Year 7 Topic 5: Weather and climate

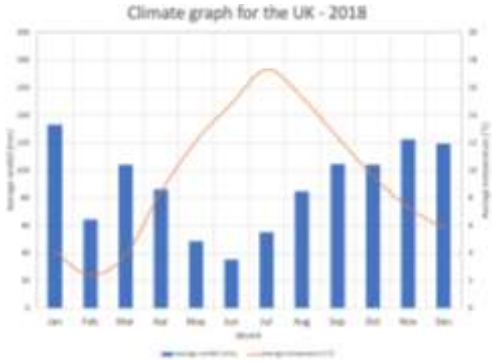
What is the difference between weather and climate?

Weather is the day to day differences in temperature and rainfall
Climate is what we would expect the temperature and precipitation to be after years of collecting information about it.

How does rain happen?

Water from the oceans and lakes or sat on the ground is evaporated (liquid – gas) and condensed into clouds. These clouds get heavy and rain, they are absorbed by trees, the soil or put back into rivers. The process continues.

Climate charts



What is the highest temperature on this graph?

What is the lowest temperature on this graph?

What is the highest precipitation on this graph?

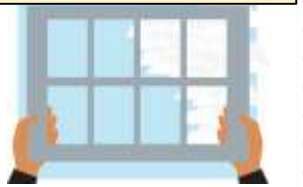
What is the lowest precipitation?

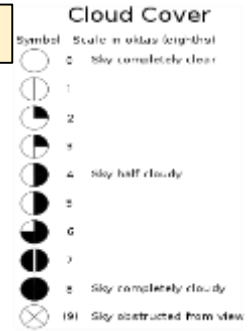
Why is the UK's weather so unique?

Different air masses affect the UK. If they are continental they bring dry weather, if there are maritime they bring rainy weather, if they are tropical they bring hot weather.

How do we measure the weather?

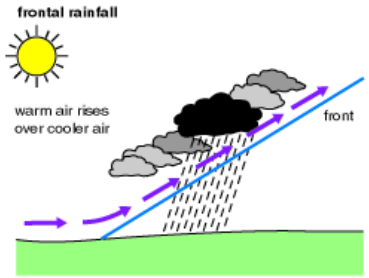
Cloud cover quadrats can show how many otkas of cloud cover there is

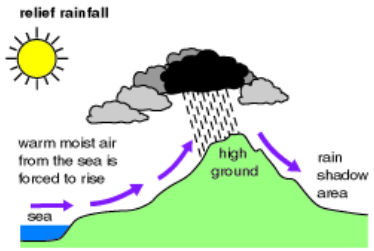


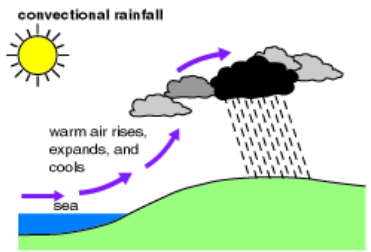


What is a tropical storm?

A low pressure weather system that bring heavy rain and strong winds. They form over warm seas in the tropics.







What are the types of rain?

Relief rainfall happens in hilly areas of the UK for example the North- west of England

Frontal rainfall is common everywhere in the UK due to our location in the global atmospheric circulation model. Challenge – look this up.

KEY WORDS: weather, climate, global air currents, prevailing wind, altitude, precipitation, relief rainfall, air pressure, extreme weather, climate change, evaporation, condensation, water cycle, air mass, polar, continental, maritime, tropical, taiga, temperate, grasslands, desert, tundra, latitude, oktas, meteorology, synoptic (chart), precipitation, depression, cold front, warm front, isobars, occluded front