



Weather and Climate

How does this unit link to prior learning?

Year 7 What is Geography

(You will use and apply the locational knowledge that you developed in the autumn term, especially when you are comparing climate zones in different parts of the world)

What will you be learning about?

In this unit you will investigate the UK's weather and climate. You will learn about the different air masses and pressure systems that affect the UK's weather. You will find out about three different types of rainfall and why they may occur in different parts of the UK. You will then learn about what we mean by extreme weather and how extreme weather events can affect people in the UK and in other parts of the world. Finally you will learn about the factors that influence the global climate.

Key Focus

In this unit there is a focus on physical processes. These are the natural chain of events which result in changes to places, such as changes in the weather. This will start with the water cycle. We will then build on this with other more complex physical processes such as the different types of rainfall and global atmospheric pressure system. Each lesson will start with knowledge retrieval, which will cover the knowledge, understanding and skills you have developed in previous lessons.

We will develop our learning by studying the following sequence of lessons:

1. Weather vs Climate

You will understand what the difference is between weather and climate. You will also begin to look at how weather affects people

2. The Water Cycle

You will look at the water cycle, exploring the keywords, explaining their meanings and explaining how this physical process works

3. Measuring the Weather

You will investigate how we measure the weather, what equipment is used and why

4. Air pressure

You will investigate air pressure, looking at the key differences between high and low pressure, explaining how that directly links to the weather

5. Interim Assessment

You will be assessed on the first part of this unit and any gaps or misconceptions will be addressed

6. Air Masses

You will explore the different air masses that affect the UK. You will also look at weather fronts and how they affect the UK

7. Types of Rainfall

You will be able to identify the 3 types of rainfall, and explain what causes the different types of rainfall

8. Microclimates - **Awe and Wonder**

You will be undertaking an investigation around Lode Heath School looking into microclimates around the building

9. Extreme Weather part 1 - Tropical Storms

You will look at what is meant by the term extreme weather, plotting the distribution of tropical storms onto a map and then looking at their effects.

10. End of Year Assessment

You will be assessed on all of the work that you have done during year 7 and any gaps or misconceptions will be addressed

11. Extreme Weather part 2 - Flooding

You will now look at a UK based case study of extreme weather, looking at the flooding that occurred in Carlisle

12. Weather Forecasting - **Awe and Wonder**

You will complete a weather forecast; you will be drawing on all the skills and knowledge that you have gained during this topic

13. Climate zones

You begin to look at climate zones around the world, locating them and identifying key characteristics of them

14. The Hadley Cell and Deserts

You will begin to explore global atmospheric circulation, focusing particularly on the Hadley cell linking back to the ideas about pressure you learnt previously

15. Climate change

You will look at the key issues that are surrounding climate change, understanding how it will effect the world

Key Vocabulary

Weather climate convectional relief front maritime continental tropical storm extreme weather Hadley cell