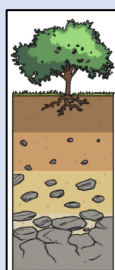
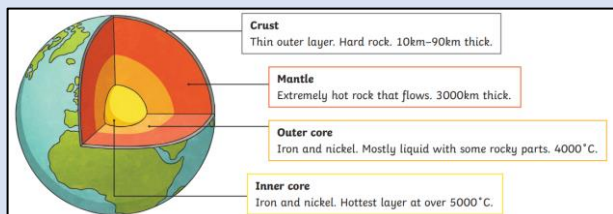


Knowledge Organiser – Year 4 – Geography – Autumn Term – Extreme Earth

What do I already know?

- I can name and locate the world's seven continents and five oceans
- I can name and talk about characteristics of various types of weather
- I know what happens to water if it is boiled or frozen
- I understand the vocabulary 'solid, liquid and gas'
- I can say where water is found in the environment (eg, sea, pond, river, stream, lake, waterfall)



Layers of Soil	
humus	Rotting dead leaves and animals.
topsoil	Plant's roots grow here. Very few rocks.
subsoil	Rocks and stones. Full of nutrients. Tree roots may reach. Fossils .
bedrock	A mass of rocks. Fossils .

Key Vocabulary	
cumulonimbus cloud	Large thunderstorm clouds.
erupt	To suddenly burst out causing lava to explode out of the earth's surface.
fossils	The remains of plants or animals that lived a long time ago which can be found deep in the earth.
magma	Extremely hot, liquid rock.
tectonic plates	The earth's crust is made up of large areas called tectonic plates that join together.

What should I be able to do at the end of the topic?

- name the layers that make up the Earth;
- name the key parts of a volcano;
- show where most volcanoes are found;
- explain how to keep safe during an earthquake;
- describe a tsunami;
- describe the damage caused by a tsunami;
- explain how tornadoes form;
- describe how scientists collect data about storms.

- Describe water in its solid, liquid and gaseous state.
- List the main events in the water cycle.
- Explain that changes in temperature cause evaporation and condensation.
- Explain that water has to be cleaned for drinking.
- List different types of flooding.
- Describe how flooding affects communities.

Key Vocabulary

dam	A barrier that blocks off flowing water.
fertiliser	A substance that helps make plants grow.
particles	Everything is made up of matter. Particles are tiny bits of matter.
pesticides	A substance used to destroy pests such as small animals, insects and weeds.
pollution	Anything that is introduced into a habitat which has a harmful effect on plants and animals living there.
reservoir	A man made lake that is used to store water.
water vapour	Water that is in the form of a gas.

Treating Water

Water is stored in reservoirs to allow solids to settle at the bottom.		Chemicals are added to help remove small particles .		Water is clean and safe to drink.
		Water passes through gravel and carbon to filter out tiny particles .		Chlorine is added to kill off bacteria.

Flooding

Fluvial	Pluvial	Coastal	Plumbing
Lots of rainfall causing rivers to burst their banks.	Heavy rainfall cannot drain away quickly enough.	High tides and storms.	Broken pipes in buildings.
Flooding can be prevented in some areas by building dams and flood barriers. However, blocking a river at one location can cause flooding further up or downstream.			

The Water Cycle

