

Weather and Climate



twinkl

Lesson 3

BQ: What are the range of climates in North America?

GS3: Human and Physical Knowledge

Success Criteria

- I can explain the difference between climate and weather.
- I can tell you about the climate and likely weather conditions of an area in the North America.
- I can compare the climate of a region of North America with another.

North America is the World's third-largest continent – 24,474,000 km² covering approximately 16.5% of the Earth's land and 5% of the Earth's surface.

It is bordered by the Atlantic Ocean to the east, the Arctic Ocean to the north and the Pacific Ocean to the west.

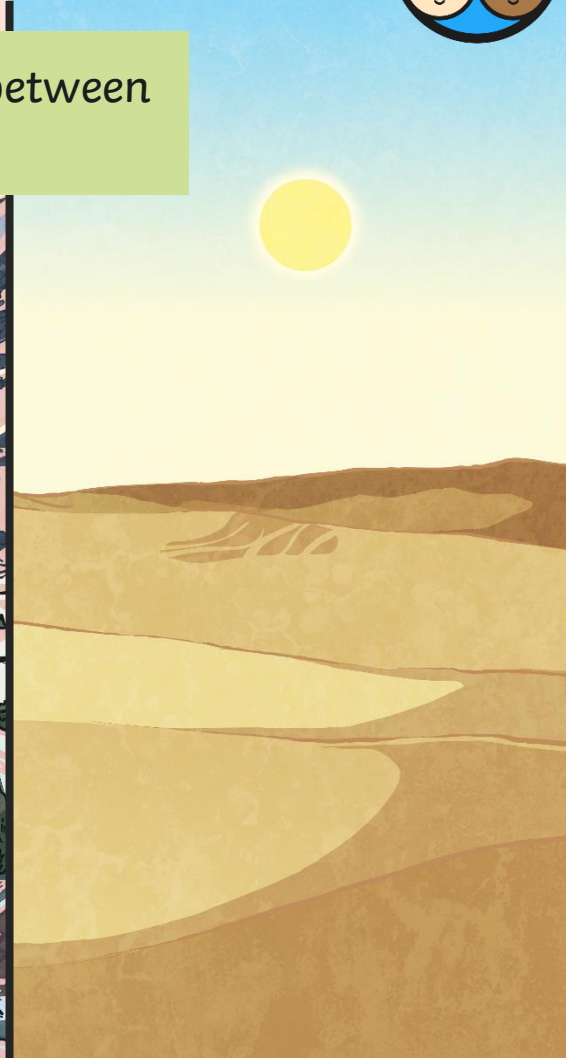
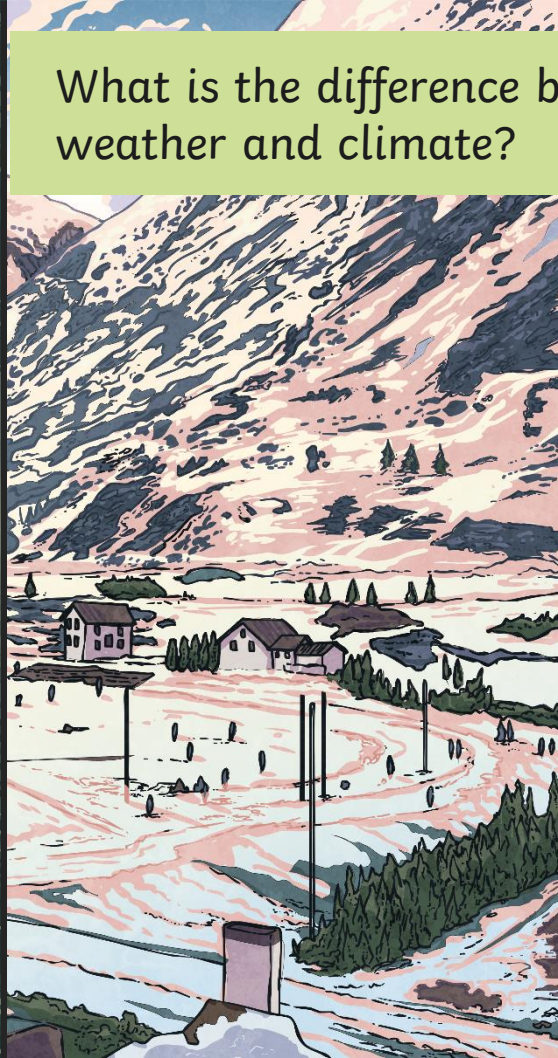
The eastern side of the continent is generally lower than the west which contains the Rocky mountains. The five Great Lakes lie on the United States Canadian border.

The highest mountain is Mt McKinley in Alaska (6,194 m) and the longest river is the Mississippi (3,765 km).

Weather or Climate?



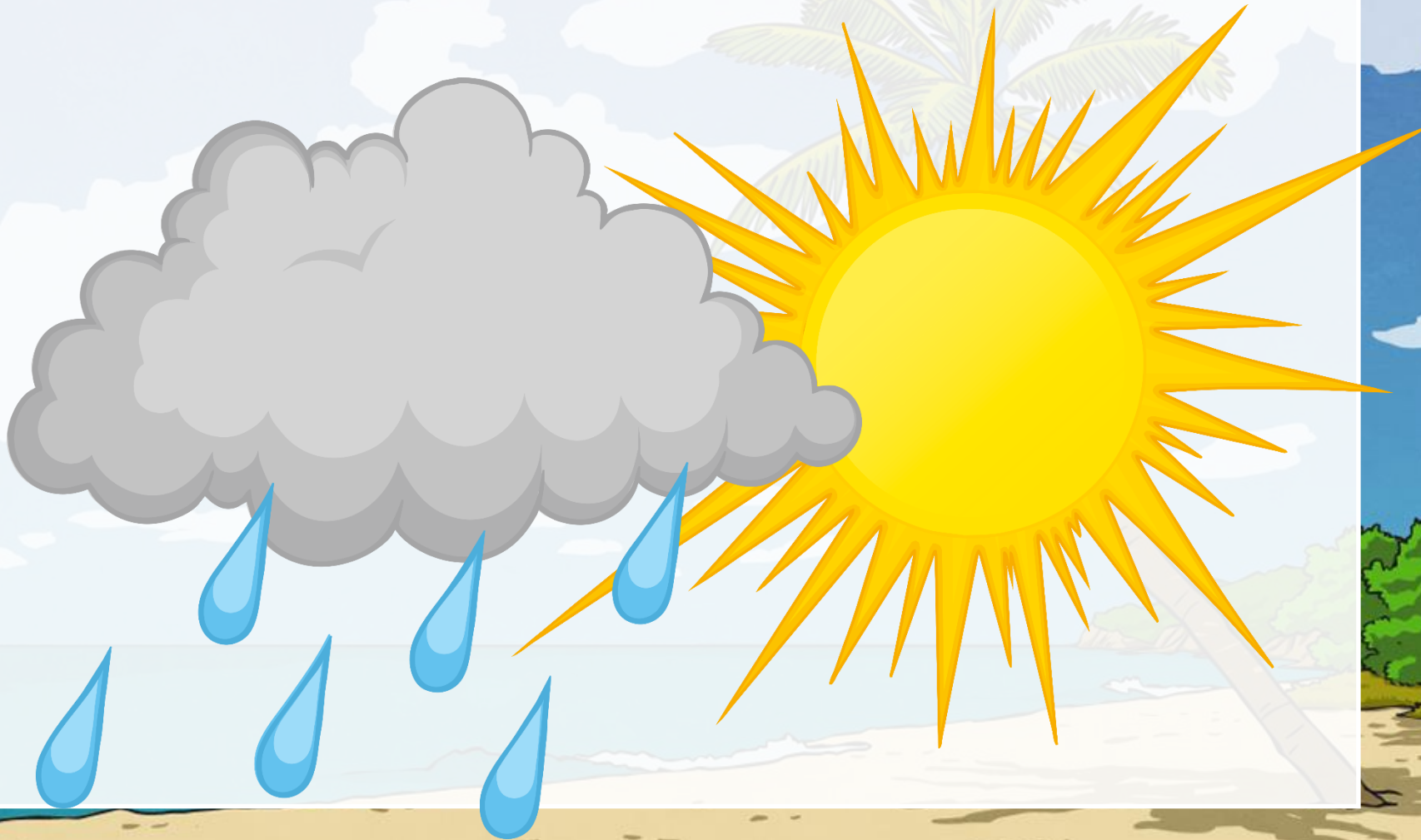
What is the difference between weather and climate?



What Is Weather?

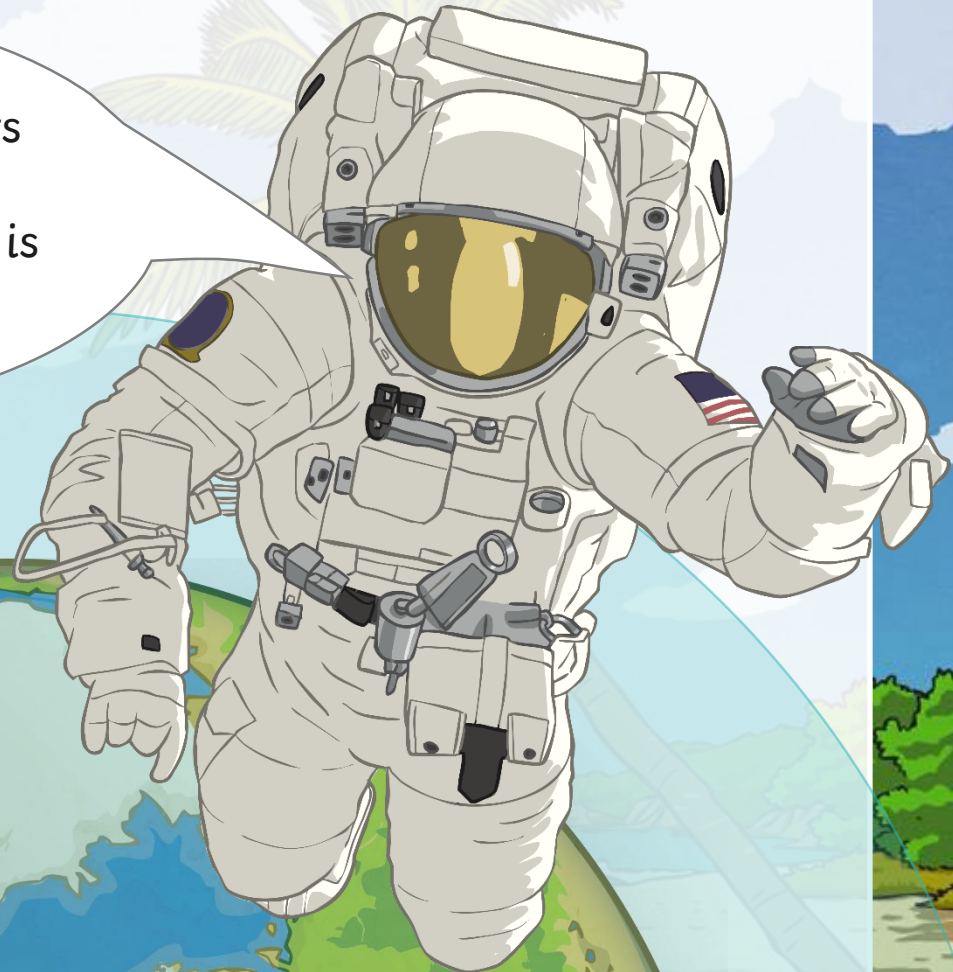


How many types of weather can you think of?



What Is Weather?

Most of our weather occurs in the lowest layer of the Earth's atmosphere, which is called the **troposphere**.



'Weather' and 'Climate'

What Is the Difference?

weather

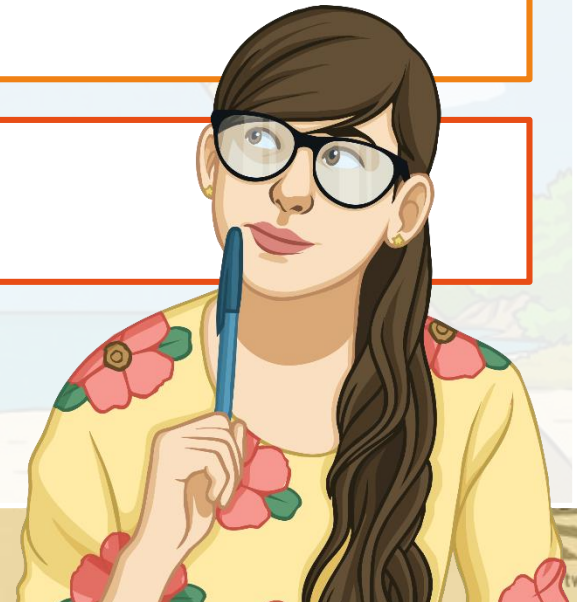
The conditions of the atmosphere, such as temperature and presence of rain and clouds. Weather changes daily.

climate

The average weather conditions of a location over a long period of time. The UK has a temperate climate: warm summers, mild winters and some rainfall all year.

meteorologist

Someone who studies the weather.

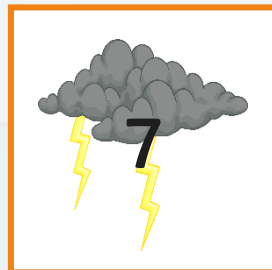


'Weather' and 'Climate'?



There is a statement hidden in each box.

Does each statement describe **weather** or **climate**?



What Is the Difference



1. The Sahara Desert is hot and dry all year.



Climate

Next question

What Is the Difference



2. Today has been really hot and sunny.



Weather

Next question

What Is the Difference



3. Last Wednesday was really windy!



Weather

Next question

What Is the Difference



4. Greece is always hot in the summer.



Climate

Next question

What Is the Difference



5. England has cold and wet winters.



Climate

Next question

What Is the Difference



6. There was a huge thunderstorm last night!



Weather

Next question

What Is the Difference



7. The average daytime temperature in Sydney, Australia is 23 °C.



Climate

Next question

What Is the Difference



8. The heavy rain last week caused a flood.



Weather

Next question

What Is the Difference



9. This morning, we didn't have to go to school because it snowed!



Weather

Next question

North America

North America can be broadly divided into the six regions shown on the map (right).

Greenland, Canada and most of the United States lie in the Northern hemisphere and have four distinct seasons

Spring: March, April, May

Summer: June, July, August

Autumn: September, October, November

Winter: December, January, February

Mexico, Central America, the Caribbean and southern United States have more constant temperatures throughout the year but have a wet season – May to October and a dry season – November to April.



The climate of North America can be broadly divided into eight different climate types:

Deciduous forest – Four distinct seasons with warm summers and cold, wet winters. The trees shed their leaves in autumn.

Coniferous forest – Also known as Taiga, cold and dry with snowy winters and warmer summers.

Mediterranean – Warm to high temperatures with rainfall in the autumn and winter months.

Grassland – Hot summers and cold winters with above average rainfall.

Tundra – This area is characterised by a layer of permafrost (soil that has remained below freezing for at least two years. Winters are very cold, summers are warm and there is little rainfall.

Alpine/mountain – Cold, windy and snowy. It is winter from October to May with temperatures below freezing, while summer is from June to September where the temperature can reach 15°C.

Rainforest – High temperatures and high rainfall throughout the year.


Desert – Warm to high temperatures with very little rainfall.



Task

Your task is to find out information about two places with different climates in North America. For example you could look at the different climates in the desert and forest regions. You should research and record information about the different climates.

Plenary: Presentations



Write a weather forecast for one of your chosen areas and get an adult to film you reporting it.

The weather here today...