

### KS3 Weather and climate

#### Specification Links

##### England National Curriculum KS3

##### KS3 Geography

1. Statutory guidance - To collect, analyse and communicate with a range of data gathered through experiences of fieldwork that deepen their understanding of geographical processes.
2. To understand how human and physical processes interact to influence, and change landscapes, environments and the climate.
3. To use fieldwork in contrasting locations to collect, analyse and draw conclusions from geographical data, using multiple sources of increasingly complex information.

##### Northern Ireland KS3

Environment and Society, Geography, Develop enquiry and fieldwork skills.

##### Scotland National 3

1. Physical Environments - Use mapping skills in geographical contexts in the United Kingdom
2. Gain basic knowledge and understanding, of landscape types and weather in the United Kingdom
3. Global Issues 3-08a —Use numerical or graphical information in the context of global geographical/ environmental issues (Climate change)

##### Wales National Curriculum KS3

##### KS3 Geography

1. Understanding places, environments and people - explain how and why places and environments change and identify trends and future implications, e.g. climate change.
2. Carry out - fieldwork to observe and investigate real places and processes
3. Investigating - analyse and evaluate ideas and evidence, answer questions and justify conclusions, e.g. analyse trends over time, evaluate causes and effects.

## Pre-lesson

Pre-lesson activities include:

1. Weather vs Climate
2. Human Influences on Climate Change
3. Create Your Own Weather Station

Please encourage your students to have printed a copy of the Live Lesson recording sheet. This will enable students to participate fully in the live lesson.

Please visit <https://encounteredu.com/cpd> for guidance on using these Live Lessons and Teacher Resources during school closures.



### During the live lesson

During this live lesson we will learn about the concepts of weather and climate. We will observe the equipment used to collect real world weather data and discuss the importance of accurate data for forecasting. Students will leave with the knowledge and skills to record the weather at home, keeping this information as a weather diary.

#### Location information

The live lesson will take place from FSC Rhyd y Creuau in Snowdonia, North Wales.

Drone footage of FSC Rhyd y Creuau can be used to explore the surrounding area, landuse and specific features of this location.

<https://www.youtube.com/watch?v=XtrW8KVO7RY>

FSC Rhyd y Creuau's Registered Weather collects data and uploads it to the Met Office Weather Observation Website.

<https://wow.metoffice.gov.uk>

Search for FSC Rhyd y Creuau (\*note, you'll need to select "Registered sites" in the Filter Tab)

### Post-lesson webinar

A follow-up webinar for teachers will explore ideas and strategies to continue to support student's learning on Weather and Climate. This will include supporting students to complete the Citizen Science project, and strategies and teaching resources to support students to analyse a big data set considering any spatial and temporal patterns.

### Additional resources

Investigate historic weather data for your nearest long-term weather station  
[www.metoffice.gov.uk/research/climate/maps-and-data/historic-station-data](http://www.metoffice.gov.uk/research/climate/maps-and-data/historic-station-data)

Case Study of a school's weather station  
[www.geography.org.uk/teaching-resources/case-study-of-a-school-weather-station](http://www.geography.org.uk/teaching-resources/case-study-of-a-school-weather-station)

Water Explorer Education Programme  
[www.geography.org.uk/teaching-resources/water-explorer](http://www.geography.org.uk/teaching-resources/water-explorer)

