Natural Causes of Climate Change

**Our Orbit**
- Earth's orbit changes which affects the levels of sunlight that reach us.
- These changes take thousands of years and so don't cause fast climate change.

**Volcanoes**
- Eruptions release CO$_2$ and sulphur dioxide into the atmosphere, heating the earth.
- Mt Pinatubo's 1991 eruption briefly raised temperatures by 0.5°C.

**Breathing**
- CO$_2$ is produced naturally when people and animals breathe.
- However, plants and trees take in CO$_2$ to live and so can balance this out.

**Farting**
- Methane is produced from animals and people as they digest food.
- Rice fields also release methane as rice grows.
Man-Made Causes of Climate Change

**Fossil Fuel**
- Burning coal, gas and oil releases $CO_2$ and sulphur dioxide into the air.
- 80% of earth's energy is from fossil fuels called non-renewable.

**Deforestation**
- Cutting trees down releases stored $CO_2$ and stops trees from absorbing $CO_2$.
- Deforestation causes 1/5 of greenhouse gases.

**Landfills**
- Rotting organic materials release methane (84x worse than $CO_2$).
- 1/3 of all food produced in the world goes to waste.

**Agriculture**
- Animals release methane fertiliser contains nitrous oxide (10x worse than $CO_2$).
- High food demands mean 29% of gas emissions come from farming.