Hawks Class Topic Map: Extreme earth



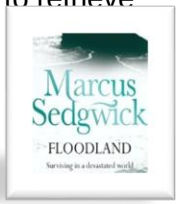
English

In English, we will be reading **Floodland by Marcus Sedgewick.** This story is set in the near future where most of the UK is covered by water. A girl named Zoe is left alone by her parents in the ruins of their home city, which has become an island where food and water are becoming increasingly scarce. She escapes to Eels Island where she discovers a strange society run by a strange boy named Dooby. Will she ever find her parents?

We will use this text to write our diary entries and persuasive letters linked to climate change and the challenges facing the world today.

In grammar, we will explore formal and informal writing and look at emotive and persuasive language. We will focus in on verb tense consistency and cohesive devices.

Through our guided reading sessions we develop our skills of skimming and scanning to retrieve infromation and learn how to use evidence from the text to explain our thinking.



PSHE

In PSHE we will be focusing on our friendships and relationships. We will look at healthy relationships and how to communicate and work together collaboratively. We will look at the importance of respect and tolerance.

RE and World Views (Christianity)

In this unit we will begin to analyse the teachings of Jesus that have consistently challenged Christians for centuries. We will explore how, for many Christians, these teachings have huge relevance in today's world.

Science

In Science this term we will explore living things and their habitats. We will look at formal methods of classifying organisms and learn how some animals have adapted to live in extreme climates.

We will look at the impact of climate change on habitats and how animals and plants are adapting in our ever-changing world.

Year 5 will also focus on the life cycles of mammals, amphibians and reptiles.

Geography

In this geography-based unit we will be using our mapping skills to learn about climate patterns around the world. We will learn about physical geography, exploring different locations with extreme climates and research extreme weather events around the world.

We will also look at how earthquakes, tsunamis and volcanoes are formed and the impact these have around the world. Finally, we will consider the impact of climate change and what we can do help.

Maths

This term in maths we will continue to consolidate fluency and efficiency in the four operations through our daily arithmetic sessions.

We will continue our unit on multiplication and division exploring prime numbers, square numbers and cube numbers before moving onto formal written methods of short and long multiplication and for year 6, long division.

We will then begin our first unit on fractions exploring equivalence, improper fraction and mixed numbers. We will order and compare fractions before moving on to adding and subtracting fractions.

DT

In DT we will research, design, build and evaluate our own storm proof shelters. We will focus on testing material properties, understanding structural stability, and exploring joining techniques to withstand wind and water. Children will then make and test their own shelter prototype.

Music

In music we will use the song 'The Singing River' to learn about different vocal components. We will look at expression, dynamics and learn and perform this a song based around an ostinato.

Computing

In this unit we will explore how data is transferred over the internet. W will focus on addressing, before moving on to the makeup and structure of data packets. We will then look at how the internet facilitates online communication and collaboration.

PE

This term children will play Tag Rugby including core skill pillars: evasion, ball carrying, passing, and defending

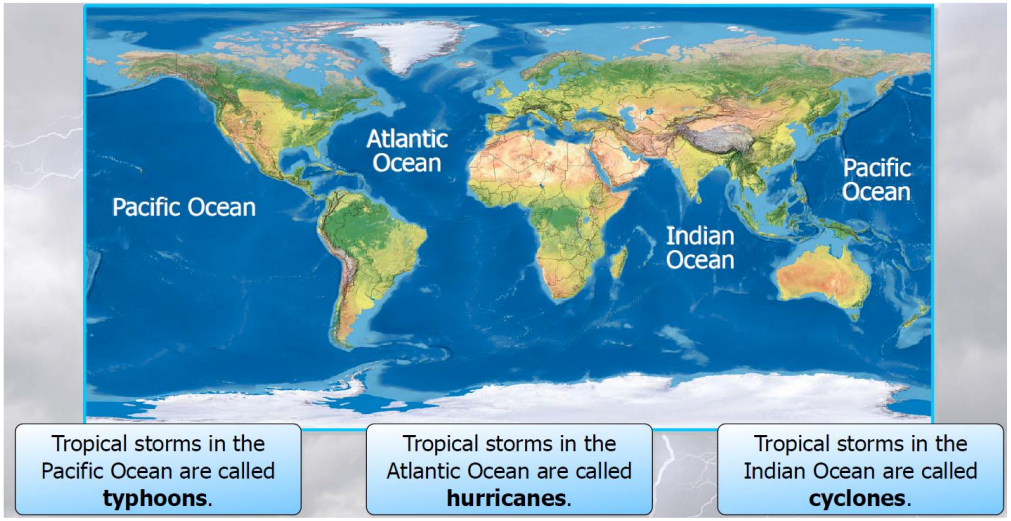
Weather	Weather is the state of the atmosphere around the Earth at any given time. This is affected by factors such as temperature, wind, air, pressure and humidity.
Climate	Climate is a region's weather patterns over a period of time. Different areas of the world experience different climates depending on where they are
Equator	The **Equator** is an imaginary circle around Earth. It divides Earth into two equal parts: the Northern Hemisphere and the Southern Hemisphere. It runs east and west halfway between the North and South poles.
Natural disaster	A natural event such as a flood, earthquake, or hurricane that causes great damage or loss of life.
Drought	A prolonged period of abnormally low rainfall, leading to a shortage of water
Tropical Storm	Tropical storms can be some of the fiercest storms on Earth. These storms develop in tropical areas of oceans and are called different things depending on where they are. Hurricanes, typhoons and cyclones are all types of tropical storms
Tornado	A tornado (or twister) is a spiralling funnel of air which descends from a storm cloud. They are formed when warm air is drawn in at the base of the cloud. It then rises upwards, spiralling as it does so to create a funnel
Water Cycle	All the water in the world rises from the Earth's surface and falls back to the ground in a continuous cycle which is driven by the sun's energy
Tectonic plate	The dozen or so ***plates*** that make up the surface of the Earth.

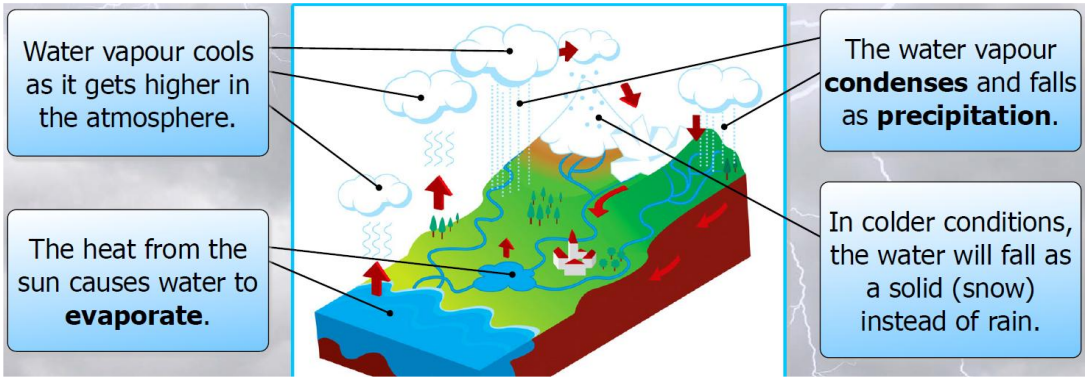
Skill

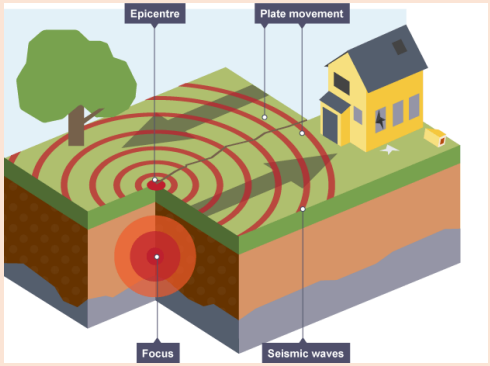
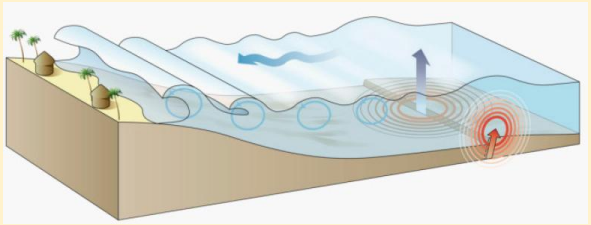
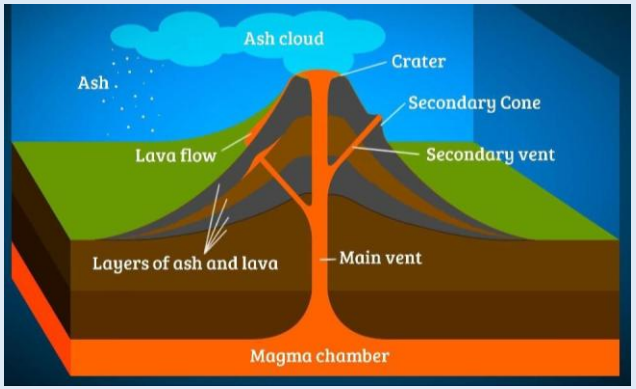
Use maps, atlases, globes and digital computer mapping to locate countries and describe features.

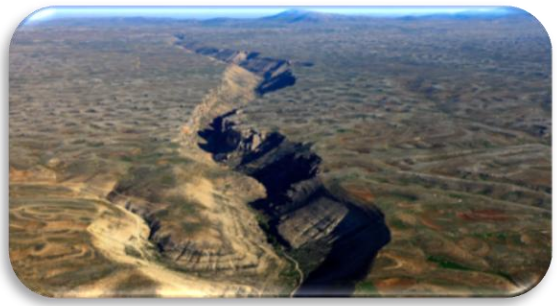
Knowledge

Describe and understand aspects of physical geography including climate, volcanoes, earthquakes and the water cycle.





Earthquake	Tsunami	Volcano
An earthquake occurs when the tectonic plates of the Earth's crust meet. The earth is made up of several layers. The outer layer **(crust)** is made up of plates of rock that fit like a jigsaw **(tectonic plates)** These are constantly moving and sometimes the force of them pushing together causing an earthquake. Earthquakes can be felt anywhere but usually only happen where tectonic plates meet. 	A tsunami is a giant wave. The name comes from the Japanese 'tsu' meaning **harbour** and 'nami' meaning **wave**. They are usually caused by earthquakes under the ocean floor, although they can be caused by other forces that disturb the ocean such as a falling meteor. Underwater, the force of an earthquake causes shockwaves. These shockwaves disturb the water and create a giant wave, or series of waves 	Underneath the easrths crust os the mantle, which contains self molten rock which can , under pressure, turn into magma. This magma can then escape though gaps in the earths crust causing a volcana. 



San Andreas Fault Line



Boxing Day Tsunami in 2004



White Island, New Zealand