Exeter and Devon

KNOWLEDGE ORGANISER

FLOODS

- A flood is an overflow of water that takes place on usually-dry land.
- Flooding is often caused by rivers, lakes and other waterways becoming too full and overflowing onto other land. Heavy rainfall is the most common reason for this.
- Flooding can also be caused by snowmelt, or (less commonly) tsunamis and storm surges.
- As the earliest settlements were built around waterways, flooding has affected people since ancient times. In some places, humans have built dams or levees to protect land from flooding.
- All flooding is dangerous, but the worst floods have proven truly catastrophic, killing millions of people.

CAUSES OF FLOODING

1. Heavy Rainfall.
2. Long Periods of Rain
3. Snowmelt
4. Steep slopes
5. Impermeable rock
6. Saturated soils
7. Tsunamis

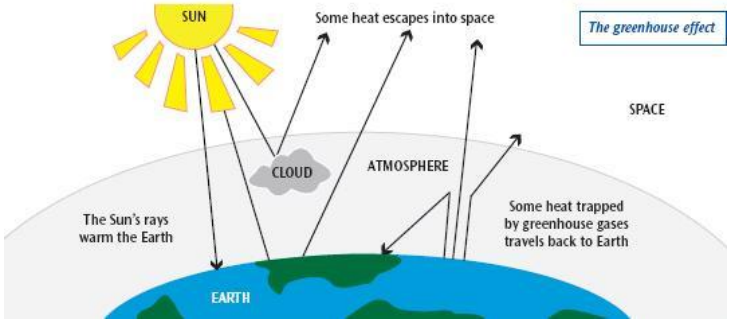
All of these can be natural causes of flooding. Human activity can also cause flooding, or make natural causes more drastic or frequent.

EXETER is the county city for Devon. There has been a settlement in this location on the River Exe since before the Roman Invasion and it sits just above the head of the river's estuary and is only about 10 miles from the estuary's entry into the English Channel. Due to its position it can be prone to flooding, the worst in recent history being in 1960, which led to huge flood defences being installed in the 1960s and 1970s.

Exeter during the floods, 1960

CLIMATE CHANGE and HUMAN ACTIVITY

The lower atmosphere of our planet is becoming warmer. This is a result of greenhouse gases which are a product of the activities of human beings such as burning fossil fuels like coal and deforestation which can involve burning large areas of forests. Both of these release carbon dioxide, which trees and plants take in from the air and produce oxygen. By removing plants and trees from our environment, we reduce our air quality and increase temperatures in the atmosphere and seas. A warmer atmosphere results in weather changes and an increase in more extreme weather, such as storms, heatwaves and blizzards. This is known as **climate change.**



PROTECTING AGAINST FLOODING

Humans have always found ways to protect against potential flooding such as:

Building walls and bridges, raising housing up on stilts, creating flood plains, building dams, re-directing rivers/waterways, building levees

Ways we can continue to protect our environment:

Plant more trees and plants to absorb more water, re-introduce native animals such as beavers to help strengthen river banks and beds, slow or stop the rising temperatures and sea levels.

VOCABULARY

Flood Plain	Weir	Canals	Flash Flood
Estuary	River	Meander	Levee
Dam	Climate Change	Sea levels	Saturated
Settlements	Waterways	Low lying	Overflow

INTERESTING FACTS 1. Bangladesh is the most flood prone area in the world. 2. A river is more likely to overflow at its bends or 'meanders.' 3. Rainfall is the most common cause of flooding. 4. 'Regular' flooding is flooding that people expect and (in some cases) rely upon. 5. Just 6 inches of flowing flood water can knock a person off their feet.