





YEAR 5 GEOGRAPHY KNOWLEDGE ORGANISER—EXTREME EARTH

climate	a region with a particular climate.
biome	a large naturally occurring community of flora and fauna occupying a major habitat, e.g. forest
arid	a climate having little or no rain; too dry or barren to support vegetation.
temperate	a climate characterized by mild temperatures.
tropical	A climate that is very hot and humid
polar	A polar climate consists of cool summers and very cold winters e.g. glaciers, or a permanent or semi-
Mediterranean	A climate bordering the Mediterranean sea
Mountainous	A climate that s in the mountains
sustainable	able to be maintained at a certain rate or level
disaster	a sudden accident or a natural catastrophe that causes great damage or loss of life
manmade	made by humans
natural	occurring naturally

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.

Deforestation

Trees are cut down:

- to create fields for farming cattle and growing crops,
- to produce timber and wood pulp to make furniture and paper,
- to create space for housing.

Hurricanes

Hurricanes, typhoons and cyclones are the same weather phenomenon, we simply give them different names in different parts of the world. Hurricanes are large, rotating storms that form over the warm waters of the tropics. Wind speeds must exceed 74mph for a storm to be regarded as a hurricane. There are five categories of hurricanes. The scale of categories is called the Saffir-Simpson Hurricane Scale.

Five recent category 5 hurricanes:
Wilma, 2005: 148mph; 47 deaths; \$27.6bn in damage
Ivan, 2004: 148mph; 76 deaths; over \$8.2bn in damage
Maria, 2017: 155mph; 805 deaths; \$31.1bn in damage
Irma, 2017: 130mph; 115 deaths; \$7.2bn in damage
Dorian, 2019: 175mph; 66 dead; \$2.6bn in damage

Saffir-Simpson Hurricane Scale:
Category 1: 74-95 mph winds, minimal damage
Category 2: 96-110 mph winds, moderate damage
Category 3: 111-129 mph winds, extensive damage
Category 4: 130-154 mph winds, extreme damage
Category 5: 155+ mph winds, catastrophic damage

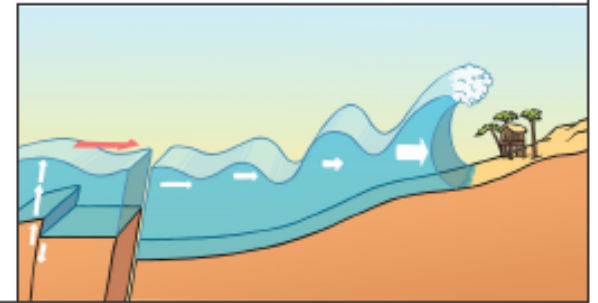
Volcanoes

- Volcanoes are made when pressure builds up inside the earth. This affects the earth's crust causing **magma** to sometimes **erupt** through it.
- Active volcanoes have **erupted** in the last 10 000 years.
- Dormant volcanoes haven't **erupted** in the last 10 000 years but may erupt again.
- Extinct volcanoes aren't expected to **erupt** again.



Tsunamis

- A tsunami is a giant wave caused by a huge earthquake under the ocean.
- The earthquake causes a large amount of water to be displaced very quickly causing a series of waves.
- As the waves travel through shallower water near land, they get bigger and bigger. The wave crashes onto the land causing devastation to buildings and sometimes even lives.



Tornadoes

- A tornado is a swirling funnel of air that forms when warm air rises from near the ground into big **cumulonimbus clouds**.
- There can be thunder and lightning at the same time.
- You can see tornadoes due to the dust and water droplets caught in the clouds.
- Storm chasers are film-makers and scientists who head towards the storms. They film the tornadoes and collect data about them.
- Most tornadoes happen in Tornado Alley in America – more than 500 each year.
- Tornadoes can happen in the UK but only around 30 per year.



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.

