

# Ark Pioneer learning at Home

## Core Curriculum

### Geography

#### Work to be completed

- Work 1 – Complete Activity 1
- Work 2 – Complete Activity 2
- Work 3 – Complete Activity 3
- Work 4 – Complete the Stretch Tasks
- Work 5 – Red pen check your work from this week using the answers at the bottom + **complete Online Quiz before next Tuesday**

#### Resources / links to help with work:

- NEW!** You could practise some of the skills you have learned this year by going onto Oak National Academy's Digital Lessons. There are different topics. If you want to practise:
- Knowledge of the world's countries and continents, as well as your map skills, right click [here](#).
- Tectonic plate theory, and earthquakes and volcanoes - right click [here](#).

#### How will this work be checked?

Each week you will be given 'red pen work' to carry out corrections on the learning that you are doing at home. Please make sure this work is done and that you correct all work in your exercise book. You can red-pen check your Geography work using the answers at the bottom of the booklets, after you have finished having a go yourself.

You must also complete the weekly quiz for your core curriculum subjects online and the link to those is on our school website in the 'quizzes' drop-down option from 'Home Learning'.

#### How much time should I be studying and what happens if I don't finish all my work?

For core curriculum subjects you are expected to do 30min each day as a minimum. Those subjects are English language, English literature, Maths, Science, History and Geography. These subjects all have a weekly quiz and will be checked in on by your form teacher when they call each week.

All other subjects are 'Extended Curriculum' and they should be done after you have finished the Core Curriculum tasks for the day. You should plan to do work in different subjects each day. We recommend that pupils do one hour per week in each of the 'extended curriculum' subjects.

We recognise that it is not possible for all pupils to complete all work given the exceptional circumstance. Please speak with your form tutor about the work if it is becoming unmanageable.



Aim high



Have integrity



Be kind



Model determination

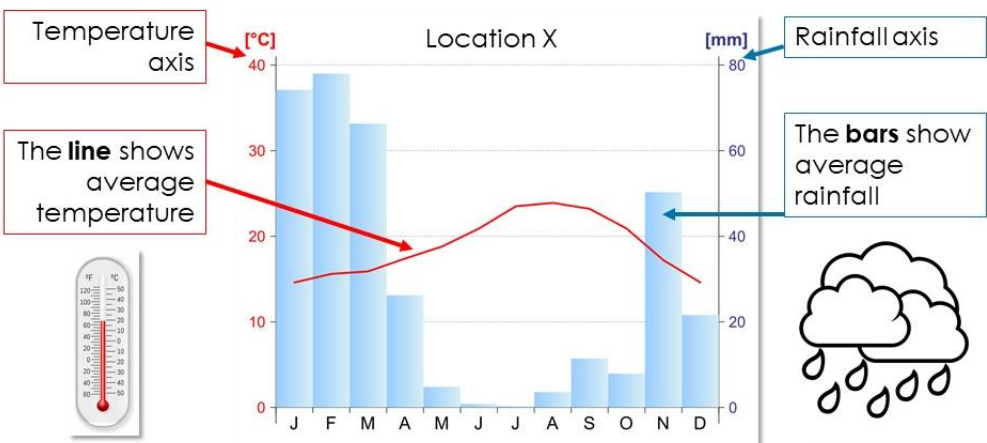
## Investigating the Weather: Mastery Quiz 2

It's time to recap what we know!

Below are three activities. Read the information and answer the questions in each. After the activities, there is a quiz for you to complete. Remember to click 'submit' when you are done!

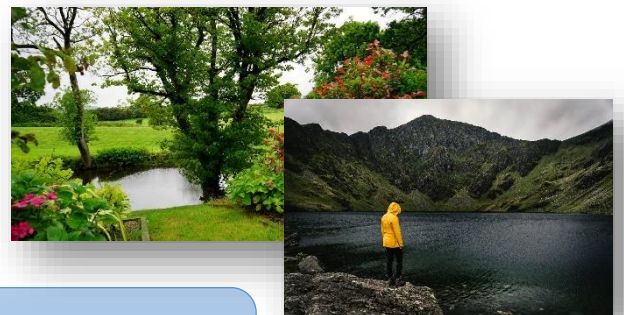
### Activity 1

A **climate graph** shows average **temperature** and **precipitation** for a place, using a **bar and line graph**.



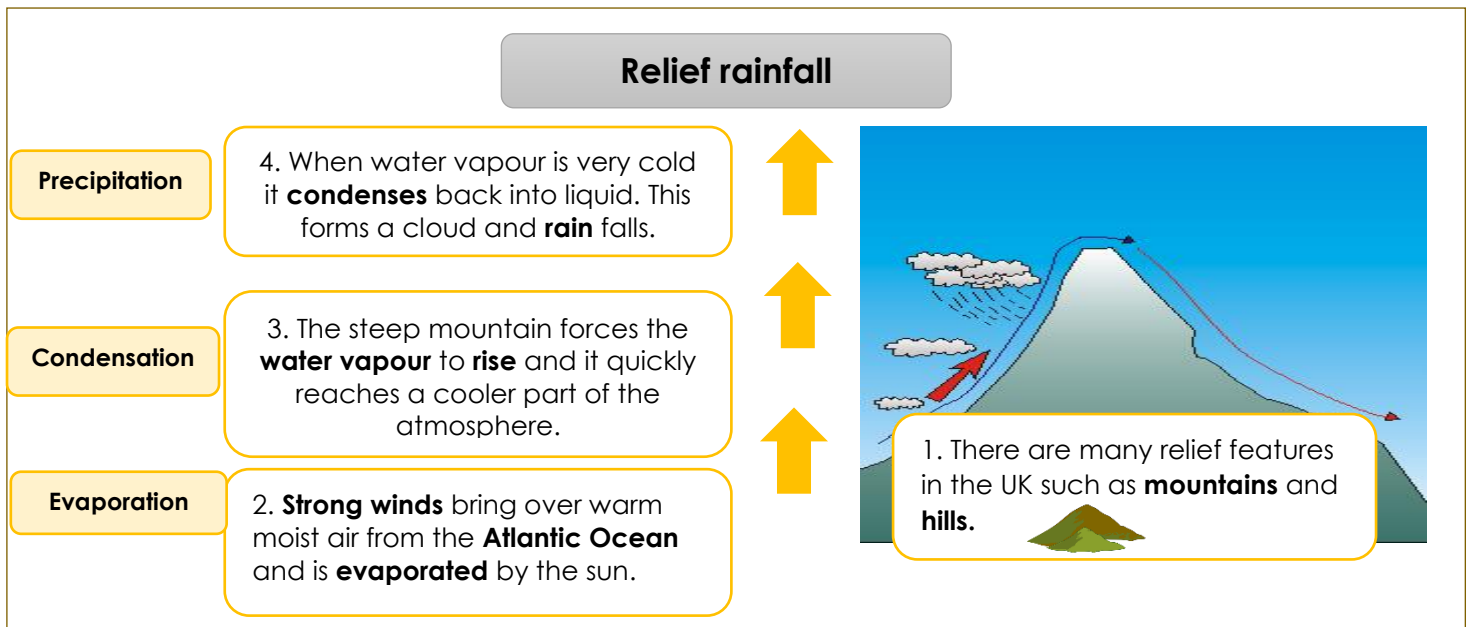
The UK has a **mild climate**. This means that it is generally cool or warm. It is **rarely extremely hot** (unlike places close to the equator) or extremely cold (unlike places close to the Poles). Another word that is commonly used to describe a mild climate is '**temperate**'.

- Complete sentences A-D in your books
  - To show temperature a climate graph uses...
  - To show precipitation a climate graph uses....
  - In this graph the month without rainfall is...
  - In this graph the hottest month is...



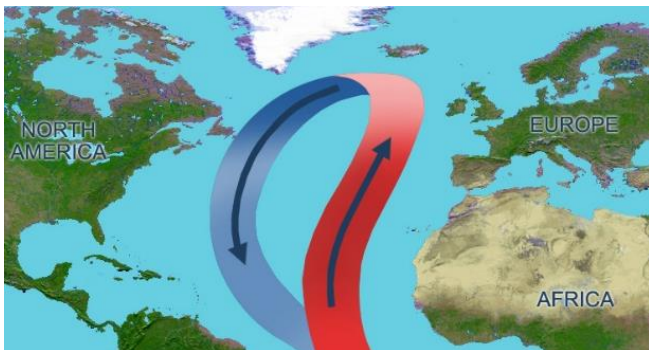
- Why is it incorrect to say that a climate graph shows the weather?
- Why is it incorrect to say that the UK has a cold climate?

## Activity 2



### Answer the questions in your books.

1. Give an example of a relief feature.
2. What happens to the water vapour when it reaches the mountain?
3. Why does the rain only fall on one side of the mountain?
4. Why is this type of rainfall called relief rainfall?



This diagram shows the **North Atlantic Current** which brings warm water from the tropics towards the UK, making the climate warmer than it otherwise would be.

The UK also receives **south westerly winds** which travel a long distance over the Atlantic Ocean, picking up lots of moisture and forming rain clouds.

### Fact or fib (write down the facts in your books, and correct the fibs)

5. The North Atlantic Current brings cool water to the UK
6. It is because of the North Atlantic Current that the UK climate is mild rather than cold.
7. The UK receives south westerly winds which travel a long distance.
8. South westerly winds bring dry weather.

## Activity 3

**Extreme weather** is when a weather event is unusual or severe and threatens people and property. Around the world extreme weather includes droughts, wildfires, blizzards hurricanes. Three types of extreme weather that can happen in the UK are heatwaves, severe winters and storms.

A **heatwave** is when the weather is much **hotter** than expected, and it lasts for at least three days. There is little or **no rain**.

**Severe winters** are much colder than normal. Temperatures are often below freezing and **blizzards** (strong snowstorms with high winds) cause snow to cover the land.

**Storms** can bring **strong winds** and **heavy rains**. Intense rainfall in the **rivers** causes them to overflow and strong winds at the coast cause **storm surges** (large waves that flood onto the land).

1. Complete **sentences a – d** in your geography exercise book!

- a) A weather event is considered extreme if....
- b) Three types of extreme weather that can occur in the UK are...
- c) The characteristics of storms are...
- d) We would know if there was a heatwave if...

2. Explain the link between flooding and storms.



# STRETCH

1. Use Map 1 and Map 2 to explain why some regions had stronger heatwave warnings than others. Refer to compass directions in your answer.

Sentence starters:

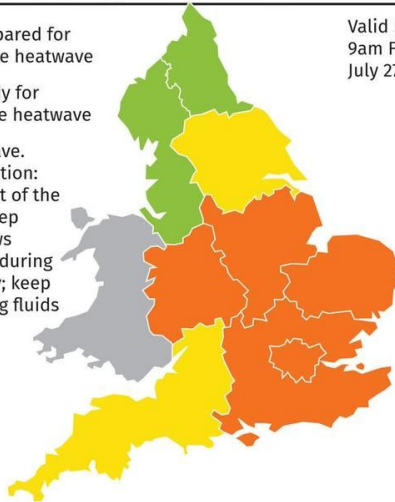
- Map 1 shows that .... (describe the pattern)
- This can be explained by Map 2 as...

Map 1: Heatwave warnings

## Heatwave warning

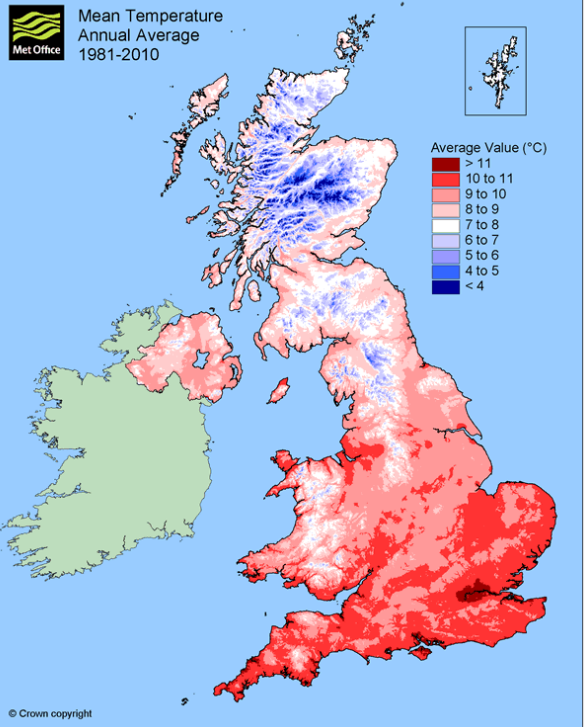
- Be prepared for possible heatwave
- Be ready for possible heatwave
- Heatwave. Take action: stay out of the sun; keep windows closed during the day; keep drinking fluids

Valid until  
9am Friday  
July 27 2018



Source: Met Office

Map 2: Average temperature

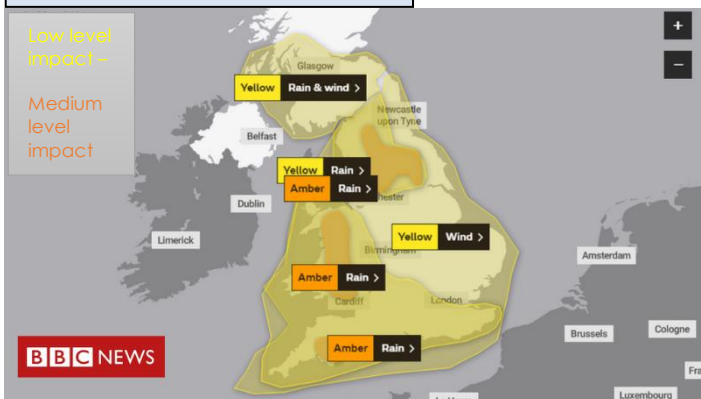


2. Use Map 3 and Map 4 to explain why some regions had stronger storm warnings than others. Refer to compass directions in your answer.

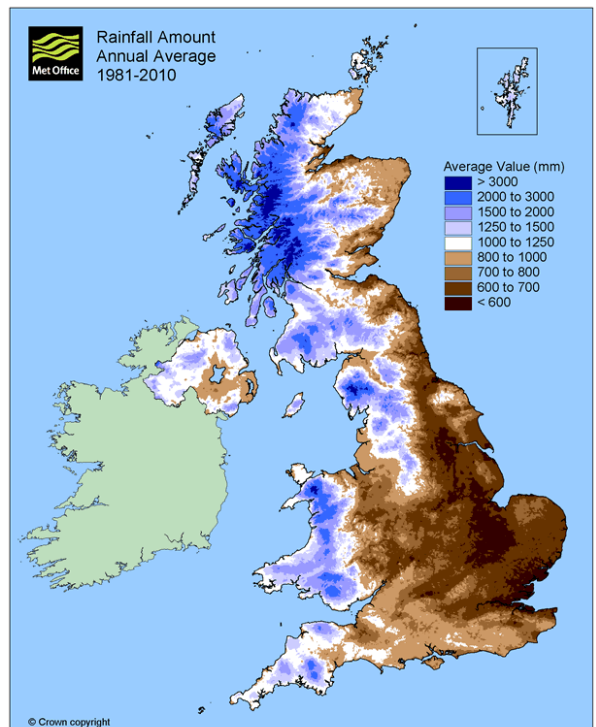
Sentence starters:

- Map 3 shows that .... (describe the pattern)
- This can be explained by Map 4 as...

Map 3 Storm Warnings



Map 4 Annual rainfall





### Activity 1 - Answers

1. Complete sentences A-D in your books
  - a) To show temperature a climate graph uses **a red line**
  - b) To show precipitation a climate graph uses a **blue bar**
  - c) In this graph the month without rainfall is **July**
  - d) In this graph the hottest month is **August**

2. Why is it incorrect to say that a climate graph shows the weather? **As it does not show the daily conditions. It shows an average over time.**
3. Why is it incorrect to say that the UK has a cold climate? **As it does not have temperature extremes. The temperature is rarely below freezing.**

### Activity 2 - Answers

**Answer the questions in your books.**

1. Give an example of a relief feature. A mountain or hill.
2. What happens to the water vapour when it reaches the mountain? **It rises quickly and reaches a cooler part of the atmosphere.**
3. Why does the rain only fall on one side of the mountain? **As the winds blow in from one side.**
4. Why is this type of rainfall called relief rainfall? **As it happens due to a relief feature such as a hill or mountain.**

**Fact or fib** (write down the facts in your books, and correct the fibs)

5. The North Atlantic Current brings ~~cool~~ **warm** water to the UK. **FIB**
6. It is because of the North Atlantic Current that the UK climate is mild rather than cold. **FACT**
7. The UK receives south westerly winds which travel a long distance. **FACT**
8. South westerly winds bring ~~dry~~ **wet** weather.

## **Activity 3 - Answers**

Complete Option 3 if you got question **8, 9, or 10** wrong.

2. A weather event is considered extreme **if it is unusual or severe and threatens people and property.**
3. Three types of extreme weather that can occur in the UK are **severe winters, heatwaves and storms.**
4. The characteristics of storms are, **strong winds, heavy rainfall, and sometimes flooding.**
5. We would know if there was a heatwave if the temperatures were **hotter than expected for that time of year for more than three days.**

2. Explain the link between flooding and storms. **The intense rainfall from the storm fills the rivers up with water so they overflow flooding the land.**

# Stretch Answers

1. Study **Map 1** that shows the average temperature at different locations in the UK.

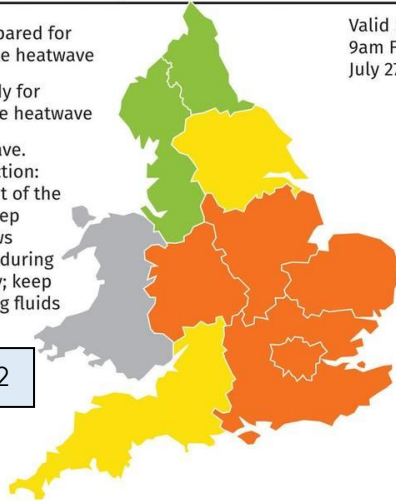
Use the map to describe and explain why some regions had stronger heatwave warnings than others as shown in Map 2. Refer to compass directions in your answer.

## Heatwave warning

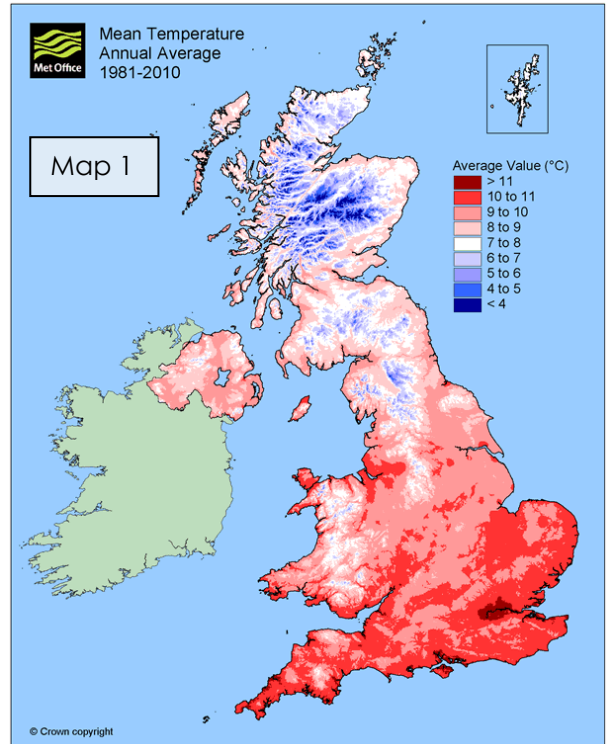
- Be prepared for possible heatwave
- Be ready for possible heatwave
- Heatwave. Take action: stay out of the sun; keep windows closed during the day; keep drinking fluids

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Map 2



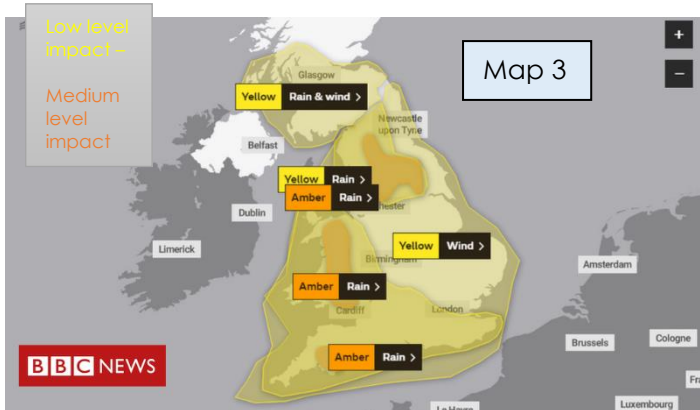
Source: Met Office PA



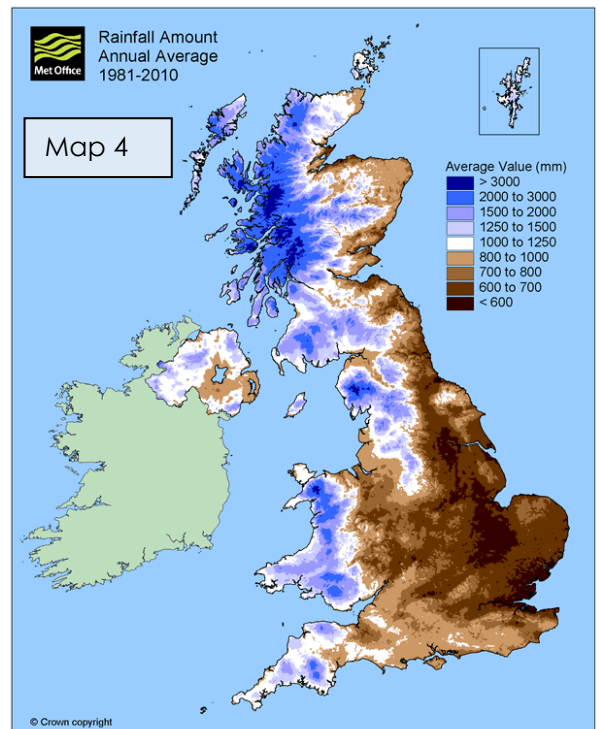
Map 1

2. Study **Map 4** that shows the average rainfall at different locations in the UK. Use this map to explain why some

Use these maps to explain why some regions of the UK had stronger storm warnings than others (**Map 3**).



Map 3



Map 4

**QUESTION 1** - Map 1 shows that the south east of England and central England had more severe heatwave warnings. This can be explained by Map 2 as it shows that the south east of England has higher average temperatures. So higher than average temperatures will be even hotter and will present more risks to life such as the risk of heatstroke.

**QUESTION 2** - Map 4 shows that the west of the UK had the strongest storm warnings. This can be explained by Map 3 which shows the annual rainfall. Map 3 shows that the west of Scotland, the West of Wales and the South west of England all have high annual rainfall. The higher the rainfall the more likely rivers are to flood in times of storm. People may need to evacuate.