



Lesson 1: Weather vs Climate

Aim

- To be able to describe the difference between weather and climate.

Lesson Objectives

- To be able to describe the difference between weather and climate and know what type of climate we have in the UK.
- To name at least three climate zones.
- To name at least one country in each climate zone.

Assumed Prior Knowledge

- To be aware of the different types of weather that we experience in the UK.
- To be aware that different countries experience different weather.
- To be able to name some countries that have different weather to the UK.

Resources

- NASA Climate Change YouTube video – What's the difference between weather and climate?
<https://www.youtube.com/watch?v=vH298zSCQzY>
- Weather Vs Climate Cards.
- Different Climate Zones colouring in exercise.
- Different Climate Zones match up exercise.
- Homework:
 - Fill in the blanks exercise.
 - Name three animals that you will find in each climate zone.

Assessment

- Weather Vs Climate Cards.
- Different Climate Zones colouring in exercise.
- Different Climate Zones match up exercise.
- Homework:
 - Fill in the blanks exercise.
 - Name three animals that you might find in each climate zone.

Lesson Outcomes

- To be able to define both weather and climate.
- To be able to name at least three different climate zones.
- To name some examples of countries in each climate zone.

Curriculum Links

- Science
- Geography



Lesson 1: Weather vs Climate

Differentiation

- Group work
- Class discussion
- Individual work

Skills For Life

- Working as part of a team.
- Listening and following instructions.

All the blank worksheets for this lesson can be found as a separate download within the 'Lesson 1' page of the The Flood Hub KS2 Climate Change Learning section. The answers for the worksheets can be found at the end of this document.



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Notes for each slide – The teacher is to decide what is copied down in their workbooks.

Slide 1 – Weather vs Climate

- Slide containing the aims and objectives of the lesson.

Slide 2 - Climate vs weather...what's the difference?

- This slide aims to generate thoughts and discussions amongst the class around what they think both weather and climate are.
- As a teacher, you could ask the pupils to discuss in pairs and write down thoughts in their workbooks or they could do this individually.
- Then, have a class discussion where pupils tell the rest of the class what they think weather and climate are.

Slide 3 - Climate vs weather...what's the difference?

- The NASA video explains the difference between weather and climate in the first one minute. After that, it touches on climate change which can be shown to the class if the teacher wishes.

Slide 4 - Climate vs weather...what's the difference?

- Following the video, the teacher can talk through the definitions and ask pupils to copy the definitions into their workbooks.

Slide 5 - Climate vs weather...what's the difference?

- This is the first in class exercise of the lesson and can be done in pairs or individually. The pupils will need a pair of scissors each and a glue stick to complete the exercise.
- Instructions:
 - The pupils should cut out the climate cards and spread them out on the table. Pupils should find two cards, one which defines weather and the other, climate, and stick these under the headings on the worksheet provided. Then, ask the pupils to pick up and read the remaining cards and decide whether they are statements which better describe weather or climate and separate them into two piles. Finally, as a class, run through the answers and then ask the pupils to stick the cards in the correct columns and stick the worksheet in their workbook.
 - The answers are provided in the 'worksheets' download.

Slides 6 – 10 – Types of Climate

- These slides name the Earth's five climate zones with a brief description of the weather patterns and examples of countries within each zone. Pupils should copy this information into their workbook to help with future worksheets and homework exercises.

Slide 11 – Climate Zones across Earth

- This slide shows a map of the Earth and the different climate zones. This worksheet is available in the 'Lesson 1 – Worksheets' download and pupils can stick this into their workbooks. Alternatively, pupils can complete the following activity on the next slide.



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Slide 12 – Climate Zones across Earth

- Pupils can be given a blank copy of the previous map and colour it in by copying the map shown on the board from the previous slide. Pupils should create a key to show what each climate zone is.

Slide 13 – Climate Match Up Exercise

- Teachers to hand out the following worksheet in class, which should take around ten minutes. This worksheet can be done individually, in pairs or as a class. At the end, the worksheet can be stuck into their workbooks.
- This activity is a simple match up exercise whereby the pupils draw a link from the climate zones on the left, to the correct descriptions on the right.
- The correct answers are revealed when you click through the slide.

Slide 14 – The Effects of Climate Change

- Optional discussion - before revealing the information on this slide, ask pupils to discuss what they think extreme weather is and whether they know any examples of it. This can be done individually, in pairs or as a class.
- This slide introduces extreme weather, which will be explained more in the next lesson of the series. Teacher to talk through this slide with the class and ask the pupils to note down the examples of extreme weather.

Slide 15 – Homework

- The homework for this lesson is a “fill in the blanks” worksheet around everything that has been covered in the PowerPoint lesson. The pupils should use their workbooks to help them fill in the answers if they need it.
- There is also an optional research task to name three animals that can be found in each climate zone.
- This homework worksheet and the answers can be found in the worksheet download for this lesson.

Lesson 1 - Sources used

- BBC Bitesize
- BBC Teach
- Kiddle
- Nasa Climate Change YouTube video
- Nasa Climate Kids
- Teachers Pay Teachers (TPT)
- Twinkl
- Wikipedia



Worksheet: Weather vs Climate

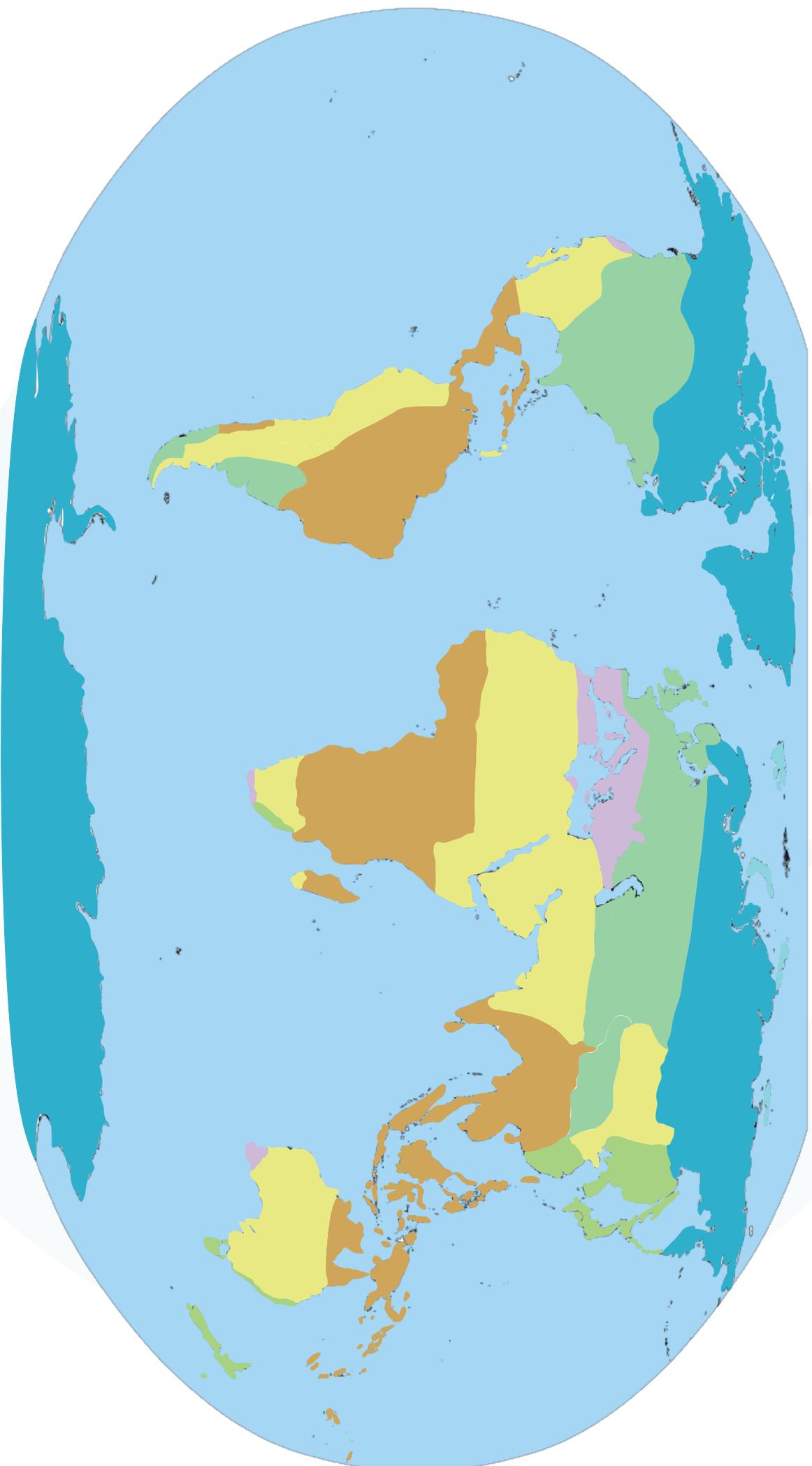
Spread the cards out on the table. Firstly, find two cards, one which defines weather and the other, climate. Then, pick up and read the remaining cards and decide whether they are statements which better describe the weather or climate. Finally, stick the cards in the box below and stick in your workbook.

Weather	Climate
<p>What's happening outside right now. It is temporary and only lasts a few days.</p> 	<p>A description of the weather conditions in an area over the last 30 years.</p> 
<p>There was a heatwave for five days in England last week.</p> 	<p>Spain has warm, dry summers and cool, mild winters</p> 
<p>There was heavy rain yesterday afternoon.</p> 	<p>The Amazon is hot but often rains all year round.</p> 
<p>The frost last night caused the pavements to be icy and slippy.</p> 	<p>The UK has four seasons all year round.</p> 
<p>The weather forecast shows snow on Tuesday but rain on Wednesday.</p> 	<p>Antartica is cold all year round.</p> 
<p>It is cloudy today.</p> 	<p>During winter in the UK, it is cold.</p> 



Worksheet: Different Climate Zones

FT Q C07 R2



Key



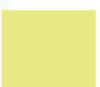
Polar



Temperate



Mediterranean



Arid



Tropical



Match-up Worksheet: Different Climate Zones

Draw a line to match up each climate zone with the correct description.

Polar

Warm all year round
and very wet.

Temperate

Warm, dry summers
and mild winters

Desert/Arid

Have four main sea-
sons - spring, summer,
autumn and winter.

Tropical

Cold all year round
with lots of snow and
ice.

Mediterranean

Very hot and rarely
rains.



Fill in the Blanks Worksheet: Different Climate Zones

Fill in the blanks in the sentences below using the words listed at the bottom.

Examples of weather include rain, **wind**, **sunshine**, **thunderstorms** and **snow**. The weather is described as what is happening outside right **now**. It is **temporary** and only lasts a few days. However, **climate** is a description of the weather conditions in an area over the last 30 years.

Polar climates are **cold** all year round with lots of snow and ice. Antarctica and the **Arctic** have this type of climate.

Temperate climates have four main seasons – spring, **summer**, **autumn** and **winter**. The UK has this type of climate.

Desert/Arid climates are very, very hot as it rarely rains. There are lots of hot desert climates across North Africa, e.g. the **Sahara** Desert.

Tropical climates are hot all year round but are very **wet** as it rains a lot. The **Amazon** rainforest in Central America is an example of an area with a tropical climate.

Mediterranean climates have **warm**, dry summers and mild winters. An example of an area with a Mediterranean Climate is **Southern Spain**.

Amazon
Arctic
Autumn
Climate
Cold
Four
Hot
Now

Sahara
Snow
Southern Spain
Summer
Sunshine
Temporary
Temperate
Thunderstorms

Warm
Wet
Wind
Winter