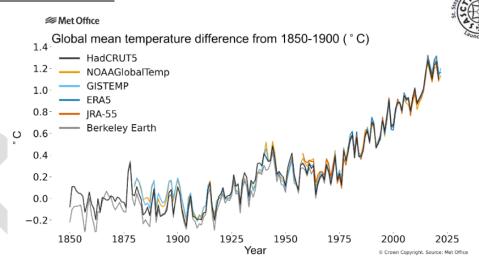
SSCA Climate Change Overview and Information 2023

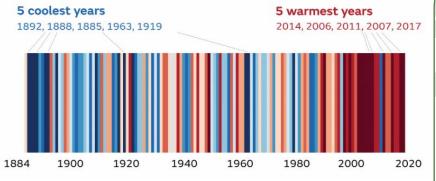
"Climate change refers to a large-scale, long-term shift in the planet's weather patterns and average temperatures. Since the mid-1800s, humans have contributed to the release of carbon dioxide and other greenhouse gases into the air. This causes global temperatures to rise, resulting in long-term changes to the climate." [UK Met Office 2023]



This plot shows the global temperature change from 1850 to 2021, compared to an estimated 1850-1900 baseline average temperature.

Met Office

UK annual temperature



This image shows that the five warmest years have all occurred since 2006. Cooler years are blue, while warmer years are red.

This graph shows us that global temperatures are increasing. As of 2018, the 20 warmest years on record globally have been in the past 22 years.

How will climate change affect the UK?

Our UK Climate Projections (UKCP) help us see how climate change might affect the UK in the future. In a high emission scenario, we expect that the UK will experience:

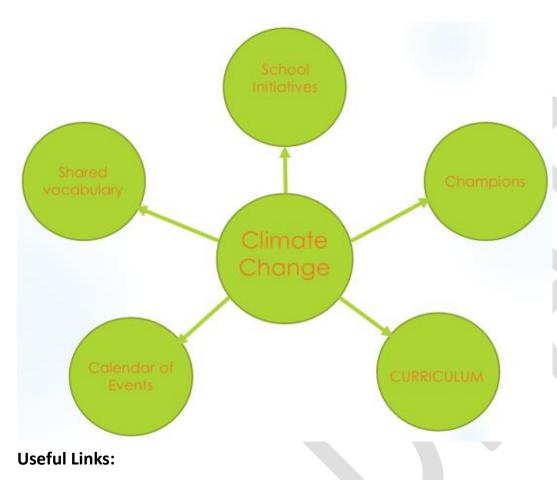
- Warmer and wetter winters
- Hotter and drier summers
- More frequent and intense weather extremes

In 50 years time, by 2070 we project:

- Winters will be between 1 and 4.5°C warmer and up to 30% wetter
- Summers will be between 1 and 6°C warmer and up to 60% drier
- These changes could have a big impact on how we live our lives.

(All information and graphical presentations courtesy of UK Met Office. For further details see their website)

SSCA Approach to Climate and Sustainability



Based on the DfE publications and prior to the release of the new model Science curriculum SSCA have assigned our Climate Change plan into 5 key areas:

School initiatives based on the "eight doorways",

A schoolwide shared vocabulary,

School champions to lead the school and community wide change,

A calendar of events taking place within school,

A climate change curriculum based on Climate Change Explained 2019 [UK Government], Schools Sustainability Guide 2022 [WWF] and Big Ideas for Climate Change 2022, a draft curriculum designed using the UN's Sustainable Development Goal for Climate Action [Leeds Development Education Centre].

What is climate change? - Met Office

Climate change explained - GOV.UK (www.gov.uk)

<u>Climate Action – Resources – Leeds DEC</u>

Learn about the effects of climate change | WWF

Sustainability and climate change: a strategy for the education and children's services systems - GOV.UK (www.gov.uk)