What evidence is there for climate change in the UK?

Video summary	Before watching the video	During the video
Tom Heap examines the evidence that the UK climate is changing, with increased droughts, increased summer temperatures and wetter winters. The film considers the evidence that plants are flowering earlier in the UK and also how moorland birds are adapting to a changing climate. Finally, the team visit the Met Office to witness computer modelling and how this can contribute to our understanding of a changing climate.	Discuss with students what they already know about climate change and what evidence there is for climate change. Ask students why they think it is important to know whether our climate is changing and what changes there have been in their lifetimes. **Introduce key terms such as:** **Climate change**: Long-term shifts in temperature and weather patterns. **Interdependency:** The dependence of two or more things on each other. **Magnitude**: The size or extent of something	You may wish to stop at relevant points during this short film to pose questions and check understanding or wait until the end. Useful questions might include: • How far back does the climate data go? • What evidence do gardeners have of climate change? • How much have temperatures increased by? • What can birds tell us about climate change? • What does the Met Office do? • What do the models show? • Why are ecosystems being disrupted?

After watching

Discuss with students what evidence was seen in the clip. Can students suggest other ways in which evidence of a changing climate can be seen for example dendrochronology, ice cores and temperature records. How reliable do they feel each method is? Students could rank the different evidence in order of reliability.

Ask students again why they think it is important to understand the changes in our climate. What evidence do they now have for this? What impacts did they see within the UK and what could happen to our ecosystems without that understanding?

Students could further research the methods or the organisations that carry out the investigations into climate change such as the Met Office or the British Antarctic Survey. For example, students could visit British Antarctic Survey to find out more about ice cores.

Curriculum notes	Where next?	Links
This topic appears in Geography at KS3 (Climate change) and KS4 / GCSE (Climate change) in England, Wales and Northern Ireland and National 4/5 in Scotland.	Look at temperature records over time and task students with creating graphs to show average winter temperatures each year. Ask students to describe what their graphs show. This is a great opportunity to practice presenting and analysing data.	Climate change and global warming: https://www.bbc.co.uk/bitesize/guides/zx234j6/revision/1 Evidence of global warming: https://www.bbc.co.uk/bitesize/guides/z87s4j6/revision/2