

What is extreme weather?

Identify three examples of extreme weather the UK can experience.

Identify the direction each of the examples of UK extreme weather approach from.

1. Severe winter weather -
2. Hot and sunny weather leading to droughts -
3. Heavy snow and bitterly cold conditions -
4. Heavy rain and strong winds -

Depressions (low pressure systems) bring heavy rains and strong winds to the UK. Identify 3 possible impacts of this.

Floods are caused by heavy rainfall or storm waves Identify 3 possible impacts of this.

Droughts and heatwaves are long periods of time with little or no rainfall. Identify 3 possible impacts of this.

Cold conditions occur if depressions (low pressure systems) are not passing over the UK. Identify 3 possible impacts of this.

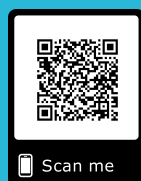
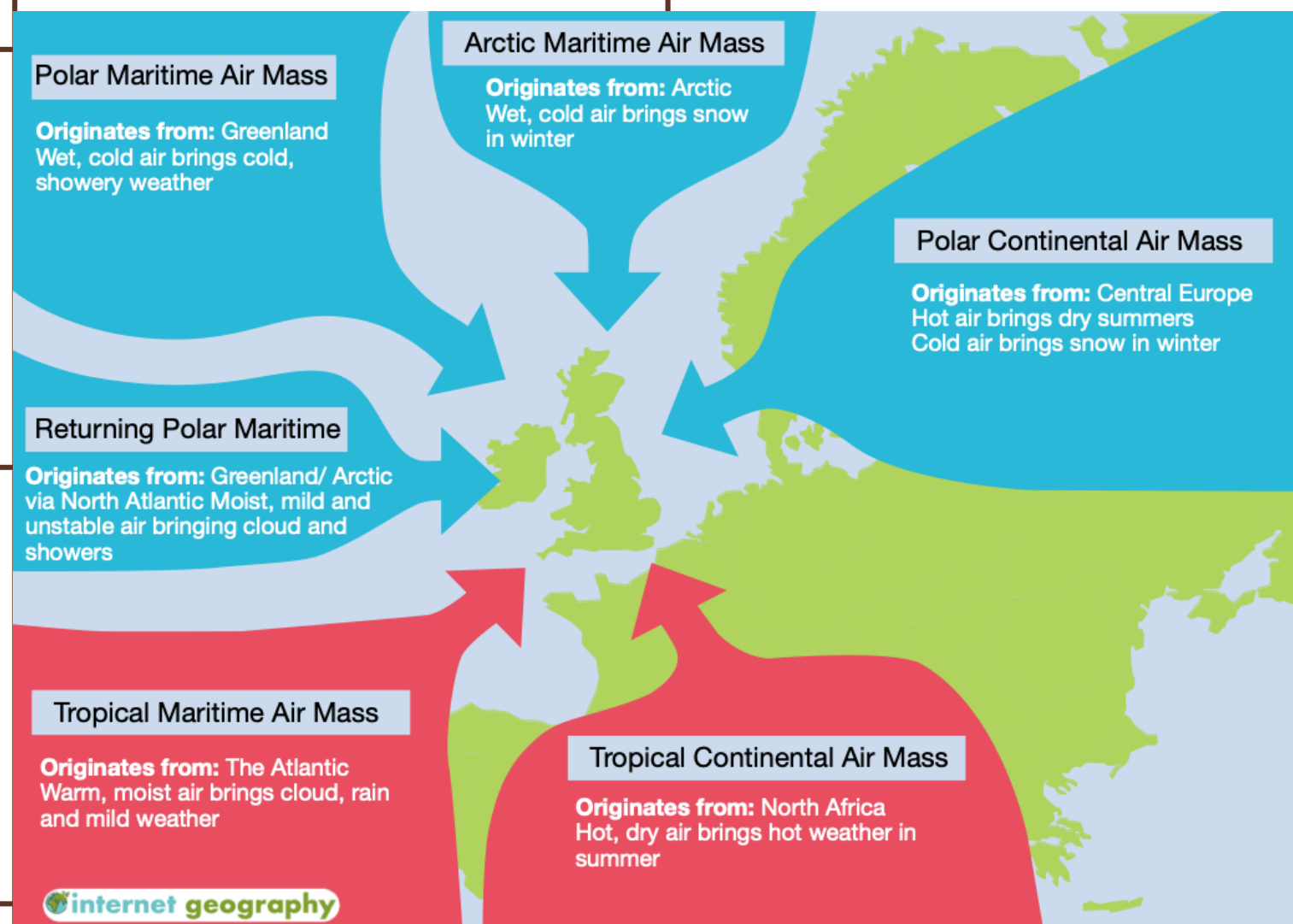
What benefits could extreme weather bring to the UK?

For a case study of an extreme weather event you have studied explain its cause.

For a case study of an extreme weather event you have studied explain one social, economic and environmental impact.

Give three management responses to an extreme weather event you have studied.

What evidence is there that the weather in the UK is becoming more extreme?



Weather Hazards in the UK



Extreme weather is when the weather is particularly severe or out of season. It is clearly different to the usual weather pattern.

Storm events
Flooding
Droughts and heatwaves
Extreme cold weather

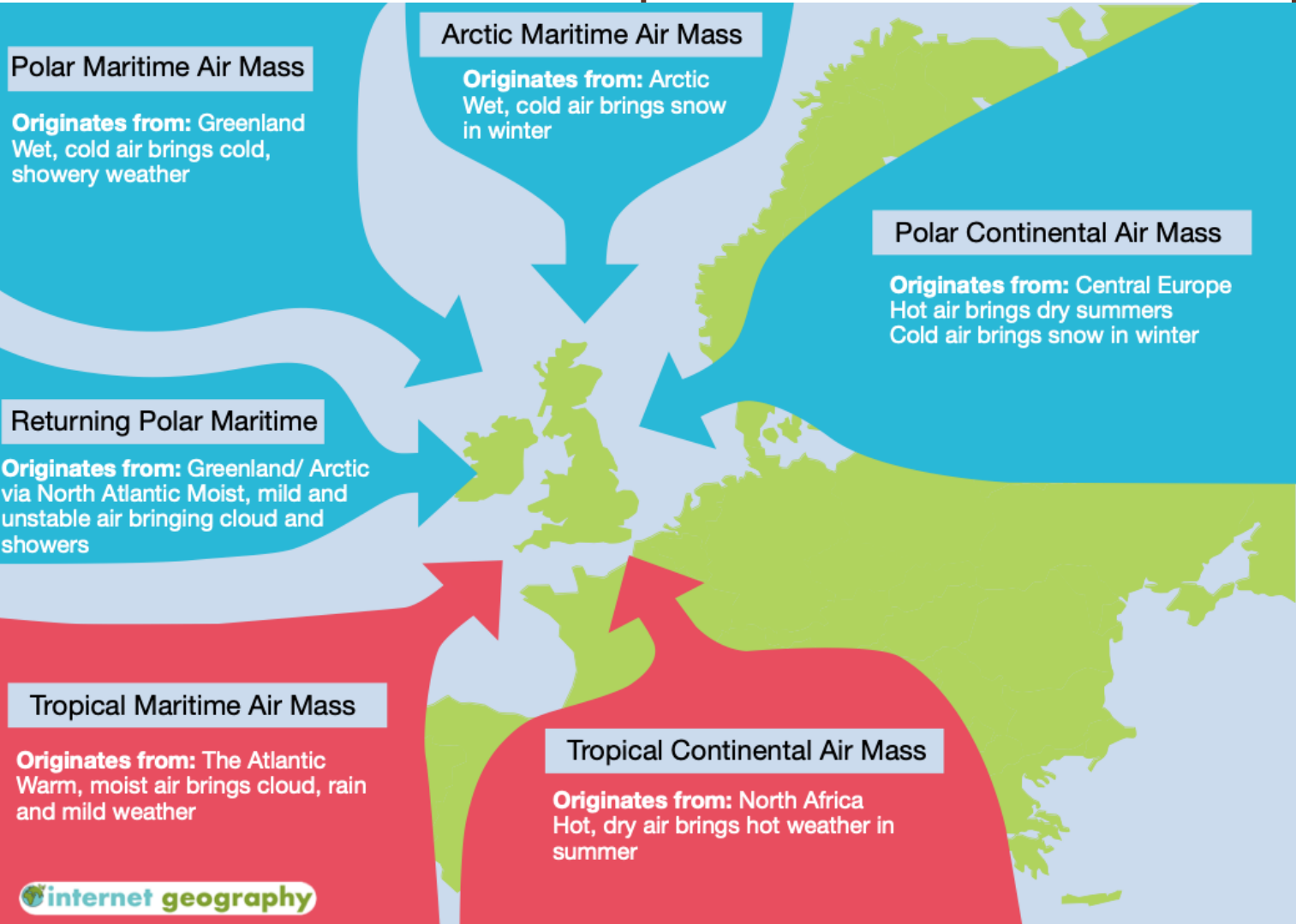
- 1. Severe winter weather - East
- 2. Hot and sunny weather leading to droughts - South
- 3. Heavy snow and bitterly cold conditions - North
- 4. Heavy rain and strong winds - West

- Flood and wind damage to properties
- Power supplies cut off
- Disruption to transports
- Death and injuries
- Falling trees causing damage

Damage to homes, businesses and possessions
Death by drowning
Expensive recovery
Inability to get home insurance
Landslides
Crops ruined and livestock lost

Crops fail and cattle cannot survive below -10°C
Transport infrastructure shut down e.g. airports, railways and roads shut
Schools and businesses shut
Injuries caused by people falling in snow and ice

Your answer will depend on the case study you have covered. However, you must discuss the cause, or the reason why the extreme weather event happened. Below is an example for the Beast from the East:
“A meteorological event called stratospheric warming disturbed the jet stream - allowing cold winds from Russia to travel as far as the UK. The air mass picked up water over the North Sea which resulted in heavy snowfall when it reached The UK.



Crop production fails
Habitats are damaged or destroyed e.g. moorland fires
Water reserves in reservoirs may drop
Hosepipe bans
Water rationing
Roads can melt and railways can buckle
Business productivity can drop
Elderly people are vulnerable to the heat leading to heat exhaustion and possibly death

Warmer temperatures may lead to an increase in tourists visiting the UK.
Warmer temperatures will result in more people staying in the UK for holidays rather than travelling abroad.
A wider variety of crops could be grown, such as grapes, which would allow the production of wine etc.

Again your answer will depend on the case study you have covered. However, you must ensure that:
Social = impacts on people
Economic = financial impacts
Environmental = the impact on the environment

Once more your answer will depend on the case study you have learned. Below is an example for the Beast from the East.
Red weather warnings were issued.
Devon and Cornwall police to declared a major incident.
Flood warnings were issued by the Environment Agency - residents were told to expect tides to be around 400mm
The Royal Air Force was drafted in to help relief efforts in snow-hit Lincolnshire.
The military rescued vehicles on the M62.

The frequency of extreme weather in the UK is increasing. Since the 1980s temperatures have increased by 1°C. Winter rainfall has also increased. Recently, more weather records have been broken than every before.



Weather Hazards in the UK