

Extreme Earth: Knowledge & Skills Organiser – Y3/4/5/6 (Kingfishers)

Subjects covered in the national curriculum:

English

'Running Wild' by Michael Morpurgo
(Class Reader)

Poetry- Shape Poetry

Non-Chronological Reports

News Reports

Instructions

Letters

Computing

Blogging

Email

E-Safety

Programming
(Scratch)

Geography

Tectonic Plates

Ring of Fire

Natural Disasters
(volcanoes, earthquakes,
tsunamis, flooding,
drought, wildfires)

Maps

Maths

Geometry + Coordinates

Transformations

Fractions, decimals and
percentages

Length, Area and Perimeter

Money

Extreme Earth

Science

Earth and Space

Animals including Humans

Spanish

Days of the week

Months of the year

Birthdays

Art/DT

Volcano Sculptures

Marbling

Buildings to withstand
earthquakes

RE

What did Jesus do to
save human beings?

What difference does
the resurrection make
for Christians?

PE

Cross Country

Circuit Training

RSE

What job might I do? (Y3/4)

Careers and Qualifications (Y5/6)

The skills you will develop in this topic:

Geographical skills and fieldwork/Geographical awareness:

- 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)
- describe and understand key aspects of volcanoes and earthquakes, as well as other locations of natural disasters
- understand how natural disasters occur
- know examples of natural disasters that have made headlines in the news
- understand the impact that natural disasters can have on a location

Art:

- 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
- Develop artistic/visual vocabulary when talking about own work and that of others
- Begin to explore possibilities, using and combining different styles and techniques

Design Technology: ♣ Select from and use a wider range of materials and components, including construction materials, according to their functional properties and aesthetic qualities ♣ 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 • record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs • identify that animals, including humans, need the right types and amount of nutrition, and that they cannot make their own food; they get nutrition from what they eat • identify that humans and some other animals have skeletons and muscles for support, protection and movement • identify and name the main parts of the human circulatory system, and describe the functions of the heart, blood vessels and blood • recognise the impact of diet, exercise, drugs and lifestyle on the way their bodies function - describe the ways in which nutrients and water are transported within animals, including humans • observe changes across the 4 seasons
• observe and describe weather associated with the seasons and how day length varies • describe the movement of the Earth and other planets relative to the sun in the solar system • describe the movement of the moon relative to the Earth • describe the sun, Earth and moon as approximately spherical bodies use the idea of the Earth's rotation to explain day and night and the apparent movement of the sun across the sky

RE: How is salvation linked to incarnation? Was Jesus' death a sacrifice? what is the meaning behind Jesus' death/resurrection? How do Christians celebrate Holy Communion? What is the last supper? How do Christians celebrate Easter Sunday/Good Friday? What would you sacrifice? How would sacrifice impact your life? What are the meanings behind the story? How did/does Jesus inspire the world today? How does resurrection and death make a difference in Christians' lives? How does the belief in resurrection and life after death makes a difference to Christians?

Computing: Use sequence, selection and repetition in programs. • Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs. • learn to use graphical programming language, such as Scratch or Logo to draw regular 2D shapes. • add loops or procedures to create a repeating pattern. • learn to collaborate electronically by blogging - mailing and working on shared documents

Home Learning ideas:

- Create a fact page about a natural disaster. How are they formed? Where do they occur?
- Create a short presentation/piece of writing on tectonic plate boundaries. Research types of tectonic movement, such as destructive and constructive plate boundaries.
- Find out about at least 3 examples of natural disasters that have happened in real life (eg. Boxing Day tsunami 2004)
- Use a papier mache (or something else spherical) to create your own earth model. You could include natural features of the earth on it or wonders of the world.
- Write your own adventure story set in or near a natural disaster event. It could be modern-day realistic, fantasy or historical. Make sure that it is neatly presented, perhaps with a front cover.
- Imagine that you are a news presenter. Write down at least five questions which you would ask someone who has survived a natural event such as an earthquake, volcanic eruption or flood.
- Investigate photos/artwork of natural disasters to inspire your own picture. You can use paints, pastels, pencils or collage. The choice is yours!
- Design a new building which is capable of surviving a specific natural event. You could create a model, draw your design, use a computer program or any other way that you can think of to present your ideas.
- Create a board game using ideas from our 'Extreme Earth' topic.

Vocabulary I need to know:

Geography: fault, magma, Ring of Fire, sill, crater, conduit, active, eruption, ash, core, vent, volcano, crust, dormant, mantle, lava, extinct, earthquake, tsunami, tectonic plate, divergent, convergent, transform, drought, flooding, wildfires, avalanche, tornado, hurricane.

Science: Earth, Sun, Moon, day, night, equinox, solstice, seasons, equator, Tropic of Capricorn, Tropic of Cancer, North/South Pole, continent, Solar System, planet, orbit, rotate, tilt, nutrition, carbohydrates, vitamins, minerals, fat, protein, skeleton, internal organs, heart, lungs, liver, kidneys, brain, blood, diet, exercise, nutrients

Art/D.T: develop, evaluate, design, equipment, construct , structure, model, practical

RE : salvation, resurrection, incarnation, sacrifice, Holy Communion, Last Supper, Easter, Good Friday

By the end of the unit:

Children will have an understanding of natural disasters including where and why they occur. They will have an understanding of the processes that cause volcanoes, earthquakes and typhoons and be able to name locational examples of where these have happened in the past. Through looking at the earth's rotation and where the UK is located on the planet, children will have knowledge of why we have experience different seasons and climates that affect different parts of the world.