to their environments

Art/DT

Seascapes – looking at the artists: Monet, Hokusai, Renoir.

Design a model building / bridge to withstand earthquakes

Curriculum Enrichment

COVID depending
Online experience to the Science Museum.

PE

Tag Rugby – Hockey – Gymnastics.

French

Numbers, food, at the restaurant roleplays

The skills you will develop in this topic:

Geographical skills and fieldwork/Historical awareness:

- Use digital and paper maps and atlases (including aerial maps) to find locations specific to topic area.
- Begin to use atlases to find out other information (e.g. temperature)
- Find and recognise places on maps of different scales
- Use 8 figure compasses, begin to use 6 figure grid references.
- Locate the world's countries, Identify the position and significance of lines of longitude & latitude.
- Use atlases to find out data about other places, describe and understand key aspects of physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle

- Record knowledge and understanding in a variety of ways, using dates and key terms appropriately
- Devise, ask and answer more complex questions about the past,
- Considering key concepts in history
- Analyse a range of source material to promote evidence about the past
- Understand that the past is represented and interpreted in different ways and give reasons for this

- Begin to offer explanations about why people in the past acted as they did
- Show understanding of some of the similarities and differences between different periods, e.g. social, belief, local, individual
- Give reasons why some events, people or developments are seen as more significant than others

Art:

- Improve their mastery of art and design techniques including drawing, painting and sculpture with a range of materials (for example, pencil, charcoal, paint, clay).
- learn about different artists from around the world

Create sketch books to record their observations and use them to review and revisit ideas.

Design technology:

- Select from and use a wider range of materials and components, including construction materials, according to their functional properties
- Select tools and equipment suitable for the task
- Critically evaluate their work

Science:

- 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
- identify scientific evidence that has been used to support or refute ideas or arguments
- report and present 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
- use test results to make predictions to set up further comparative and fair tests
- recognise that some mechanisms including levers, pulleys and gears allow a smaller force to have a greater effect
- observing and raising questions about local animals and how they are adapted to their environment; comparing how some living things are adapted to survive in extreme conditions, for example, cactuses, penguins and camels. (They might analyse the advantages and disadvantages of specific adaptations, such as being on 2 feet rather than 4, having a long or a short beak, having gills or lungs, tendrils on climbing plants, brightly coloured and scented flowers).
- Using previous knowledge to understand natural phenomena on other planets in our solar system.

RE: Discussion and reasoning, exploring ideas (philosophy), comparing and developing lines of enquiry (social human science), reflection.

Computing:

- 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.
- Presentations: Pupils learn to write and deliver a presentation, incorporating a range of media.
- Sound and video: Pupils record and edit media to create a short sequence - extended by editing the final product in using video editing software.
- Working with data: Pupils learn to search, sort and graph information.

Home Learning ideas:

- Find out about the DOs and DON'Ts in an earthquake or Tsunami. Interview adults at home to find out if they would know what to do in one of those situations!
- Make a quiz about famous natural disasters of the last ten years. Quiz the adults in your household to find out how much they actually know.
- Imagine hundreds of people have lost their homes and belongings due to a natural disaster. How would you help them?
- Create a piece of art depicting a natural disaster.
- Investigate any natural disasters in your local area e.g., flooding of the broads.

Vocabulary I need to know:

Extreme conditions / events and natural disasters, tectonic plates, floods, droughts, volcanoes, Tsunami, earthquake, avalanche, wildfire, eruption, hurricane, cyclone, G-force fault zones / lines, tectonic shift, degrees, climate, natural versus physical features, landscape, Celsius, Fahrenheit, catastrophic, death toll, devastation, impact.

By the end of our topic the children will:

- name natural disasters, and talk out their impact on physical and natural habitats
- describe key factors in certain natural disasters such as volcanos, and tsunamis
- use their scientific and geographical knowledge to design structures which may withstand natural disasters
- link their learning to philosophical and theological concepts such as human suffering, and charitable acts
- broaden their understanding of the world, and locations in Asia and Europe
- place natural disasters in key historical contexts such as Pompei, Italy
- understand the impact of weather patterns on events such as cyclones and hurricanes which they will be able to relate to their own experience
- use their Maths skills to interpret data and read general information about weather etc.