

# Mrs Geography

*presents*



## WEATHER & CLIMATE



## HOME LEARNING BOOKLET

This booklet has been designed to take you through a number of things you need to for your GCSE examinations.

**Please** follow your teachers instructions, as some information included in this booklet may not be directly for your exam board!

# LESSON 1 - UK CLIMATE CHARACTERISTICS

## What is the difference between weather and climate?



Climate is different weather conditions that can be expected in an area over a long period, usually 30 years.

Weather is the particular conditions in the atmosphere over a short time e.g. a day.

**TASK: Decide if each statement is talking about weather or climate. Use the definitions above.**

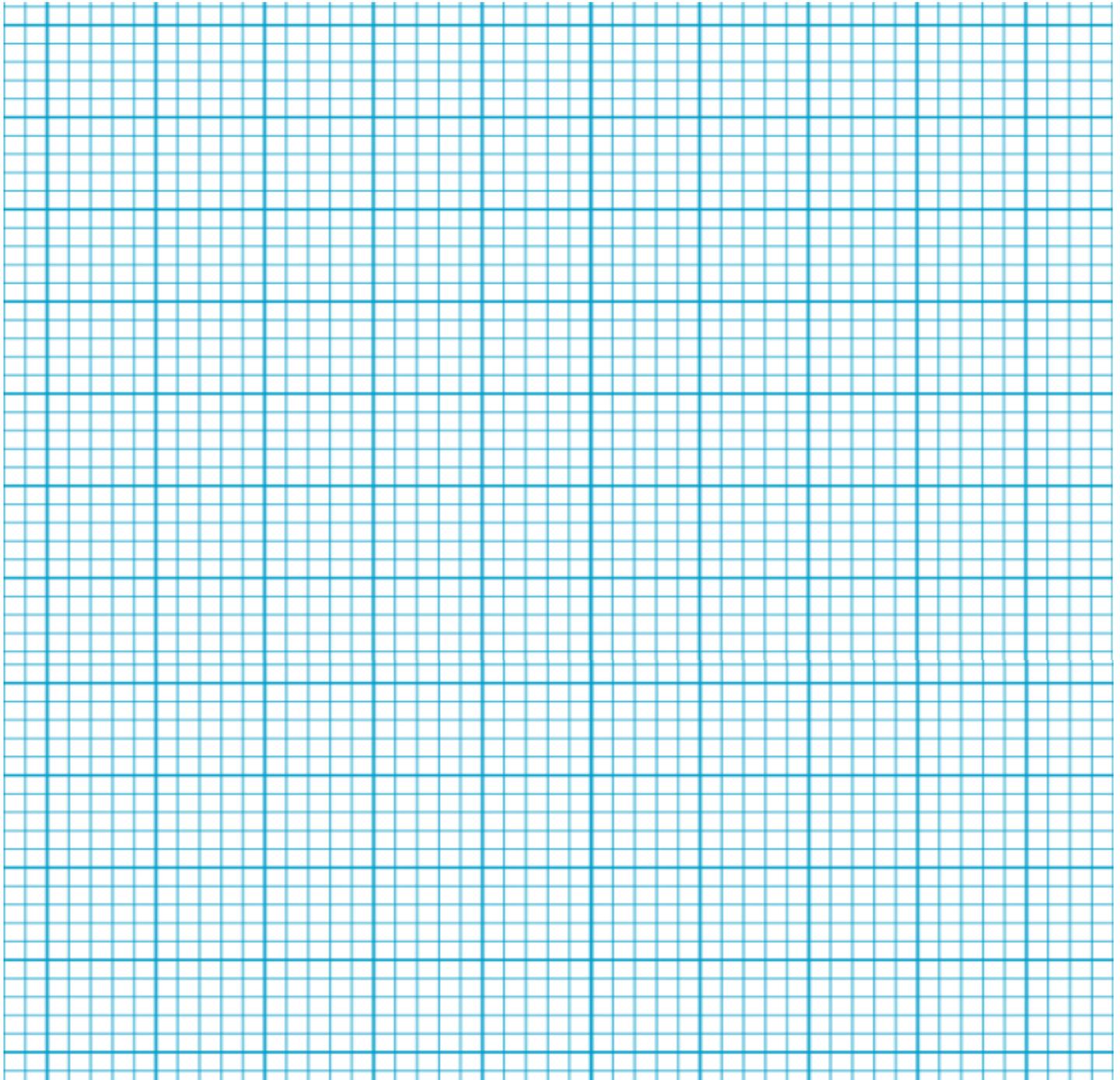
	Weather	Climate
"I think we should move further south where it's warmer"		
"My washing will never dry today"		
"It's a beautiful day at Lords"		
"December will be cold and wet"		
"Where should we go for our skiing holiday this year?"		
"There is too much fog to take off now."		



**TASK: Create a climate graph for Liverpool. Use the data below.**

TIP: If you are struggling on how to draw a climate graph, [CLICK HERE](#).

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Temperature (°C)	7	8	10	12	16	18	20	20	18	14	10	7
Precipitation (mm)	61	60	46	56	51	59	50	61	75	90	79	82

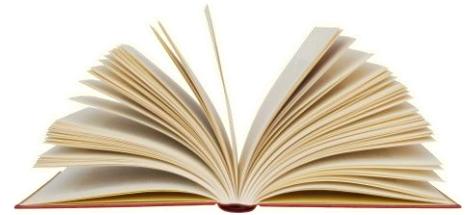


## LESSON 2 - WHY IS THE UK CLIMATE SO VARIABLE?

The British Isles has a temperate climate.

### READ ME - What is a temperate region?

This is perhaps the most varied climate system in the world and is divided into two main types: the maritime and the continental.



Maritime temperate regions are found in areas near coasts where the sea and onshore winds provide more rain and help to keep the temperatures level throughout the year. Continental temperate regions have more pronounced dry periods and, as there is less of a moderating influence by the sea, temperatures are often hotter in summer and colder in winter.



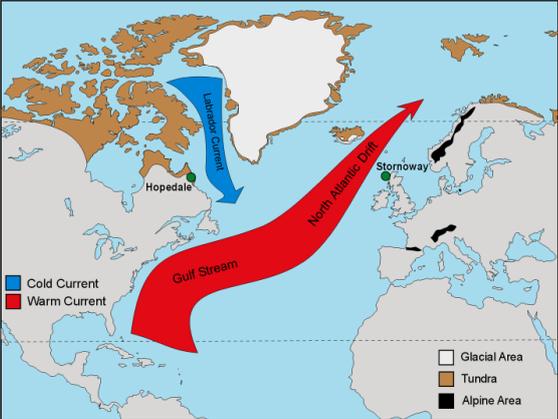
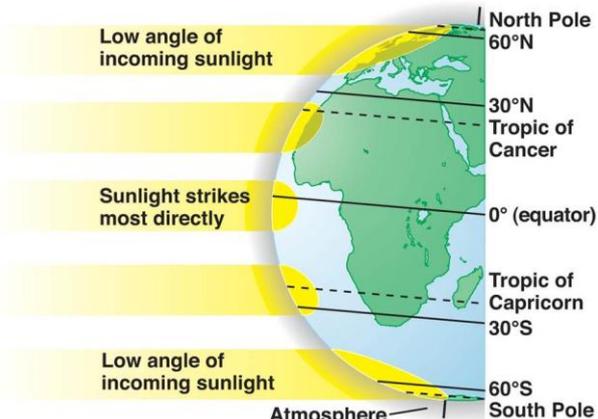
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Britain is a good example of a country with a maritime temperate climate where the summer temperatures are generally cooler than further into Europe. This is because the sea has a moderating effect, keeping the land cooler in summer and warmer in winter. However, Britain does experience very changeable weather so accurate weather forecasting is difficult to achieve. Rain often comes in the form of storms which develop in the North Atlantic and blow across Britain from west to east at all times of the year. Even in such a small island, the weather, and to some extent the climate, differs from north to south and east to west. Mountainous areas get a lot more rain than the lowlands and this has a large effect on what can be grown. Lowland areas tend to be warmer and more suitable for large-scale agriculture.

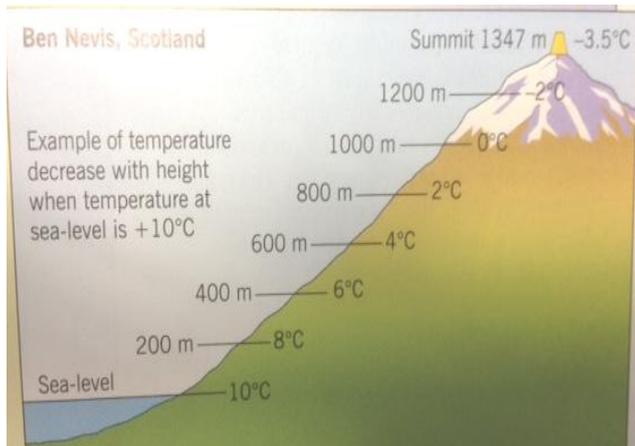
**TASK: Using the YouTube vide ([CLICK HERE](#)), summarise the factors which influence the UK's climate?**

*The first has been done for you.*

<p style="text-align: center;"><b>1. Ocean currents</b></p> 	<p>The relatively warm waters of the North Atlantic Drift is responsible for moderating the climate of western Europe, so that winters are less cold than would otherwise be expected at its latitude.</p> <p>Without the warm North Atlantic Drift, the UK and other places in Europe would be as cold as Canada, at the same latitude.</p>
<p style="text-align: center;"><b>2. Distance from the equator (latitude)</b></p> 	



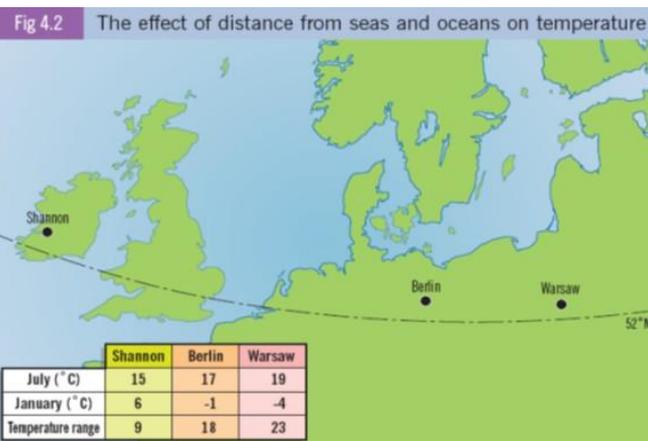
### 3. Altitude (height above sea level)



### 4. Prevailing winds (air masses)

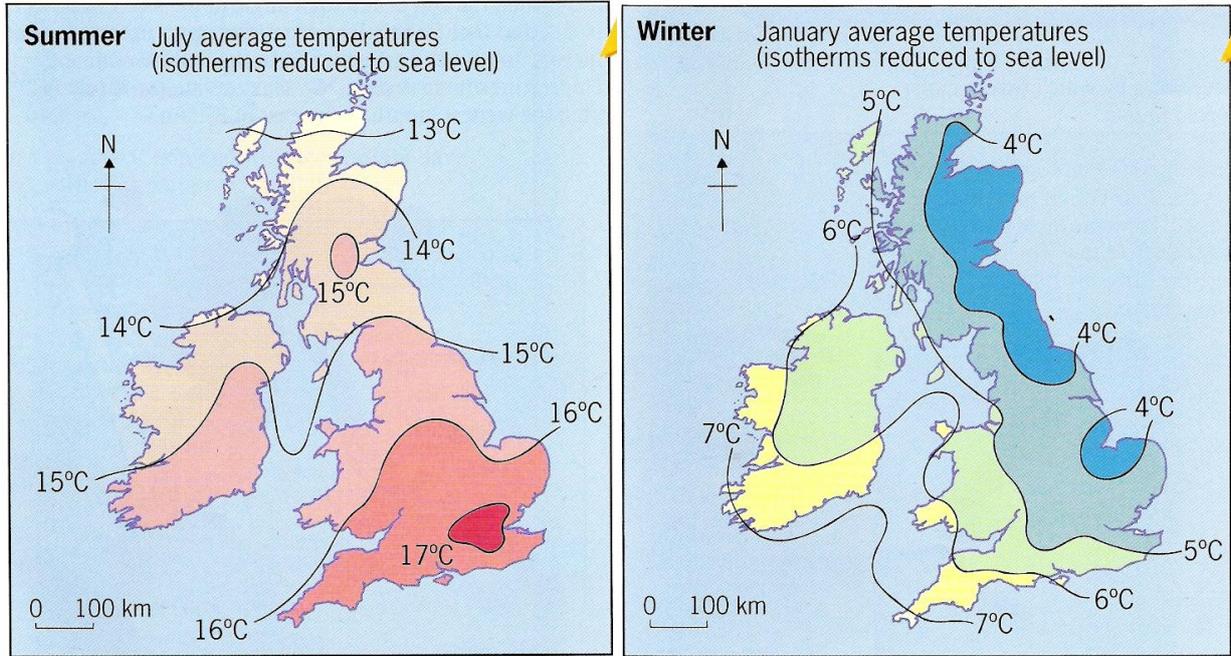


### 5. Distance from the sea





**EXAM QUESTION:** Compare the average temperatures for the UK in summer and winter. Use the figure. **(3 marks)**



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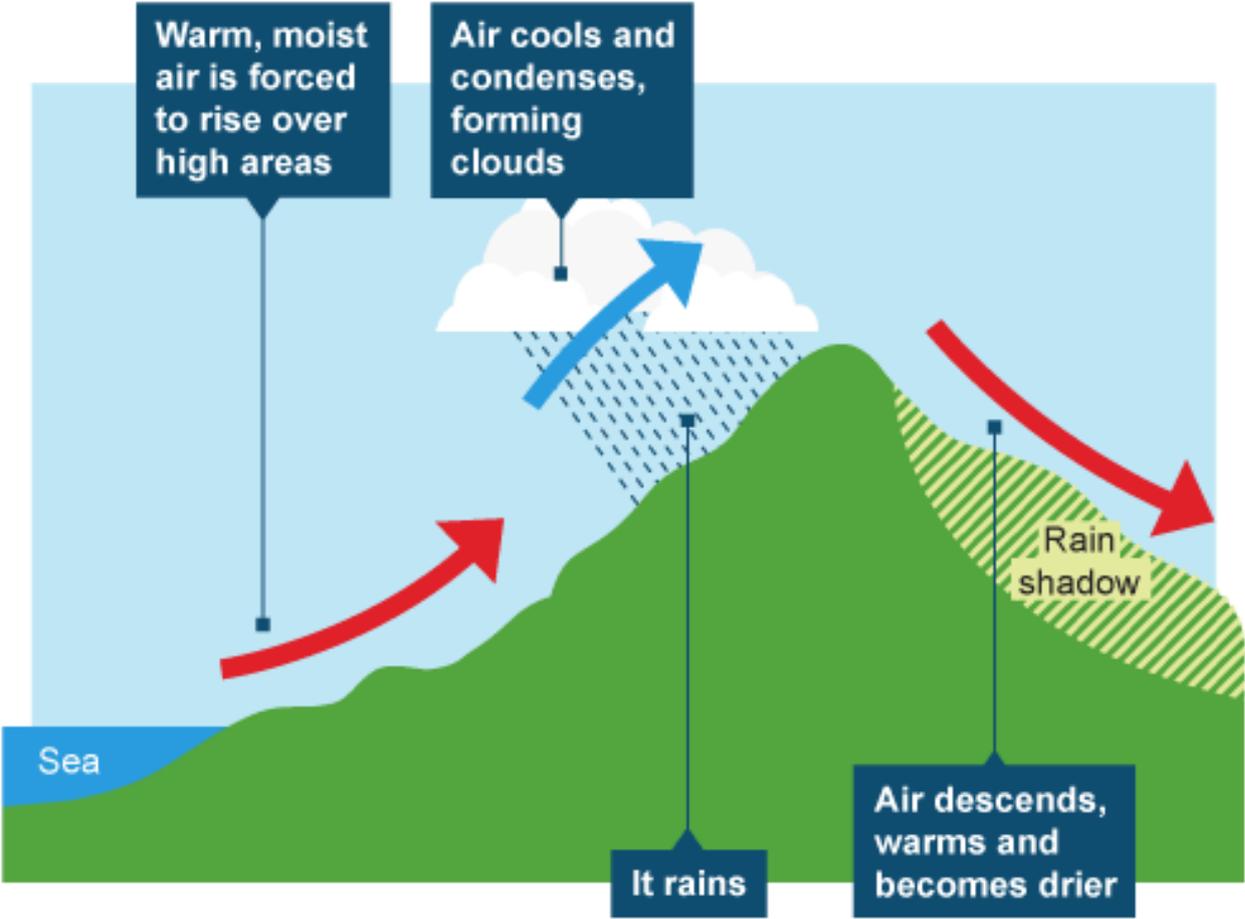
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## LESSON 3 - TYPES OF RAINFALL

TASK: Using the YouTube vide ([CLICK HERE](#)), draw a diagram and explain each type of rainfall

### Relief rainfall

Diagram	 <p>The diagram illustrates the process of relief rainfall. On the left, a blue area labeled 'Sea' is shown. A red arrow indicates that 'Warm, moist air is forced to rise over high areas'. As the air rises, it is shown cooling and condensing into white clouds, with a blue arrow pointing upwards. This process is labeled 'Air cools and condenses, forming clouds'. Rain is shown falling from the clouds on the windward side of a green mountain, labeled 'It rains'. On the leeward side, a red arrow shows the air descending, labeled 'Air descends, warms and becomes drier'. This descending air is shown as a hatched green area, labeled 'Rain shadow'.</p>
Explanation	<ul style="list-style-type: none"><li>• Warm wet air is forced to rise through evaporation over high land such as the Pennines in the UK.</li><li>• As the air rises it cools and condenses to form clouds.</li><li>• The drier air sinks, as the air sinks it warms meaning it can carry water, so there is little precipitation on one side of the mountain known as a rain shadow.</li></ul>



# Convictional rainfall

<b>Diagram</b>	
<b>Explanation</b>	



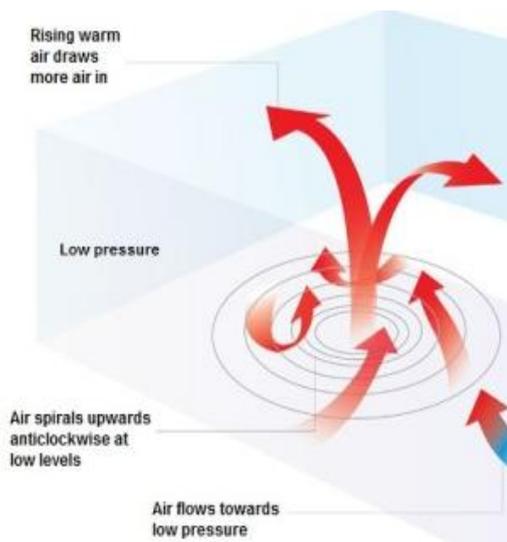
# Frontal rainfall

**Diagram**

**Explanation**



## LESSON 4 - DEPRESSIONS. AREAS OF LOW PRESSURE



**Low pressure:** As air warms, it ascends leading to low pressure at the surface.

**TASK:** How does a depression form? What weather do they bring? FILL IN THE BLANKS

anti-clockwise	Atlantic	cold
condenses	cooled	front
temperature	towards	undercuts
unsettled	warm	

Depressions form over the \_\_\_\_\_ Ocean, when \_\_\_\_\_ moist tropical air from the south meets \_\_\_\_\_, drier heavy air from the north. The different air masses do not mix easily due to differences in \_\_\_\_\_ and air pressure. As the lighter, warmer air moves towards denser, colder air, it is forced to \_\_\_\_\_ over the cold air. This forms the warm \_\_\_\_\_.

As the denser, colder air moves \_\_\_\_\_ the warm air, it \_\_\_\_\_ the warm air forcing it to rise. This forms the cold front. In both cases the rising warm air is \_\_\_\_\_ and some of its water vapour content \_\_\_\_\_, producing cloud and frontal rain.

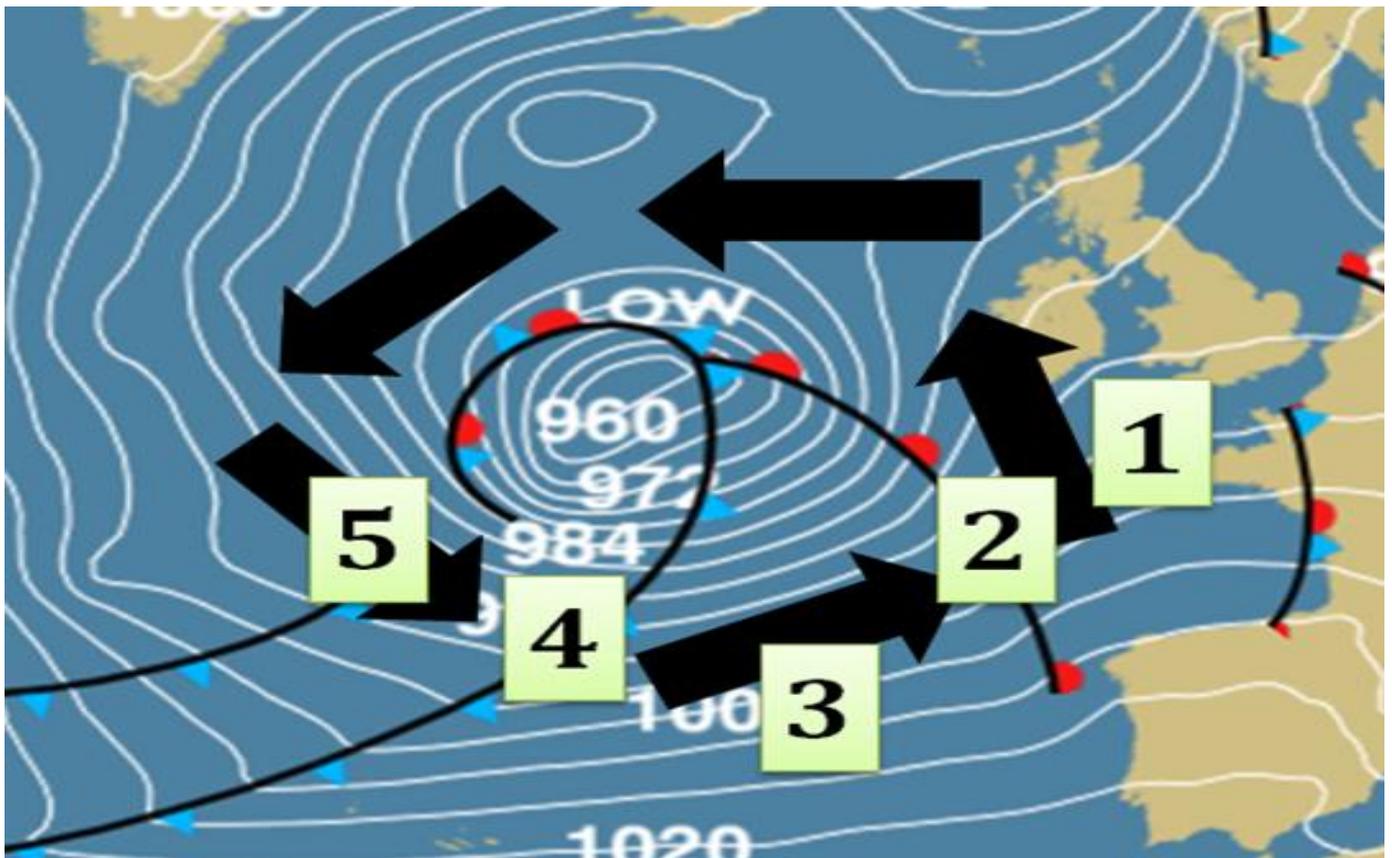
Finally, the cold front travels faster than the warm front, catching it up to form an occluded front.



Weather in a depression is \_\_\_\_\_ – both in winter and summer. Firstly, as a warm front approaches clouds form and thicken quickly. Winds blow in an \_\_\_\_\_ direction and slowly increase in strength.

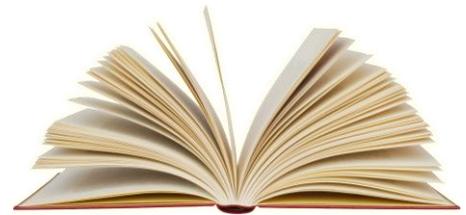
### Depressions on a synoptic chart

Winds should also be travelling anti-clockwise, and into the low pressure centre.

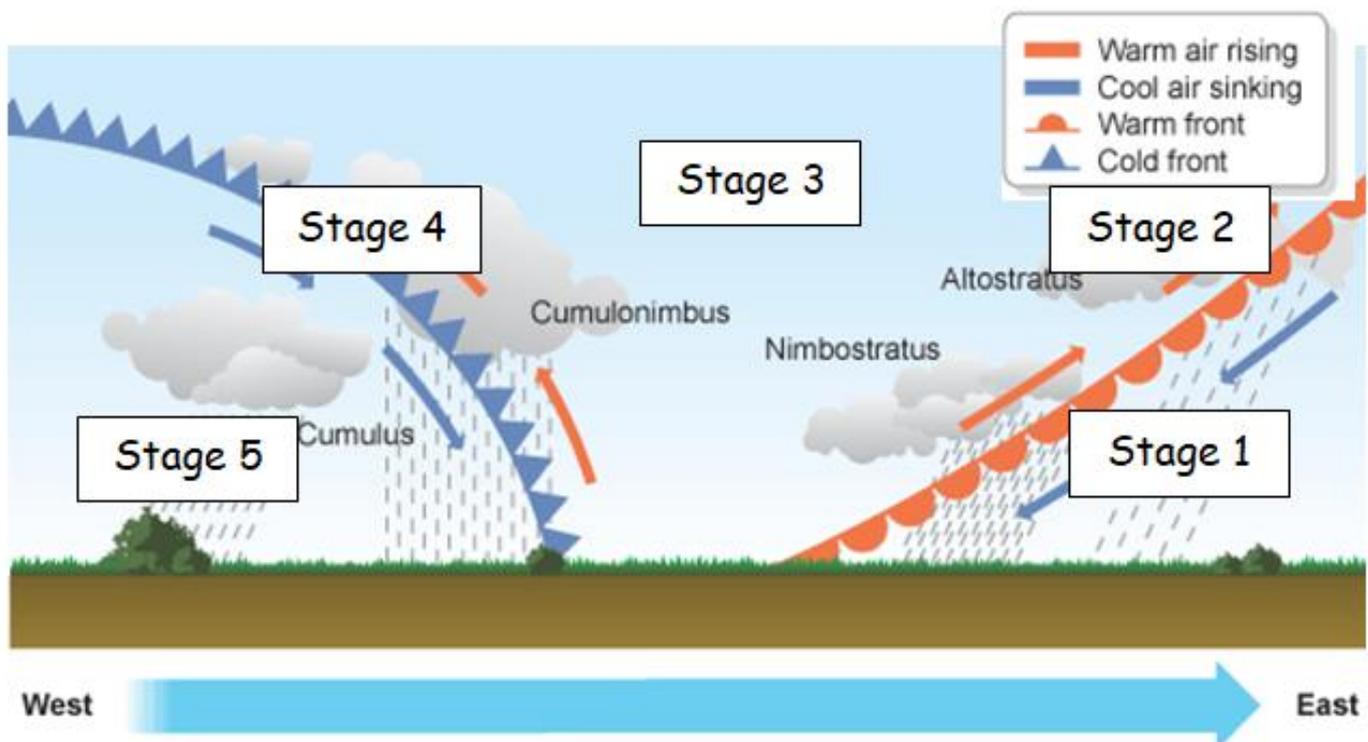


## The passage of a depression

The diagram shows a depression with a leading warm front and a trailing cold front moving from west to east across Britain.



- At the warm front, lighter, warmer air from the South (tropical maritime air) meets cooler air from the North (polar maritime air) and rises gradually over it.
- As the warm air slowly rises it cools, its water content condenses and clouds form (cirrus, altostratus and then nimbostratus). The result is steady rain, later giving way to drizzle and finally clearer skies.
- Behind the warm front is an area of warm, rising air and low pressure (the warm sector) - the centre of the low-pressure system. As this part of the depression passes over, there may be a short period of clear, dry weather.
- However, at the trailing cold front, heavier, cooler air meets the warm air at the centre of the depression, undercutting it and forcing it steeply upwards. Quickly moving air masses produce high winds and cooler temperatures. As the rapidly rising warm air cools, its water condenses and clouds form (cumulonimbus, then cumulus). The result is heavy rain or thunderstorms, giving way to showers and finally to clear skies as the cold front moves away eastwards.



**TASK: Complete the table using the statements below, refer to the information and diagram on the previous page.**

*Some have already been completed for you.*

Quite cold  
Starts to rise  
Continues to fall  
Thin (cumulus)

Thickens  
(cumulonimbus)  
Low and thick  
(nimbostratus)

Showers  
Heavy rain  
Some heavy rain  
Thunder OR hail

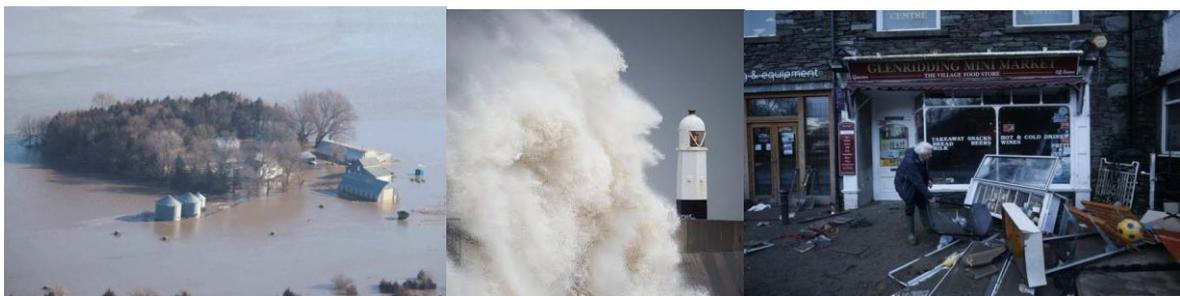
	Stage 5	Stage 4	Stage 3	Stage 2	Stage 1
Temperature	Stays cold	Suddenly drops	Mild	Begins to rise	
Pressure	Continues to rise		Stays steady		Starts to fall
Cloud cover			Starts to thin and break up		Clouds begin to thicken
Precipitation			Drizzle		None at first
Other	-		-	-	



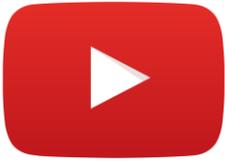


**TASK: What are the impacts of depressions?**

TIP; Look at the images.



## LESSON 5 - ANTICYCLONES



**TASK:** Watch the following YouTube video ([CLICK HERE](#)), which introduces anti-cyclones.

**TASK:** What is an anticyclone? FILL IN THE BLANKS

rain	clouds	days	cold	sunny
clouds	sunny	cold	rain	high

High pressure systems are also known as anticyclones.

Anticyclones are caused by a period of \_\_\_\_\_ pressure when \_\_\_\_\_ air sinks.

In summer, anticyclones give us clear skies so it is usually hot and \_\_\_\_\_.

There are no \_\_\_\_\_ so it does not \_\_\_\_\_.

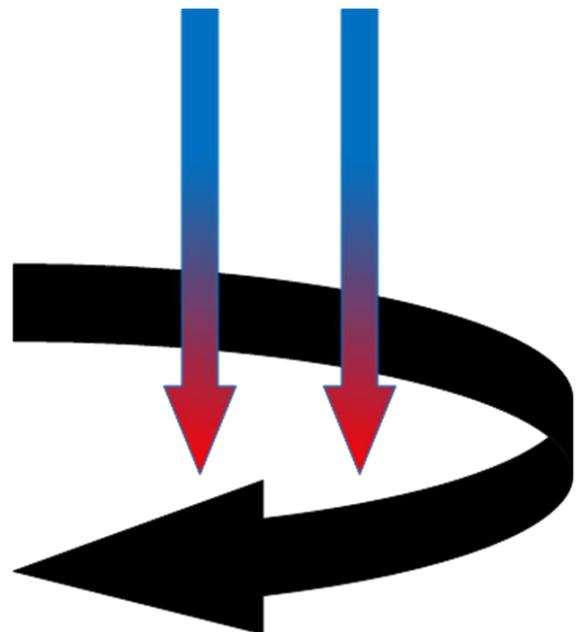
In winter, anticyclones still give us clear skies, so it is usually \_\_\_\_\_ but \_\_\_\_\_. There are no \_\_\_\_\_, so it does not \_\_\_\_\_. This weather can last for many \_\_\_\_\_.

### What causes high pressure?

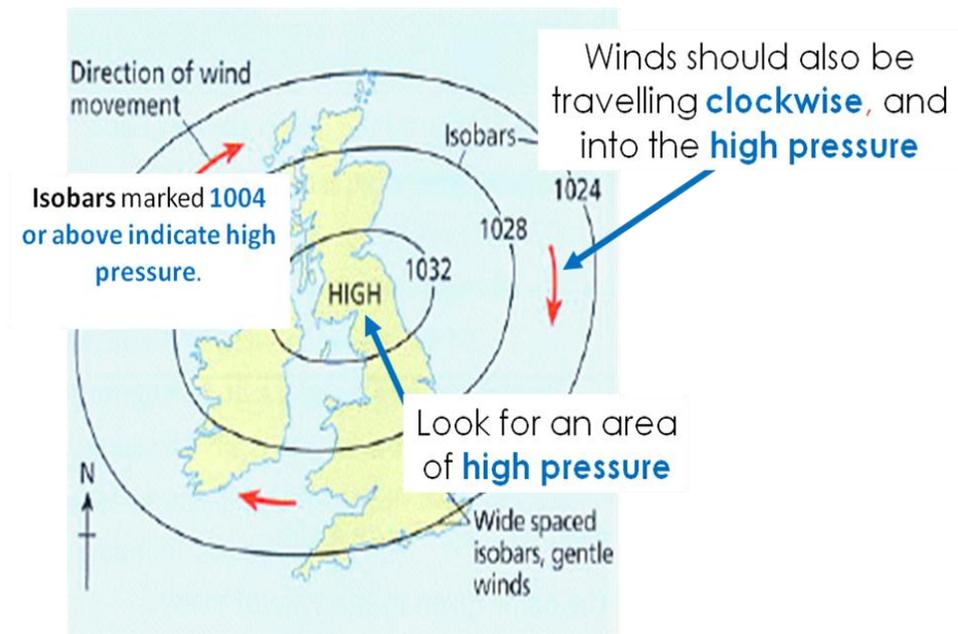
When air high in the atmosphere is cold, it falls towards the earth's surface.

Falling air increases the weight of air pressing down on the Earth's surface. As the cold air falls through the atmosphere, it becomes slightly warmer.

This means that air pressure is high.



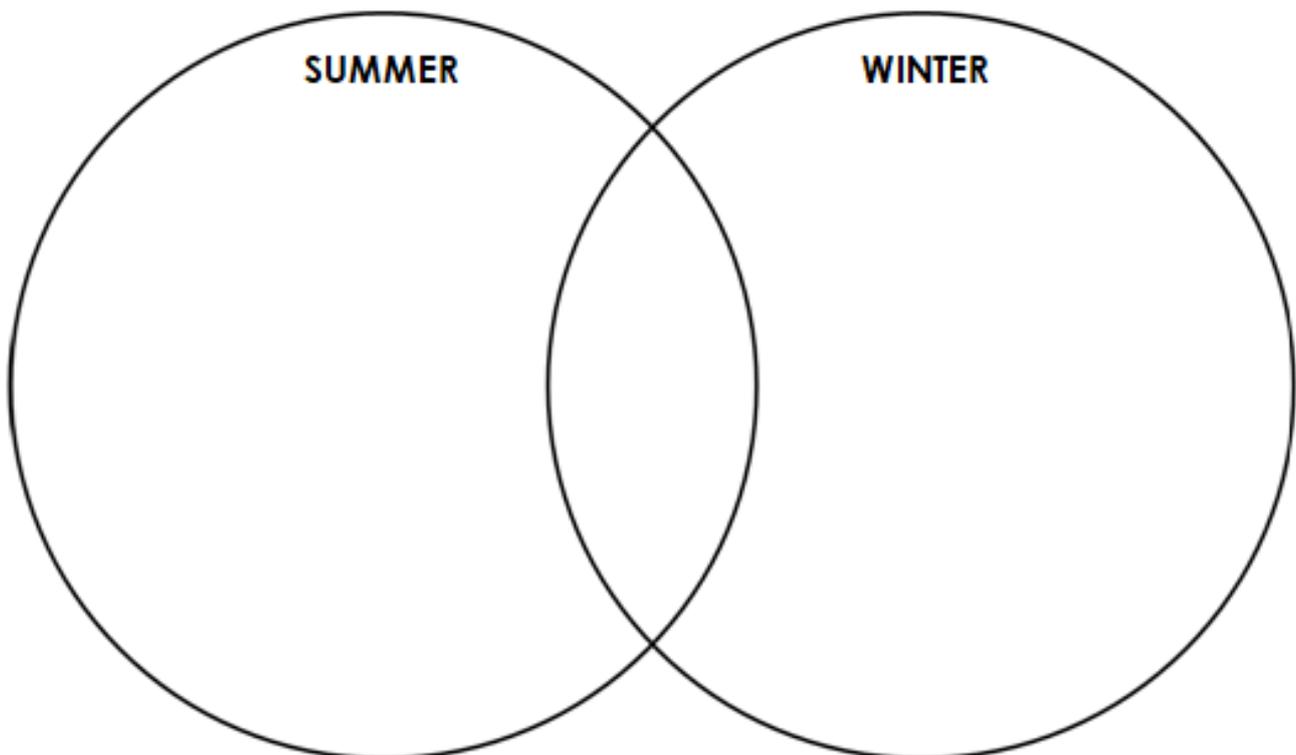
## Anti-cyclone on a synoptic chart



### **TASK: Summer vs. winter anti-cyclones**

Sort the following weather conditions into the venn diagram.

No rain	Cool nights	Very little cloud	Settled weather for days
Early morning frost	Very cold nights	Light winds	Cold days
morning dew and mist	Hot days	Heat wave	Early Puddles freeze over



Because warm air can hold more moisture than cold air, no condensation or clouds occur.

There are no warm or cold fronts in high pressure areas. This means that high pressure systems bring clear skies. Winds are usually light, and blow out of the high pressure area.

**READ ME: BBC article - Europe freezes as 'Beast from the East' arrives**



SOURCE: <https://www.bbc.co.uk/news/world-europe-43218229>

**TASK - Highlight the effects from this winter anticyclone.**

**Social**



**Economic**



**Environmental**



Much of Europe has been blanketed in snow as cold weather spreads as far south as the Mediterranean coast. The cold spell, nicknamed "the Beast from the East" in the UK, is carrying freezing winds across the continent, and temperatures as low as -30C (-22F).

At least 10 people have died since Monday, including many who were sleeping rough in cities. Dozens of roads were closed and trains and flights cancelled across the continent. Hundreds of schools suspended classes and some businesses advised workers to stay at home.

Emergency shelters have been opened by many authorities to cope with the needs of homeless citizens. In Belgium, police were allowed to detain people overnight if they refused to go to shelters.

At least five people died in Poland while four deaths were reported in France, including a nonagenarian who was found outside the gate to her retirement home, AFP news agency reports.

Three deaths were confirmed in Lithuania and two in Romania, including an 83-year-old woman found collapsed in the snow. A 47-year-old homeless man died in the Italian city of Milan.

Rome saw its first snowfall in six years while Naples had its heaviest snowfall in decades. On Tuesday, snow was seen on the excavation site of the ancient city of Pompeii, near Naples in southern Italy - where the average February temperature is 6-14C.

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**EXAM QUESTION:** Compare the hazards brought by a prolonged summer anticyclone with those of a prolonged winter anticyclone **(6 marks)**

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# LESSON 6 - A DOMINANT LONG-LASTING HIGH PRESSURE SYSTEM

## Where is California?

California is one of three states along the West Coast. Situated directly beneath Oregon, California stretches along the coastline from north to south for 900 miles. With a total area of 163,696 square miles, California is the third largest state based on geographic size alone.



## Why does California experience drought?

Since 2000, the longest duration of drought in California lasted 376 weeks beginning on December 27, 2011 and ending on March 5th, 2019. The most intense period of drought occurred the week of July 29, 2014 where 58% of California land was affected.

There are many contributing factors for why California experiences drought:

### **1. Climate**

California's climate has always been variable. Much of the state has a Mediterranean climate, with hot, dry summers and mild, rainy winters. Northern California and the high mountains have snow in winter, while the deserts experience very hot summers and mild winters.

### **2. Location**

Because the planet's poles are warming faster than the tropics, the difference in temperature between these two climate zones is becoming smaller. This leads to an expanding subtropical, arid region. This subtropical zone is pushing into Mediterranean climates, including those in Chile, South Africa, Australia, and the Mediterranean Basin, causing total precipitation in these places to decrease.

### **3. Climate change**

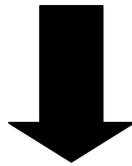
This was confirmed by a 2015 scientific study which estimated that global warming accounted for 8–27% of the observed drought anomaly in 2012–2014. Although natural factors dominate, global warming has substantially increased the overall likelihood of extreme California droughts.



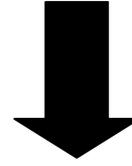
## What is a drought?



A drought is a period of time when an area or region experiences below-normal precipitation. The lack of adequate precipitation, either rain or snow, can cause reduced soil moisture or groundwater, diminished stream flow, crop damage, and a general water shortage.



## CASE STUDY SUMMARY



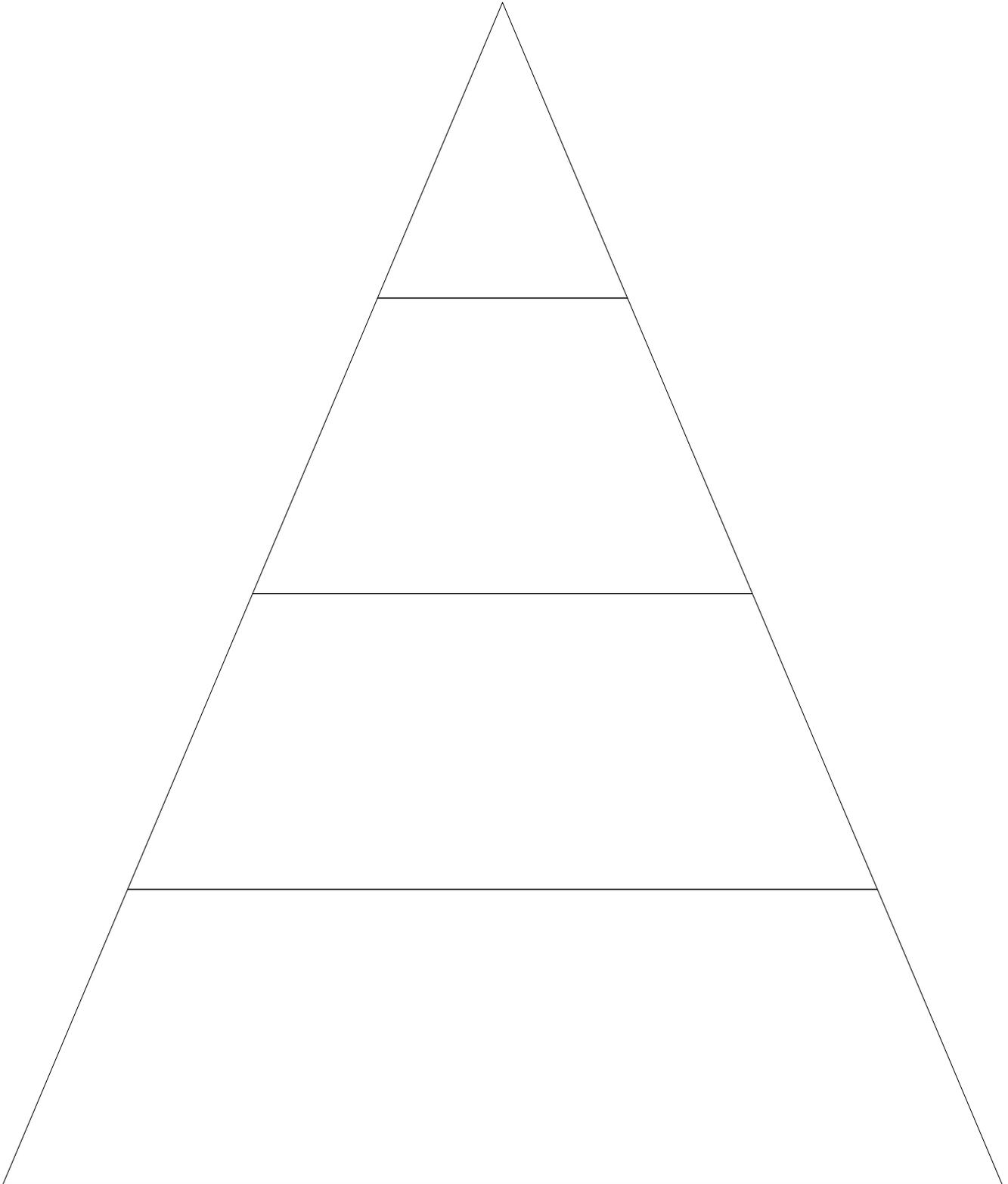
Causes of California's drought(s)			
High pressure weather systems, causing dry spells and high temperatures	Limited precipitation - drought since 2011  <b>SYNOPTIC LINK: CLIMATE CHANGE</b>	A growing population placing stress on freshwater supplies	
Period of lower than normal snowfall and rainfall caused drop in water supplies	States allowed to extract more water than the river receives.	High wastage and overuse of water.	
Impacts of California's drought(s)			
Social	Economic	Environmental	
Population of Central Valley was worst affected.	Cost Californian government \$2.7 billion a year - less state money to be spent on services.	Waters diverted so rivers and wetlands get less - impacts on natural environment e.g. salmon breeding.	
Extraction of ground water causing subsidence leading to damaged buildings and infrastructure e.g. San Joaquin Valley.	542,000 acres taken out of crop production.	The drought has lowered groundwater levels	
	Californian farms lost \$1.8 billion and 10,000 jobs.	Wildfires - dry vegetation more likely to catch fire	
		Desertification	
Responses of California's drought(s)			
Farmers have had temporary success with digging wells to access clean water	State laws requiring a 25% cut in water usage.	People are being encouraged to use less water by public education campaigns.	Homeowners encouraged to check water leaks.





**EXAM QUESTION: Assess the impact of drought on people and the environment.**

Rank the 'impacts' in the triangle, worst to least. Then, explain why you have ranked the impacts this way with a reason.



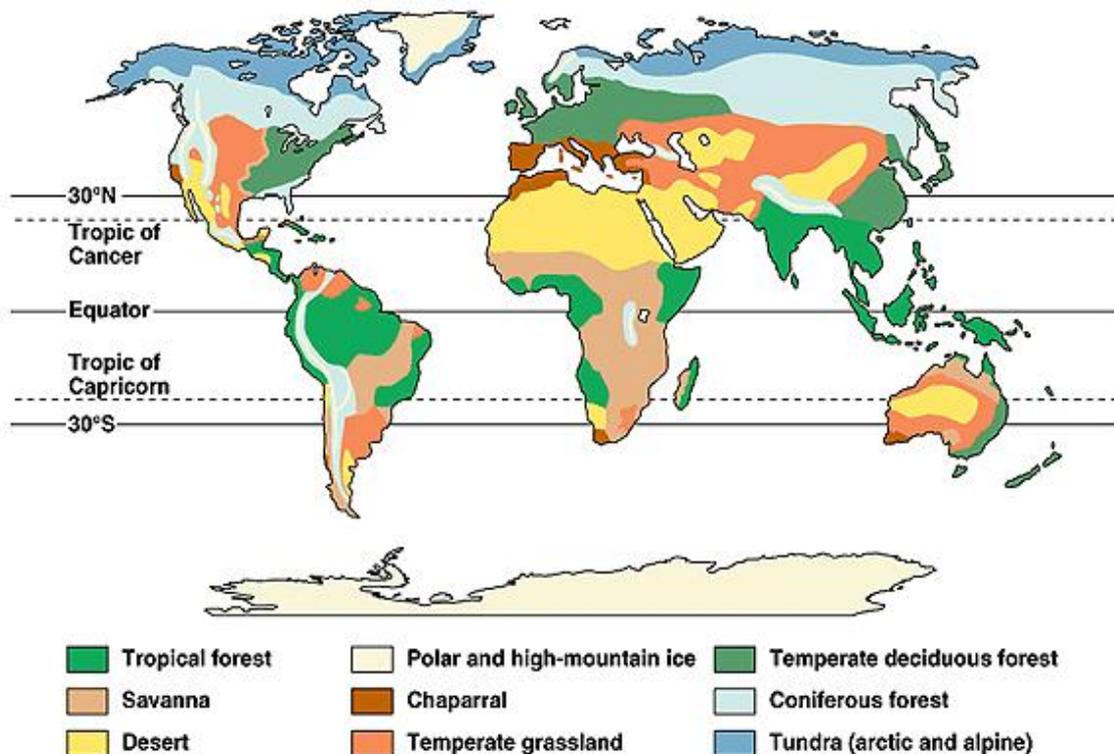
## LESSON 7 - GLOBAL ATMOSPHERIC CIRCULATION

What is global atmospheric circulation?



Global atmospheric circulation causes areas to have some types of weather more often than others – it affects the Earth's climate.

This helps to explain the location of world climate zones and the distribution of weather hazards.



### READ ME: Global Weather patterns

This refers to the world wide movement of heat, causing different weather conditions around the world. There are three main ways that this occurs.



1. Global Circulation Cells
2. Ocean Currents
3. Jet Streams

The air around the earth moves round in circular motions. This is caused by the sun heating the earth and air by the equator more than towards the

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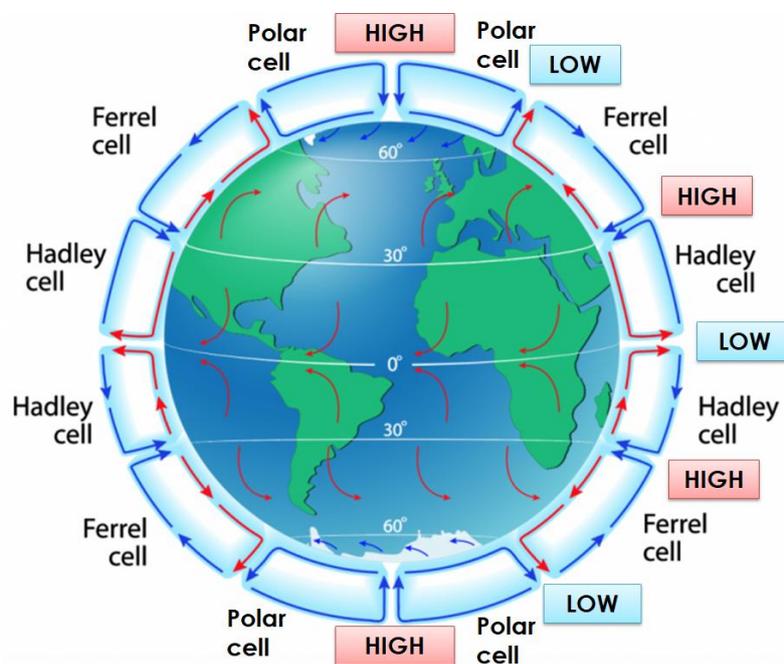


poles. The air is circulating between high and low pressure belts (borders) as surface winds. The differences in air pressure (high and low) are caused by differences in temperature between the Equator and the poles.

Wind is large scale movement of air caused by differences in air pressure. Winds move FROM the areas of high pressure TO the areas of low pressure. These winds are part of the global atmospheric circulation known as convection cells. These cells have warm rising air which creates low pressure, whereas cool falling air which creates a high pressure belt.

There are 3 main cells, that move the earth

- Hadley cells (these move air between the equator and 30° north or 30° south)
- Ferrel cells (these move air between 30° north/south and 60° north/south)
- Polar cells (these move air between 60° north/south and the north/south pole)



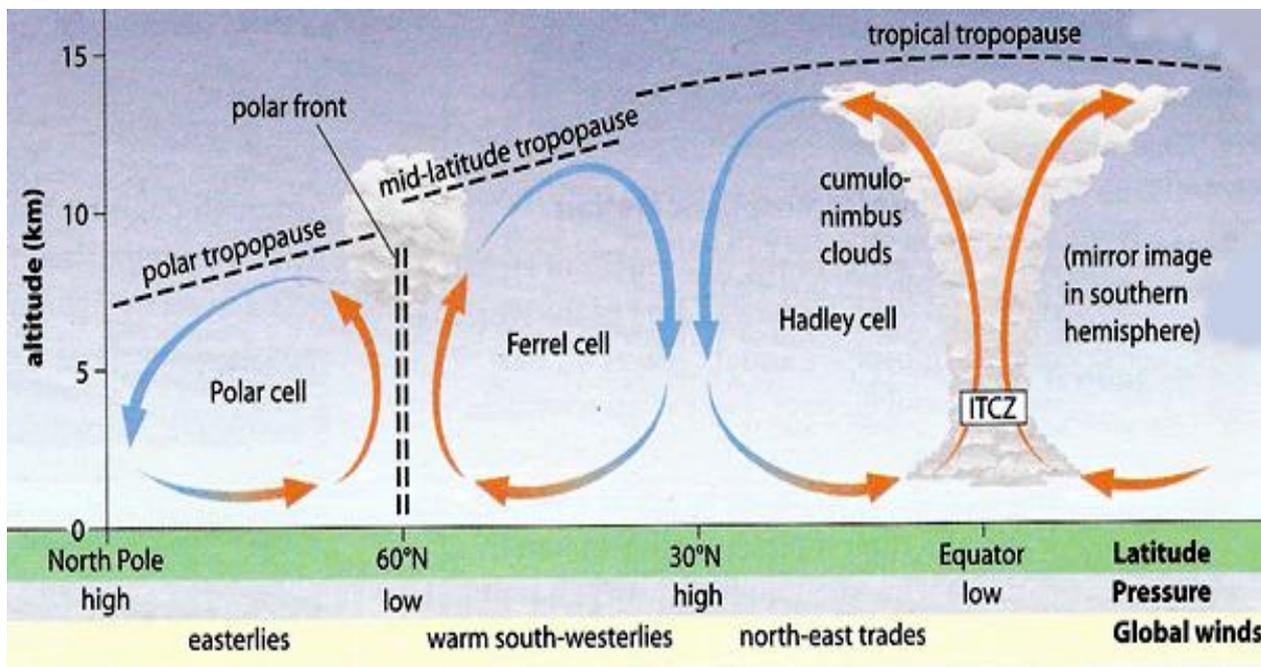
The sun heats up the earth at the equator which heats up the air around it, causing the air to rise. This creates an area of low pressure and the rising air condenses to create clouds and rainfall.

The air moves to 30° north and south of the equator, creating areas of high pressure. The air sinks and moves back to the equator in a circular motion and the process occurs again. The high pressure creates clear skies and dry conditions



At 30° north and 30° south, the air that has sunk will either move back to the equator or will move to 60° north or south. At 60° north or south the air will rise again, creating an area of low pressure. The rising air condenses to create clouds and rainfall.

At the north and south pole the air is sinking again, causing an area of high pressure. The high pressure creates clear skies and dry conditions.



**EXAM QUESTION: Using your work from today’s lesson, complete the following paragraph (5 marks)**

Winds move from areas of ..... pressure to areas of..... pressure. This causes a difference in ..... between the Equator and the poles. Air from the equator rises and move towards the poles, then cools down and sinks at about ..... North and South of the equator. These winds are part of the global atmospheric circulation known as ..... cells.

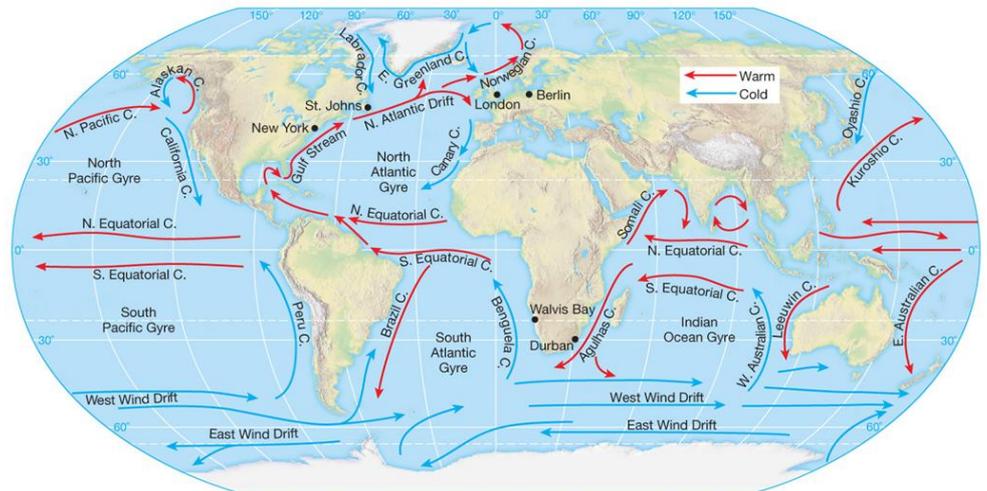


## What are global ocean currents?

The oceans are constantly moving in a pattern known as a current. They move masses of water from one area to another.

The waters **moving away** from the equator, in a north south direction take **warm** waters with them.

The waters **moving towards** the equator from the north or the south bring **cold** water.



## What are jet streams?

Jet streams are **strong high altitude currents of air**. The exact position of the jet streams and convection cells can vary seasonally.



In our upper atmosphere, about 10,000 metres above us, there are two jet streams

- The **polar jet stream** (found between the polar and Ferrel cells)
- The **subtropical jet stream** (found between the Ferrel and Hadley cells)

They are extremely fast moving winds that circle the earth.

Their path can change causing cold or hot wind to be moved to different areas of the world.

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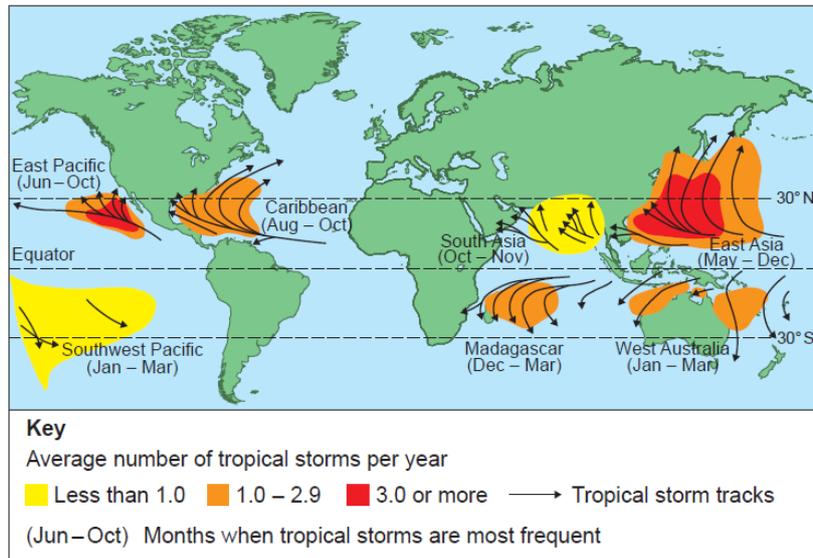


# LESSON 8 - TROPICAL STORMS



A tropical storm is an intense low pressure weather system, that can last for days OR months.

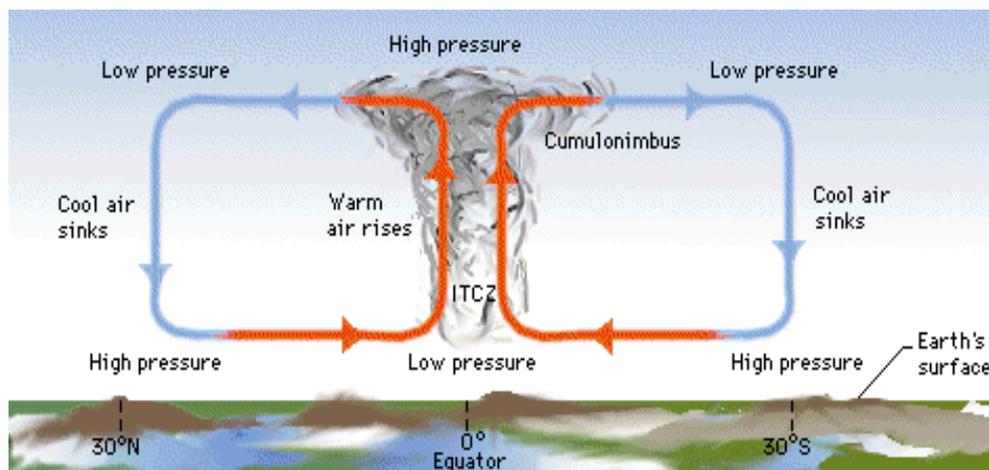
Tropical storms are given different names in different parts of the world; hurricanes (North America), cyclones (India) and typhoons (Japan and East Asia).



## Why are tropical storms distributed (located) where they are?

Tropical storms occur in the tropics (mainly where the intertropical convergence zone (ITCZ: low pressure zone) lies).

Air rises and triggers bursts of torrential rain. Sometimes, the ITCZ grows a 'wave' of low pressure which extends further than usual. Tropical storms develop along these waves. Once they gain energy, they can travel even further away from the equator.



## What do tropical storms need to form?



Tropical cyclones form between 5 and 30 degrees of the equator and typically move in a westerly direction. This distribution is controlled by the places where sea temperatures rise above 26-27°C. This provides heat and moisture that causes the warm air to rise rapidly in this low pressure region.

Sea surface depth must be between 60-70 meters.

**TASK: Explain how a tropical storm is formed. FILL IN THE BLANKS.**

<b>Cloud</b>	<b>Condenses</b>	<b>Coriolis</b>	<b>Cumulonimbus</b>	<b>Eye</b>
<b>Rainfall</b>	<b>Rises</b>	<b>Source</b>	<b>Spin</b>	<b>Surface</b>
			<b>Surface</b>	<b>Travels</b>

Air is heated above the ..... of warm tropical oceans. The warm air ..... rapidly under the low pressure conditions.

The rising air draws up more air and large volumes of moisture from the ocean, causing strong winds. The ..... effect causes the air to ..... upwards around a calm central ..... of the storm

As the air rises, it cool and ..... to form large, towering ..... clouds, which generate torrential ..... The heat given off when the air cools powers the tropical storm.

Cold air sinks in the eye, therefore there is no ....., so it is drier and much calmer

The tropical storm ..... across the ocean in the prevailing wind.

When the tropical storm meets land it is no longer fuelled by the ..... of moisture and heat from the ocean so it loses power and weakens.



# LESSON 9 - AN INTENSE LOW PRESSURE WEATHER SYSTEM

**Distance:** The closer to the system the greater the intensity

**TASK: What factors could influence the effects and responses of low pressure weather systems?**

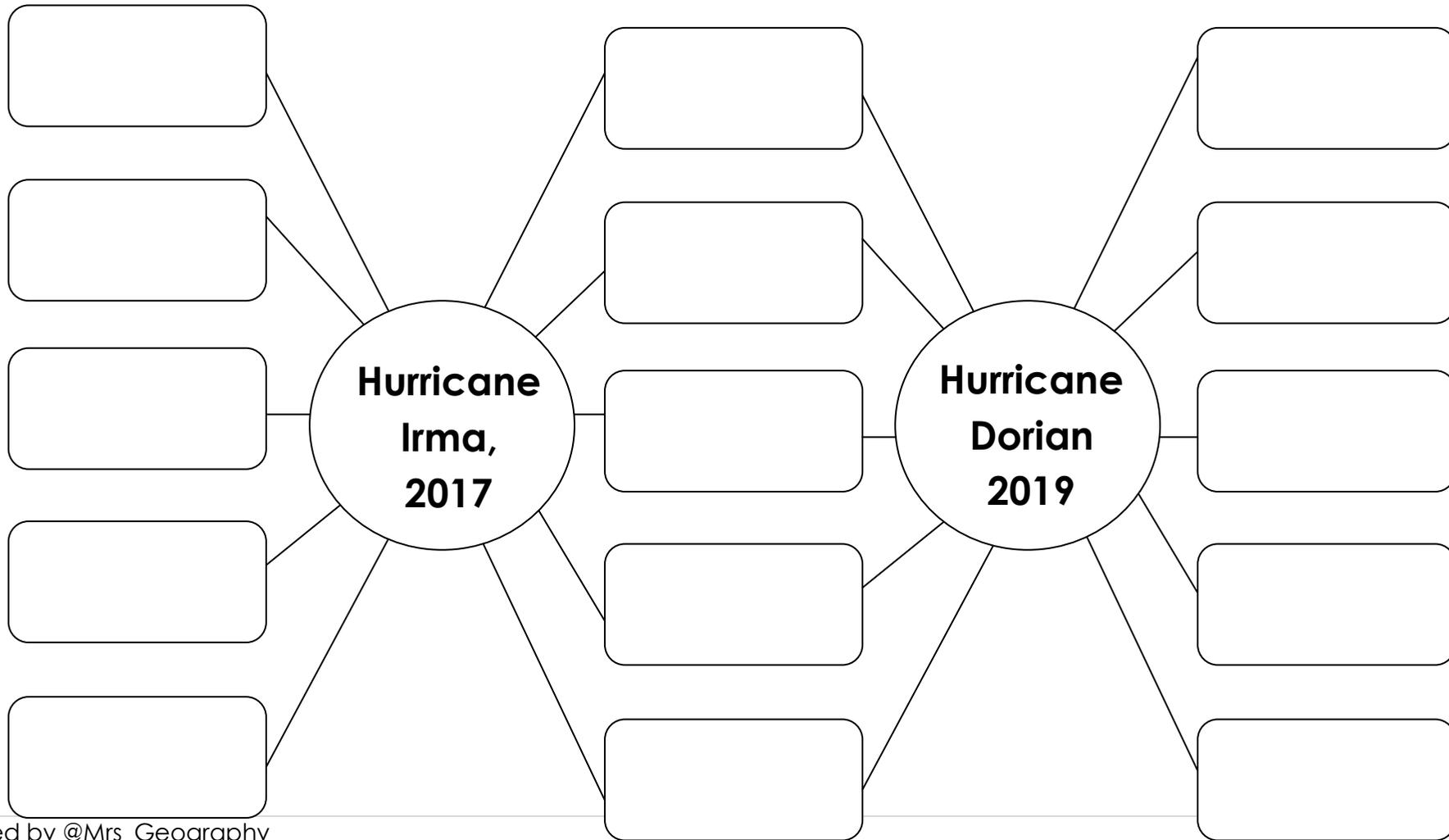
**Emergency services:** More skilled emergency services, armies and volunteers reduce casualties



**TASK: Use the internet to research the impacts caused by Hurricane Irma 2017 and Hurricane Dorian 2019.**

Using your research identify similarities and differences between the two case study examples.

Any similarities are to be written in the boxes between the circles, whereas any differences are written in the boxes to the left and right of the circles. Statistics can also be added onto the legs connecting the boxes to the circles of each case study, for further detail.





# LESSON 10 - PROBLEM SOLVING; HURRICANES

## INSERT: Ways of reducing the hurricane hazard

SOURCE; EDUQAS specification B, 2018



### Actions by the State of Florida



#### **1. Build sea walls**

The cost of sea walls is high but they prevent damage from even the highest sea surge. Currently only half of the Florida coast is protected by sea walls. Many businesses in holiday resorts do not want them as they are unsightly.



#### **2. Build hurricane evacuation routes**

These roads allow people to move away from (evacuate) the coast if a sea surge is forecast. These roads are expensive and may be rarely used.



#### **3. Build more storm shelters**

Public storm shelters keep people safe during even the strongest hurricane. Sports centres can also be used. Some people are reluctant to use storm shelters as they have to leave their homes unprotected.



#### **4. Refuse planning**

The state can refuse planning permission for new homes and businesses. Planning could be refused in coastal areas at risk of sea surges. These areas are often the most popular places for new homes and businesses.

### Actions taken by Individuals



#### **5. Take out insurance**

Home owners can take out insurance against hurricane damage for about US\$650 (£530) per year. Some politicians think home insurance should be made compulsory. This will reduce the need for government aid after a hurricane. Residents of Florida have a 20% chance of being affected by a hurricane in their lifetime.





## 6. Use social media

People are encouraged to use social media to support family and friends when a hurricane is forecast. The hashtag #hurricanematthew was used in 2016 to offer shelter, supplies and transport. This costs nothing and adds to community spirit.



## 7. Pay for stronger roofs and windows

Homes can be made safer by strengthening roofs and windows. When a hurricane is forecast windows can be boarded over. The total cost is about US\$8000 (£6500) per home.

## Actions taken by National Government



## 8. More funding for the National Hurricane Centre (NHC)

The NHC is doing research to more accurately predict the size and track of hurricanes. In time, this will save lives and money. This research will be very expensive. Better prediction will benefit many parts of the USA.

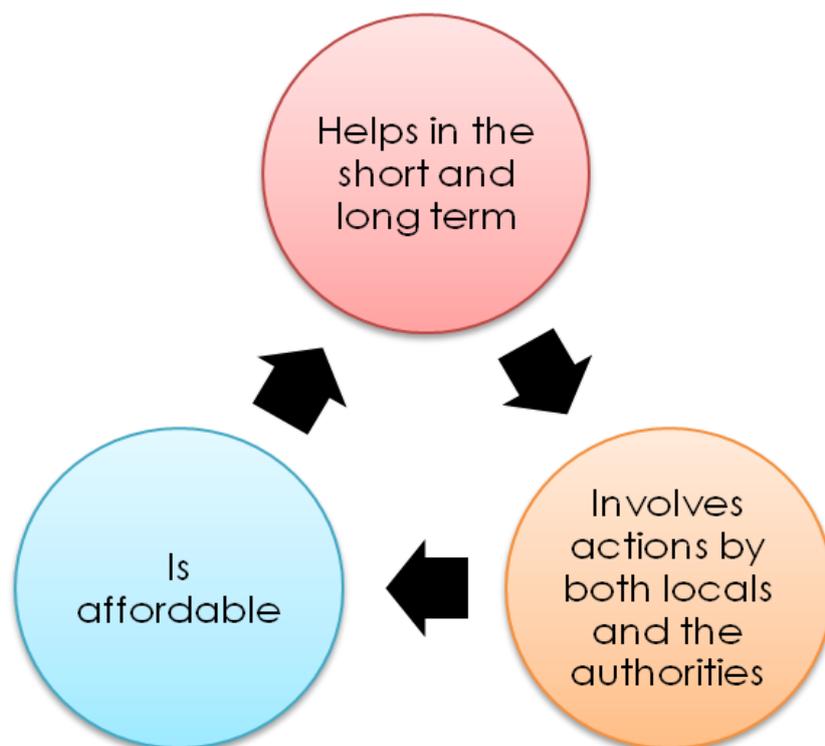


## 9. A National Emergency Fund

The President of the USA can declare a public emergency if a natural disaster (such as a hurricane or flood), is serious. This releases government money to provide aid and compensation to victims. People in the USA unaffected by natural disasters are unhappy about paying more taxes into this fund.



Surveys in the State of Florida show that the residents want the authorities to come up with a clear plan for the future. They want three ways of reducing the impacts of hurricanes in a plan that:



**EXAM QUESTION:** Use insert information to help you select three ways that would work well together and would satisfy the residents. Justify your ideas. **[12 marks]**



## What a Good One Looks Like - WAGOLL

**INSTRUCTIONS; Annotate the student response below to show what they have done well within their answer. This could be;**

- **References to locations**
- **Use of the Figure**
- **Balance, i.e. positives and negatives**
- **Developed arguments OR chains of reasoning**
- **Wider links to geography**
- **Sustainability considered**

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I think the combination of these three ways would work well together to help reduce the effect of hurricanes:

1. Build sea walls
2. Use social media
3. More funding for the National Hurricane Centre

**I think the residents of Florida would be satisfied with this combination because:** the action taken by the individuals, using social media, will cost them nothing but will benefit people in the short term when a hurricane strikes. It will provide ways for people to locate friends and family, offer shelter, supplies, and transport and always be aware if a hurricane is forecast, giving time to prepare. Although mobile phones can be expensive, the majority of people already have them and it is still a choice whether to get one unlike if homeowners were forced to take out insurance.

The action taken by the state of Florida, building sea walls would prevent a lot of damage from sea surges, therefore reducing damage and economic impact. Although the cost is high, it would save a lot of money from damage that would otherwise be caused. It will also provide many people with jobs to build the sea wall. Even though some businesses don't want them



because they are not very attractive, it will most likely benefit their business by protecting t.

The action that should be taken b the national government is to increase the funding for the National Hurricane Centre (NHC) This would mean more research into the size and track of hurricanes so they can be more easily and accurately predicted and forecast This would provide people with a better warning about hurricanes and more time to prepare for them. This may help to reduce damage, therefore saving money and even saving lives as people know when to evacuate. It would also benefit other states not just Florida. Even though the research is very expensive, it will save money long term by reducing the coasts of repairing damage from hurricanes.

These three ways would work well together because they include a structural defence, long term research,, and short term emergency help. This is also affordable because only two of the three things cost money, and this money can be earned back from the decline in money spent on damage. Both short and long term strategies are also provided.



**Now it is your turn** - Using the model answer, create your own response to this exam question.

**EXAM QUESTION:** Use insert information to help you select three ways that would work well together and would satisfy the residents. Justify your ideas. **[12 marks]**

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# GLOSSARY

<b>Weather</b>	
<b>Climate</b>	
<b>Temperature</b>	
<b>Precipitation</b>	
<b>Climate graph</b>	
<b>Altitude</b>	
<b>Prevailing winds</b>	
<b>Front</b> ( <i>warm, cold, occluded</i> )	
<b>Anti-cyclone</b> ( <i>high pressure</i> )	
<b>Depression</b> ( <i>low pressure</i> )	
<b>Synoptic chart</b>	
<b>Drought</b>	
<b>Tropical storm</b> ( <i>hurricane, typhoon, cyclone</i> )	

