



# Climate Change and the Arctic

**Wicked Weather Watch:** talking to young people about climate change

# Climate Change: What is it?

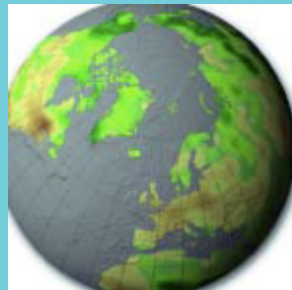
## Weather

The daily conditions of the atmosphere over a specific, small local area.



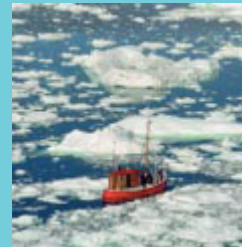
## Climate

The long-term weather pattern over a large region, area or the globe.



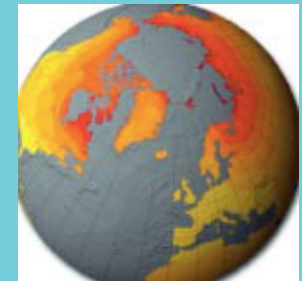
## Climate Change

Describes how our planet's average temperature, rainfall, wind and other weather conditions change over a long period of time.



## Global Warming

Describes just the change in the Earth's average temperature over a long period of time.



# Climate Change: What causes it?

**Natural events** such as a volcanic eruption.

**Human activity** such as burning fossil fuels, deforestation and farming.



The Earth's climate has changed many times over thousands of years.

However, over the last 50 years we – humans – have caused the planet to warm much more quickly by our everyday activities releasing too many **greenhouse gases** into the atmosphere.

**Can you name any greenhouse gases?**



# Climate Change: Global Impact

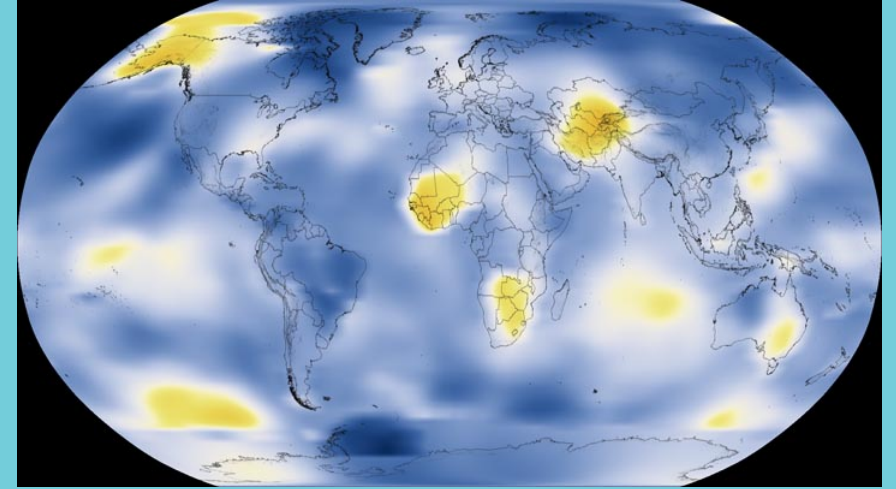
Climate change affects the whole world. The top 3 biggest changes will be:

- Rising temperatures – land, air and oceans
- Rising sea level – if the sea level rises by just 44cm, **140 million people** will be affected!
- Changing where animals and plants can live

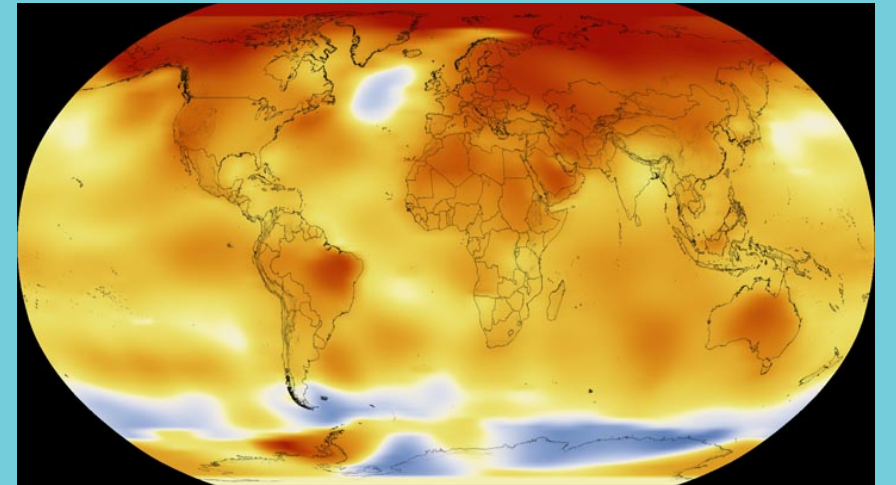
Data source: NASA/GISS

Credit: NASA Scientific Visualization Studio

1916



2016



# How do WE contribute?

TRUE OR FALSE? In 2014 the UK was the **BIGGEST** contributor to global warming **in the whole world.**

Driving

Eating  
food that  
comes  
from far  
away

Cutting  
down  
trees

Eating  
meat

Using  
electricity

Aeroplanes

Paving  
and  
tarmac



# How will climate change affect the UK?

- Temperatures have risen 1°C since the 1970s. It will continue to get hotter.
- Very wet winters = more floods.
- Summers could be warmer and drier.
- Our wildlife and plants will change.
- Farmers might be able to grow new crops such as wheat or sugar beet.



# It's not all doom and gloom!

The UK is leading the way in terms of renewable energy – Scotland wind farm.

The solar industry is one of the fastest growing in the USA.

Electric cars are getting a lot more popular around the world.

Governments are acting – Paris and COP23.

**And there are things WE can do too!**

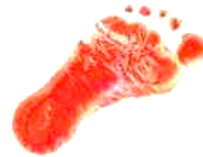




# What YOU can do at school and home

## Reducing our 'carbon footprint':

- Turn off lights; change your lightbulbs at home to energy saving bulbs
- Recycle, reduce, re-use and use less paper
- Eat locally grown food
- Walk/cycle or scoot to school rather than drive
- Take train or bus rather than plane or car
- Turn off TV/computer at the wall
- Protect and plant trees – good because they remove some of the harmful gases from the air
- Wear a jumper instead of turning up the heating
- Use an energy monitor in your house or school. Saving energy saves money too!
- Raise money for solar panels at school or switch to a 'green' energy supplier.







**It's cool to do something about climate change**

**Any Questions?**

