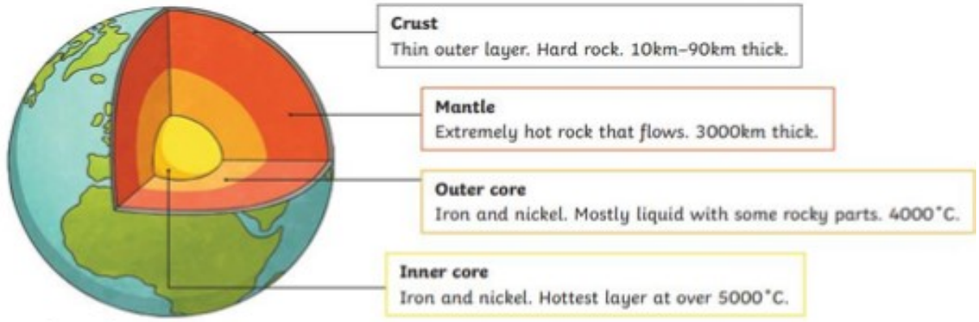
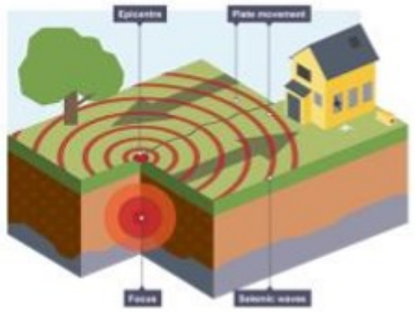
The Rocky Mountains Knowledge Organiser

Layers of Earth

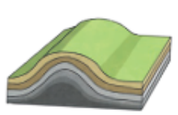
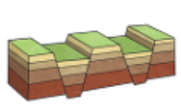
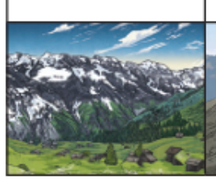
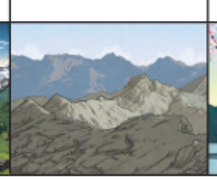
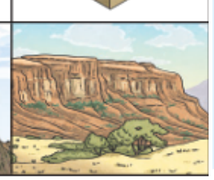


Earthquakes

- Earthquakes are caused when the earth's tectonic plates suddenly move.
- Most earthquakes occur near the tectonic plate boundaries.
- Earthquakes can cause lots of damage to roads, buildings and property.
- The power of an earthquake is measured using the Richter Scale.



How Are Mountains Made?

Fold mountains	Fault-block mountains	Volcanic mountains	Dome mountains	Plateau mountains
Tectonic plates collide and rock is pushed up.	Cracks in the earth's surface open up, some chunks of rock are pushed up, some down.	Formed around volcanoes and made of layers of ash and cooled lava.	Formed when magma is forced upwards but doesn't ever flow out of the crust.	Materials taken away through erosion leave deep valleys or gorges next to high cliffs.
				
				

What are the Rocky Mountains?

The Rocky Mountains are the longest mountain range in North America.

3000 miles long from end to end, the 'Rockies' – that's their nickname – have an amazing range of landscapes, with picturesque lakes and forests.

What is the Climate of the Rockies Like?

The Rocky Mountains have a range of climates – remember that the mountain range is very long!

In the north, temperatures can drop to **-40°C** in the winter, but can be more than **30°C** in summer.

There can be lots of snow in the winter.

The Middle and Southern Rockies are milder and drier. There are even some areas of desert, although thunderstorms are common in the summer.

Where are the Rocky Mountains?

The Rocky Mountains run along the western side of North America. They run through two territories in Canada and six states in the USA.

They run all the way from British Colombia in Canada, right down to New Mexico in the USA.

On the map, you can see that the Rockies are divided into the Northern Rockies, the Middle Rockies, and the Southern Rockies.
Why do you think that is?

Earthquake	A sudden violent shaking of the ground.
Tectonic Plates	Large edges of the earth's crust that are divided into huge slabs. These plates fit together like a jigsaw and when they move, they cause earthquakes.
Epicenter	Part of the earths surface, directly above the focus of an earthquake.
Seismic Waves	A measurement to indicate how big an earthquake is. A wave that travels through the earth.

Key Vocabulary

altitude	The height above sea level.
avalanche	A large amount of snow that quickly moves down a mountain or slope.
crust	The outermost layer of the earth.
gorges	A narrow valley with steep walls, found between hills or mountains.
hypothermia	A serious condition when the body gets too cold and can't warm itself up.
lava	Hot, liquid rock that flows from a volcano.
magma	Hot, liquid rock located deep below the earth's surface.
summit	The highest point of a mountain.
tectonic plate	Pieces of the earth's crust connected together.