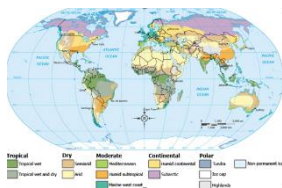


Reading

Read the attached text, 'Weather, Climate and Climate Zones'. Answer the comprehension questions using the text to help you. If you would like to challenge yourself further, answer the challenge questions.



Writing

To create a leaflet about global warming. You should include the following information:

- What global warming is
- What the causes of global warming are
- Why global warming is not good for the earth
- What can be done to combat global warming

See the attached sheets for support on creating a leaflet. Use last week's and this week's PPTs about global warming to get information for your leaflet.



Spelling

Hyphens: To join compound adjectives to avoid ambiguity

1. man-eating
2. little-used
3. rock-bottom
4. wide-eyed
5. pig-headed
6. tight-fisted
7. cold-hearted
8. stone-faced
9. green-eyed
10. short-tempered

Task 1: Remember to practice the spelling pattern using:



Task 2: Create a story that will help you remember the spelling of this week's spellings.

Maths

Task 1: Complete the addition and subtraction questions (recap last week)

A7e: Column Addition

$$\begin{array}{r} 787567 \\ + 446278 \\ \hline 1233845 \\ 1 \quad 1 \quad 1 \quad 1 \quad 1 \end{array}$$

S11e: Column Subtraction

$$\begin{array}{r} 742831 \\ - 427358 \\ \hline 315473 \end{array}$$

Task 2: Complete the attached simplifying fractions sheets and then the attached calculating sheet.

FK: Calculating with Fractions

$$\frac{1}{4} + \frac{2}{3} = \frac{3}{12} + \frac{8}{12} = \frac{11}{12}$$

Task 2:

Complete the chilli challenge fraction

questions attached.



Geography

Read the attached PowerPoint:

https://www.wwf.org.uk/sites/default/files/2016-11/WWF_KS2_Lesson2_Presentation_v4.pdf

Answer the following questions:

1. Should we spend money on new technologies to replace fossil fuels with renewable energy sources?
2. How can we transport people locally and globally in an environmentally friendly way?
3. What will climate change do to our food supplies? How do we deal with this?
4. How will tackling climate change affect jobs, how much money we have and how we live?
5. How can we support people, animals and nature that are affected by climate change?



Well-Being

'Keep Learning'

Following on from the 5 areas of well-being- try learning a new word each day over the next 7 days.

Create an eye-catching poster with your new words and their meanings.

accommodate	commensurate	equip	immaculate	physical	strenuously
accompany	community	equipment	individual	propeller	valley
acquiring	competition	equipment	interplay	pre-empt	stomach
achieve	consciousness	especially	interruption	profession	sufficient
aggressive	conscience	suggestive	language	programme	suggest
ambitious	controversy	modest	laurel	pronunciation	symbol
anxious	convenience	existence	lightning	quest	system
aparent	correspond	explication	non-violent	recognise	temperature
appreciate	critique	familiar	mischievous	recommend	thorough
attached	curiosity	foreign	muscle	renewal	twelfth
available	definite	forty	necessary	renewed	variety
average	desperate	frequently	neighbour	rhyme	vegetable
backward	determined	apartment	radiance	rhyming	vehicle
beginning	develop	quarantine	ecology	sacrifice	yo-yo
brave	distinction	house	crisis	sternly	
category	discreet	kindness	opportunity	shoulder	
concerning	embarrass	identity	proficient	signature	
connective	environment	immediate	persuade	sister	

See attached sheet for the enlarged version.

Weather, Climate and Climate Zones

What is weather and what is climate?

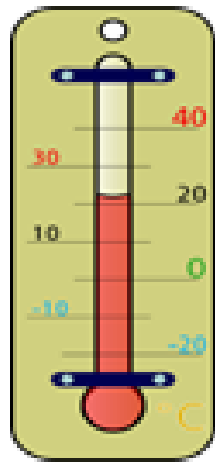


Fig. 1: Thermometer

Different places around the world have very different weather and climates. Weather is the temperature and precipitation from day to day. In contrast climate is the average temperatures and precipitation over a much longer time period like 100 years. Temperature is how hot or cold it is and is measured in degrees ($^{\circ}$) centigrade or degrees ($^{\circ}$) Fahrenheit by a thermometer (fig. 1). Precipitation

is the collective word for all the different ways that water can fall from the sky, such as rain, snow, hail and sleet, and is measured in mm, cm or inches by a rain gauge (fig. 2).

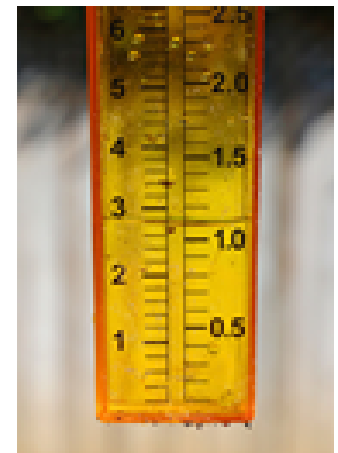


Fig. 2: Rain gauge

What is a climate zone?

Large areas of the Earth have the same sort of climate, and these areas are known as climate zones. In a climate zone the temperatures and precipitation are similar. The four major climate zones are temperate, desert, polar and tropical. Temperate areas are mild, which means they are comfortable to live in because they get enough rain, but not too much, and temperatures are not too high or too low. Deserts are arid (dry) and hot, whereas the Polar Regions are extremely cold. Tropical regions have high temperatures and rainfall all year round. A region is a large area of the Earth's surface. Each of these climate zones can be further split up into smaller areas, as shown in fig. 3.

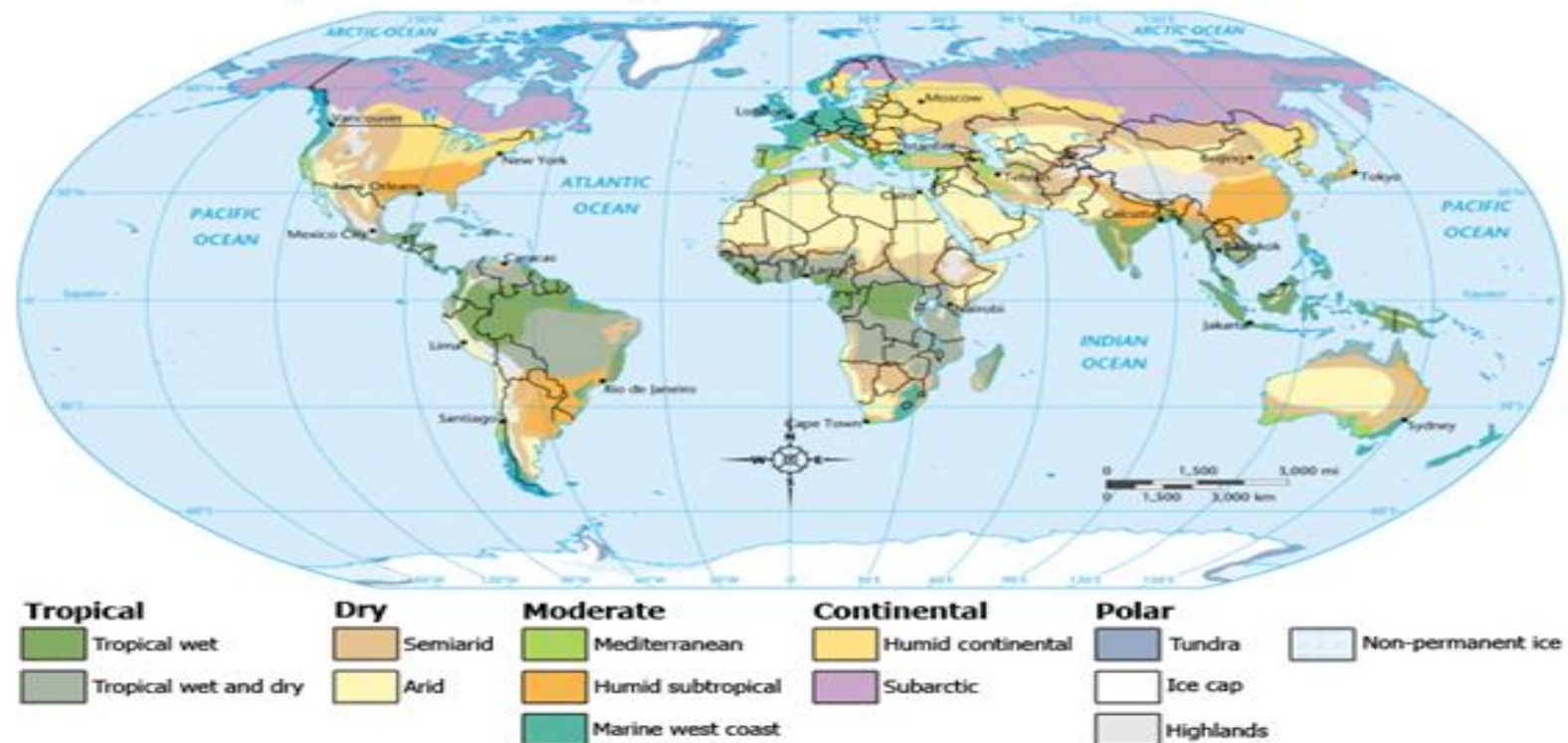


Fig 3: Map of climate zones around the world

Why do different places have such different climates?

The main influence on climate is distance from the equator, which is measured in degrees (°) of latitude e.g. 27° north. Each degree of latitude represents around 70 miles. The equator is an imaginary line running around the middle of the Earth (see fig. 3). At the top of the Earth is the North Pole and at the bottom is the South Pole. The poles are the coldest places on Earth because they are the furthest places from the equator.

Does anything else influence weather?

Other influences on weather include mountains and the sea. Close to mountains rainfall is higher because when clouds reach the mountains they are pushed higher into cool air, the water they are carrying condenses (turns from a gas into a liquid) and falls as rain (see fig. 4). Usually closer to the sea weather is less extreme, with winters and summers both being milder. Further inland (away from the sea) normally summers are warmer and winters are colder.

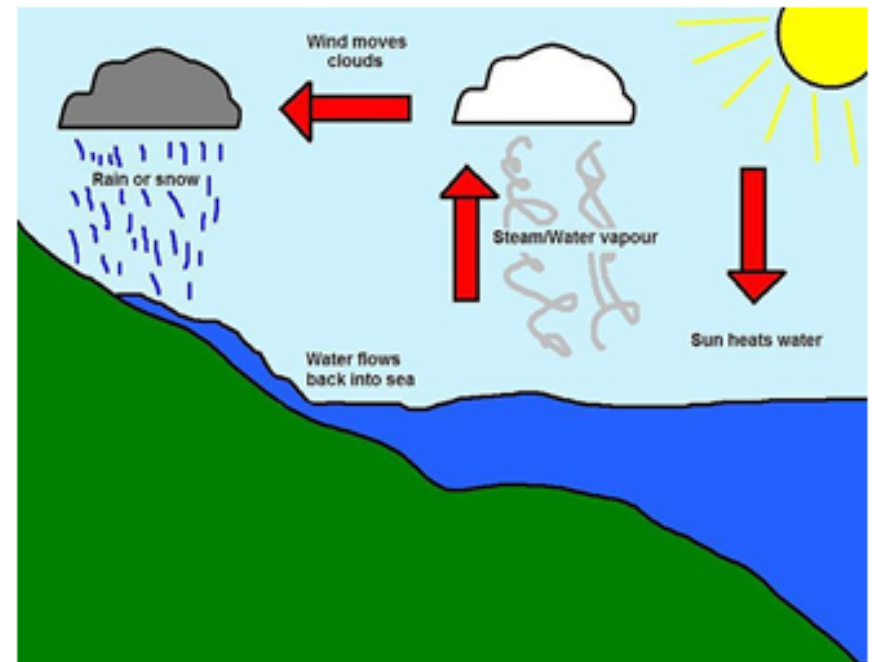


Fig. 4: The water cycle

So with these different influences can a country be in more than one climate zone?

Countries, especially the bigger ones like Russia and the USA, do not always fit into one climate zone. Indeed, you can find desert, polar and temperate climates in different parts of the USA. For example, New York on the east coast of the USA has a temperate climate, while Las Vegas in the south-west of the USA has a desert climate, and Alaska in the north-west has a polar climate (see fig. 5). Smaller countries like Britain and New Zealand tend to be in just one climate zone; in their cases it is temperate.

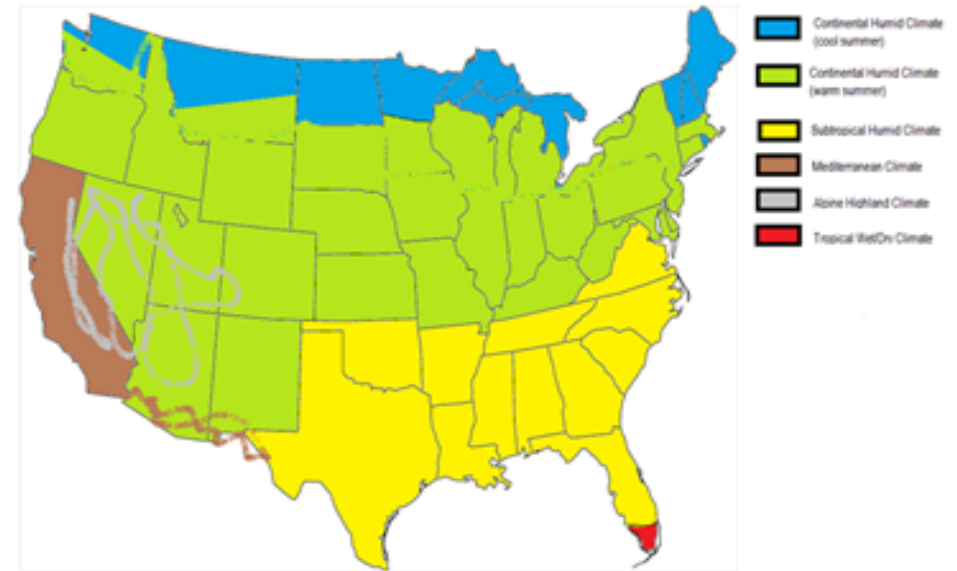


Fig. 5: USA Climate map

What use is it studying all these climate zones?

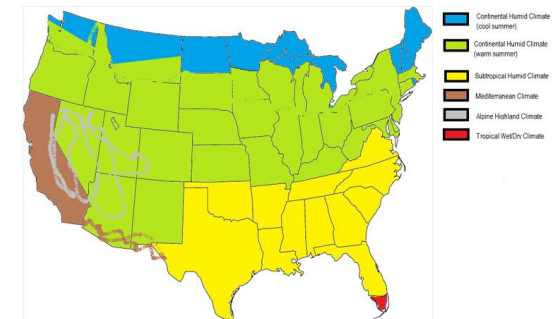
Splitting the world up into climate zones helps us see patterns of climate and weather. Doing this helps us to explain why different places have different climates. For example, if you see that as you move away from the equator temperatures get colder this raises the question, why does this happen? Realising that different places have different weather also helps us to make decisions, such as what clothes we need to bring on holiday, where it would be best to live and where it would be best to grow different crops.

Reading Questions

- 1) What is the title of the report?
- 2) Find and copy a subtitle e.g. 'Does anything else influence weather'?
- 3) What is 'weather'?
- 4) What is 'climate'?
- 5) What is temperature?
- 6) What is precipitation?
- 7) What are the four main climate zones?
- 8) What is the main influence on climate?
- 9) Where are the poles?
- 10) Name two other things that influence climate and weather.
- 11) Name one part of the USA that has a desert climate.

Challenge Questions

- 1) How does the weather impact on human's decisions?
- 2) What climate would you choose to live in? Why?
- 3) How can climate change be dangerous?
- 4) How do you think we could help prevent the dangers of climate change?



Maths

Task 1:

Adding and Subtracting Fractions Challenge

1) $\frac{1}{4} + \frac{2}{4} =$

2) $\frac{1}{3} + \frac{4}{6} =$

3) $\frac{3}{5} - \frac{1}{10} =$

4) $\frac{2}{4} + \frac{2}{8} =$

5) $\frac{2}{4} - \frac{2}{3} =$

6) $\frac{4}{5} - \frac{2}{3} =$

7) $\frac{3}{6} + \frac{4}{8} =$

8) $\frac{2}{3} - \frac{3}{8} =$

9) $4\frac{1}{4} + 1\frac{1}{3} =$

10) $2\frac{1}{3} + 2\frac{1}{2} =$

11) $4\frac{2}{3} - 2\frac{4}{6} =$

12) $3\frac{2}{4} - 2\frac{1}{4} =$

Task 2:

Using common factors, simplify the following fractions to their simplest form:

1. $\frac{4}{16} = \text{---}$

2. $\frac{14}{21} = \text{---}$

3. $\frac{6}{15} = \text{---}$

4. $\frac{18}{34} = \text{---}$

5. $\frac{9}{12} = \text{---}$

6. $\frac{36}{45} = \text{---}$

7. $\frac{12}{20} = \text{---}$

8. $\frac{42}{64} = \text{---}$

9. $\frac{15}{24} = \text{---}$

10. $\frac{15}{35} = \text{---}$

Task 3:

1.

Add and subtract fractions with denominators which are multiples, using the concept of equivalent fractions

$$\frac{1}{3} + \frac{5}{12} = \frac{\square}{12} + \frac{5}{12} = \frac{\square}{12}$$

$$\frac{4}{5} - \frac{3}{10} = \frac{\square}{10} - \frac{3}{10} = \frac{\square}{10}$$

2.

Multiply simple pairs of proper fractions, writing the answer in its simplest form

$$\square \times \frac{1}{2} = \frac{1}{4}$$

Divide simple proper fractions by whole numbers

$$\square \div 2 = \frac{1}{4}$$

3.

Compare and order fractions

$$\frac{3}{8} \quad \square \quad \frac{1}{4}$$



Well-being

accommodate	communicate	equip	immediately	physical	sincerely
accompany	community	equipped	individual	prejudice	soldier
according	competition	equipment	interfere	privilege	stomach
achieve	conscience	especially	interrupt	profession	sufficient
aggressive	conscious	exaggerate	language	programme	suggest
amateur	controversy	excellent	leisure	pronunciation	symbol
ancient	convenience	existence	lightning	queue	system
apparent	correspond	explanation	marvellous	recognise	temperature
appreciate	criticise	familiar	mischievous	recommend	thorough
attached	curiosity	foreign	muscle	relevant	twelfth
available	definite	forty	necessary	restaurant	variety
average	desperate	frequently	neighbour	rhyme	vegetable
awkward	determined	government	nuisance	rhythm	vehicle
bargain	develop	guarantee	occupy	sacrifice	yacht
bruise	dictionary	harass	occur	secretary	
category	disastrous	hindrance	opportunity	shoulder	
cemetery	embarrass	identity	parliament	signature	
committee	environment	immediate	persuade	sincere	