

How is Climate
Change affecting
Wigan & Leigh?

This lesson is designed to last 1 hour and will explore what students know about how climate change is affecting their locality.



As a result of participating in this session, students will be able to:

- **CREATE** a series of questions about climate change within local areas.
- **APPLY** knowledge of the local area, extreme weather and climate change to an exam-style question.

Curriculum Links

Key-Stage 3 Geography

Human and Physical Geography

- Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in:
 - Physical geography relating to geological timescales and plate tectonics; rocks, weathering and soils; weather and climate, including the change in climate from the Ice Age to the present; and glaciation, hydrology and coasts.
 - Human geography relating to population and urbanisation; international development; economic activity in the primary, secondary, tertiary and quaternary sectors; and the use of natural resources.
- Understand how human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on the effective functioning of natural systems.

Key-Stage 3 Science

- Ask questions and develop a line of enquiry based on observations of the real-world, alongside prior knowledge and experience.
- The production of carbon dioxide by human activity and the impact on climate.

Lesson Resources:

Climate Central | Land below 9.6 meters of water



Thank you for incorporating our resources into your teaching. Your feedback is valuable to us as we strive to improve and enhance our materials. We kindly ask that you take a few moments to complete the online feedback questionnaire. Your insights and suggestions will help us better support you and your students in the future.

10 mins

Introduction:

Drawing upon previous lessons and wider experience, students should work in pairs to suggest ways in which a changing climate could affect the Wigan and Leigh area over the next 25 years.

Take feedback and draw out ideas such as:

- rising water levels
- extreme storms
- higher temperatures
- disrupted food supplies as agriculture in other parts of the world is affected
- wildfires

15 mins

Starter:

Take the ideas developed in the introduction task and allocate one per group of around four students. Each group should, as far as possible, have a different idea to work on. Ask the groups to develop their response in more detail. This may well require students to do some research and find out more. They should work towards developing three bullet points, which they should then display on something like a large dry wipe board or A3 sheet of paper so that it is clearly readable from a distance. They should also leave space for other ideas to be added.

15 mins

Main Task 1:

The ideas developed in the starter task should be put on display around the room. One member of the group should stay with the work to add more ideas but other students should go round the room, looking at each other group's work and suggesting additional ideas about the impact of the changes.

10 mins

Main Task 2:

Introduce the idea that it isn't only what is happening in the immediate area that will affect people living in Wigan and Leigh.

Use the <u>Climate Central</u> map function to show the effect of rising sea levels. This will show that, unlike some parts of the UK, the area around Wigan would still be above sea level, even if there was a significant rise. Ask students to suggest why there would still be clear implications for the area though.

Draw out ideas such as:

- displaced people from other areas
- negative impact on agricultural areas
- disruption to critical infrastructure in areas such as London
- Encourage lower-ability students to design a Climate Change Warning Poster for display in public areas like schools, libraries, and sport centres. The A4 poster should illustrate the potential impact of climate change on our surroundings and emphasise how simple actions by everyone can contribute to the solution.

15 mins

Plenary:

Ask students to consider key points from this lesson and return to the overarching question about how climate change will affect the area.

Ask students to write down three key ideas they have learned from the work they have done and take sample responses.



