

# Year 4 Knowledge organiser: What causes extreme weather and how does it affect us?

Key information  
**What key facts must I know about our world?**



The seven continents of the world are:

- Europe
- Asia
- Antarctica
- Australasia (Oceania)
- Africa
- North America
- South America.

The Five Oceans of the world are:

- Pacific Ocean
- Atlantic Ocean
- Southern Ocean
- Arctic Ocean
- Indian Ocean



<b>The equator</b>	the imaginary great circle around the earth's surface, equidistant from the poles and perpendicular to the earth's axis of rotation. It divides the earth into the Northern Hemisphere and the Southern Hemisphere.
<b>The Tropics of Capricorn</b>	sit 23.5 degrees south of the Equator.
<b>The Tropics of Cancer</b>	sit 23.5 degrees north of the Equator.

### What is a hurricane and how and where are they formed?

Hurricanes are tropical storms that form over the warm Atlantic ocean water of the tropics.

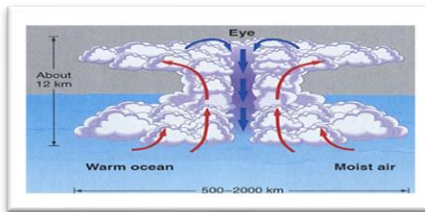
When warm moist air over the water rises, it forms clouds.

This warm air cools as it spreads and falls back down towards the ocean.

This starts a cycle of rising warm moist air, and falling cool, dry air, creating the eye of the storm.

This cycle causes huge storm clouds to form and grow.

These storm clouds will begin to rotate with the spin of the Earth forming a whirling tropical storm with extreme wind and rain.



Key: **Warm Air** **Cool Air** **us?**

tropical storms, but we do experience some extreme weather such as flooding.

Impact of a hurricane on an area	Impact of a flood on an area
<ol style="list-style-type: none"> <li>1. Destruction of homes and natural landscape due to heavy winds</li> <li>2. Rising sea level particularly if hurricane starts out at sea</li> <li>3. Flooding in low lying areas</li> </ol>	<ol style="list-style-type: none"> <li>1. Destruction of property/ businesses,</li> <li>2. Destruction of farmland and crops,</li> <li>3. Causing financial problems in an area</li> <li>4. Impact on wider economy</li> </ol>

Key vocabulary	
extreme weather	when a weather event is significantly different from the average or usual weather pattern.
continent	the world's main continuous areas of land
destruction	damage to something that it no longer exists or cannot be repaired.
Aerial photographs	photographs from an aircraft or other flying object
cyclone	a tropical storm that forms in the southern hemisphere
flood	an overflow of a large amount of water beyond its normal limits, especially over what is normally dry land
typhoon	a tropical storm affecting parts of Asia
groundwater	water held underground in soil or rock
saturated	holding as much water or moisture as can be absorbed; thoroughly soaked
floodplains	an area of land which is covered in water when a river bursts its banks.
community	a group of people living in the same place or having a particular characteristic in common
climate	the weather conditions in an area in general or over a long period.
evaporation	the process of turning from liquid into vapour.
condensation	the change of water from its gas form (water vapour) into a liquid
tropical	located between the tropics of Cancer and Capricorn. High temperatures and high rainfall (precipitation)
settlement	a settlement is a place where people live. Settlements can be as small as a single house in a remote area or as large as a mega city
economy	the production and use of goods and services and the supply of money in an area
financial	relating to money
polar	relating to the North or South Pole
latitude	an invisible horizontal line across the Earth

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	4.Heavy rain 5.Causing financial problems in an area 6.Impact on wider economy		longitude	an invisible vertical line across the Earth
			landscape	all the visible features of an area of land