

**A Shifting Climate Needs Sharper Thinking:  
A Unit of 2 Lessons focusing on Climate Change Information and Critical Thinking (Foundation  
and Advanced Levels)  
Progression Step 4 in Wales (Geography)**

**Introduction**

This programme develops transferable evidence-evaluation skills required across Science, Geography, English, and Humanities curricula in all UK nations.

This unit develops transferable evidence-evaluation and media-literacy skills required across Citizenship, English, Science and Humanities in all UK secondary curricula, using climate examples as structured case studies.

As such, the programme functions as a cross-curricular reasoning module that can be delivered within Science, Geography, English, Citizenship, or broader interdisciplinary provision.

## Purpose of the programme

This two-lesson Progression Step 4 unit develops students' ability to interpret information, evaluate claims, and justify decisions using evidence. Climate change is used as a real-world context, but the core aim is to strengthen transferable reasoning skills needed across the curriculum.

The unit teaches students to:

- identify what information is claiming
- recognise evidence and missing information
- interpret graphs and data correctly
- evaluate sources and expertise
- recognise persuasive language
- justify decisions using evidence

These skills support learning in multiple subject areas and align with national curriculum expectations in all UK jurisdictions.

## Delivery requirements

- two standard Progression Step 4 lessons
- no specialist subject knowledge required beyond basic climate awareness
- group discussion-based
- minimal written workload
- ready-to-use student worksheet

The programme is designed for straightforward classroom delivery without additional resources.

## Expected student outcomes

After completing the unit, students should be able to:

- apply a structured method to test reliability of information
- interpret graphs and claims with greater accuracy
- recognise when important information is missing
- justify decisions using evidence
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These competencies transfer directly to GCSE study in multiple subjects.

## Implementation flexibility

The programme can be used:

- once per Progression Step 4 cohort
- as part of a broader climate education strand
- as an introduction to evidence evaluation skills
- as preparation for GCSE analytical work

No ongoing timetable commitment is required beyond the two lessons.

### **Curriculum positioning**

This programme is not designed to sit within a single subject. It supports core analytical competencies already required across:

- Science
- Geography
- English
- Mathematics
- Citizenship/Humanities/Modern Studies

It may be delivered:

- within Geography
- within in Science
- within English
- as part of literacy across the curriculum
- as an interdisciplinary Progression Step 4 enrichment module
- during PSHE / tutor curriculum / project weeks

Schools may place ownership where most convenient operationally.

### **Direct Curriculum Mapping to Geography (Humanities Area of Learning and Experience) if taught here**

Requires:

- engaging with the most important issues facing humanity
- different methods of enquire and evaluating evidence

What Matters statements include:

- interpreting information
- evaluation on a range of evidence and sources
- critical thinking
- informed decision making
- understanding of the interrelationships between human and natural world

### **Cross-Departmental Justification**

To explain why and highlight where subjects other than Geography can be involved in the teaching of this resource.

#### **Subject contributions:**

##### **Science**

Supports:

- working scientifically
- interpreting data and graphs
- evaluating evidence
- understanding reliability of claims

Students practise distinguishing evidence from assertion and recognising limits of data.

## Geography

Supports:

- analysing environmental information
- evaluating sources
- interpreting climate-related data
- considering consequences of environmental decisions

Students apply geographic reasoning to real-world environmental claims.

## English

Supports:

- critical reading
- analysing persuasive language
- distinguishing fact from opinion
- evaluating argument structure

Students practise identifying how language shapes interpretation.

## Mathematics

Supports:

- interpreting graphical data
- understanding trends
- recognising misleading statistical presentation

Students learn how scale, timeframe, and representation affect conclusions.

Supports:

- evaluating public claims
- considering consequences of decisions
- understanding information used in public debate

Students discuss how unreliable information can influence real-world outcomes.

## Inspection and school improvement relevance

The programme directly supports:

- disciplinary literacy across subjects
- evidence-based reasoning
- student ability to interpret complex information
- preparation for GCSE analytical requirements

It also strengthens students' ability to evaluate information encountered online and in media, supporting whole-school priorities for digital and information literacy.