#### SHAPING OUR FUTURE: THE CLIMATE CHALLENGE KS2 LESSON 1 – PRESENTATION





# PENGUINS AND POLAR BEARS

Climate change is nearly always in the news because it's happening right now, but that's just about melting ice caps, penguins and polar bears... RIGHT?

# PENGUINS AND POLAR BEARS

Climate change is nearly always in the news because it's happening right now, but that's just about melting ice caps, penguins and polar bears... RIGHT? **WRONG!** 

# **PENGUINS AND POLAR BEARS**



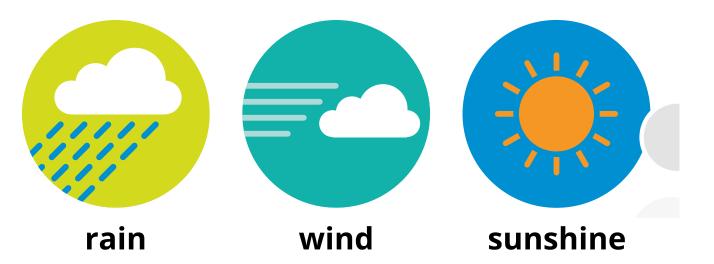


Video opens in Vimeo



rain









fog





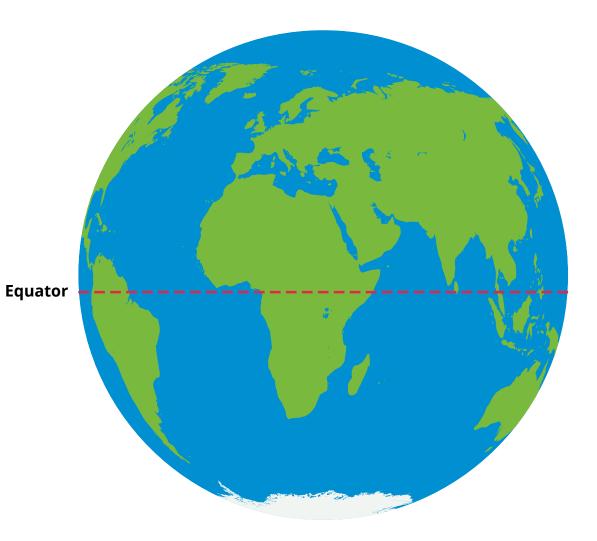
This day-to-day change is called the **weather**.

# CLIMATE

The word climate means the long-term weather patterns for a particular area.

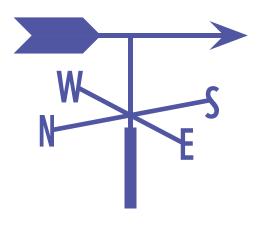
The equator is an imaginary line around the middle of the Earth, a bit like a belt. The areas closest to this belt have very hot climates. Areas nearest to either of the poles have very cold climates.

See if you can name some of the places found in these 5 different climate zones:



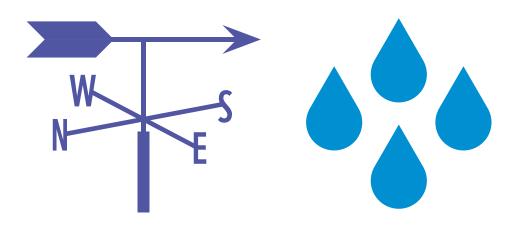


The weather changes in four main ways, which can be monitored and measured in order to predict what the weather will be like for the next day or the coming week.



#### MOVEMENT

Winds blow from all directions, knowing which way the wind is blowing can help predict the weather.



#### MOVEMENT

Winds blow from all directions, knowing which way the wind is blowing can help predict the weather.

#### MOISTURE

The moisture content of the air causes mists and fogs and of course rain, and frost if it's cold.



#### MOVEMENT

Winds blow from all directions, knowing which way the wind is blowing can help predict the weather.

#### MOISTURE

The moisture content of the air causes mists and fogs and of course rain, and frost if it's cold.

#### PRESSURE

Pressure affects whether we have clear, cloudless days or thunder and lightning storms.

#### MOVEMENT

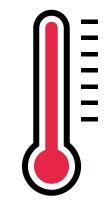
Winds blow from all directions, knowing which way the wind is blowing can help predict the weather.

#### MOISTURE

The moisture content of the air causes mists and fogs and of course rain, and frost if it's cold.

#### PRESSURE

Pressure affects whether we have clear, cloudless days or thunder and lightning storms.



TEMPERATURE

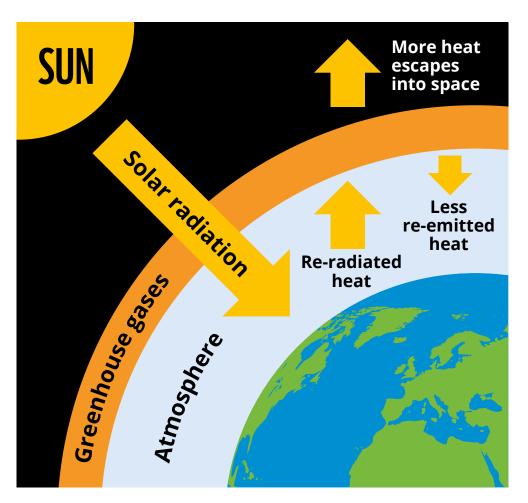
Temperature is influenced by all of these, as well as how much sunshine reaches the Earth.

# **CLIMATE CHANGE**

Since the 18th century scientists known as meteorologists have been monitoring and recording the weather. These records show that the Earth's atmosphere is beginning to get warmer which is causing our climate to change.

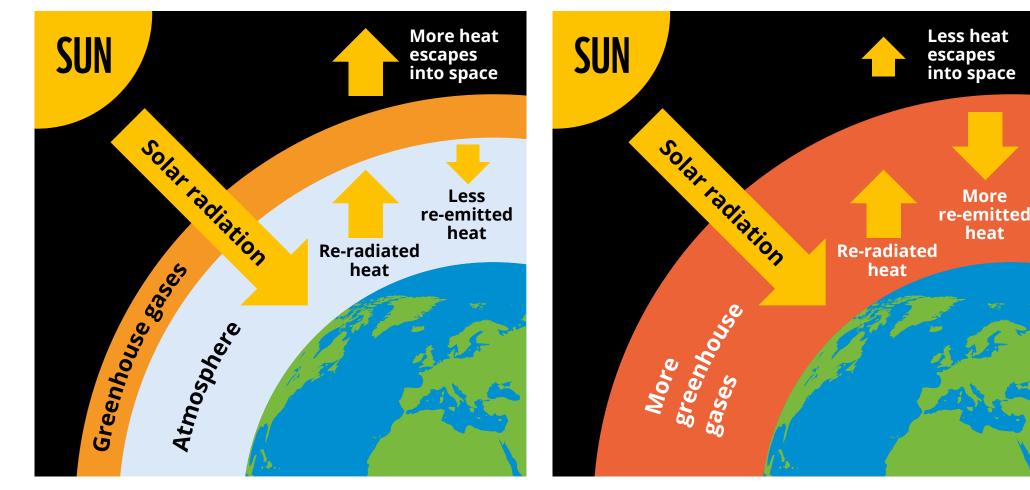
This is known as **climate change**.

# **CLIMATE CHANGE**



#### NATURAL Greenhouse Effect

# **CLIMATE CHANGE**



#### NATURAL Greenhouse Effect

#### INCREASED GLOBAL WARMING CAUSED BY HUMAN ACTIVITY

# WHY DOES IT MATTER?

Human activity has caused the Earth to get warmer in the last 100 years.

Climate change caused by our greenhouse gases is changing our weather patterns leading to rising temperatures and extremes of weather - both of which are damaging our natural environment.

Think back to the places around the globe you named earlier. How do you think weather extremes and climate change will affect the animals and people that live there?



© WIM VAN PASSEL / WWF

# **CLIMATE CHANGE AND US**

What about us, here in the UK?





#### FLOOD CRISIS GRIPS CITIESWITH MORE RAIN FORECAST

THE DROWNING OF THE NORTH OF ENGLAND CHOCOLATE PRICES ARE RISING 90 MPH Superstorm Is on way

# **CLIMATE CHANGE AFFECTS US ALL!**





Video opens in YouTube

