



Scotland's Hills: Stimulating Pupil's Creativity

Celebrate Scotland's rich and diverse landscape and explore creative ways of thinking with this research-based group activity.

By researching the Scottish landscape with a focus on many geologically inspiring areas of your pupils choosing (we have suggested a few areas with associated resources to get you going) your pupils can let their imaginations run free, finding creative and innovative ways of communicating their findings to the rest of the class.

Your pupils could choose to impart their new found knowledge in the form of a news report 'live from the scene of the action', or maybe they could communicate through music, drama or storytelling.

Why not film the results to encourage peer and self assessment within your class?

At a glance, you will need:

- ITC equipment (if available) or other suitable props
- Access to the internet, books or leaflets (we have a number of suggestions to get you started!)

Workshop	Activity	Pre/Post	Suggested CfE level
Restless Earth	Scotland's Hills: Stimulating Pupils Creativity	Post	Second/Third/Fourth

Learning Intention

We are learning about Scotland's rich and diverse landscape.
 We are learning to present to an audience effectively.
 We are learning to research a specific subject.

Task

We are going to research the formation of one of Scotland's geologically inspiring regions and deliver this information in an informed, creative and effective manner.



Success Criteria

- Through group delivery, pupils will be able to demonstrate an understanding of how and why different landscape features have developed in Scotland.
- Pupils will gain a greater appreciation of Scotland's rich and diverse landscape.
- Pupils will gain valuable experience of delivering an activity to an audience, speaking clearly and using good eye contact.
- Pupils will gain skills in accessing and discriminating information.

Evidence ideas:

- Peer assessment marking sheet including 'best bits' and 'ideas for improvement' sections.
- Peer and self assessment through recording their productions and analysing their own and other group activities.

CfE Capacities

Successful learners:

- with enthusiasm and motivation for learning resulting from directing their own discovery, able to use literacy and communication skills, technology for learning and creative thinking

Confident individuals:

- with self respect and able to achieve success in an unusual area of activity

Responsible citizens:

- with respect for others and able to develop knowledge and understanding of the world and Scotland's place in it

Effective contributors:

- with an enterprising attitude and able to communicate in different ways and in different settings able to work in partnership and in teams

CfE Outcomes

Social Studies - People, place and environment

I can describe the major characteristic features of Scotland's landscape and explain how these were formed. SOC 2-07a

Having investigated processes which form and shape landscapes I can explain their impact on selected landscapes in Scotland, Europe and beyond. SOC 3-07a

I can explain how the interaction of physical systems shaped and continue to shape the Earth's surface by assessing their impact on contrasting landscape types. SOC 4-07a

Literacy and English – Listening and talking (Tools for listening and talking)

When I engage with others, I can respond in ways appropriate to my role, show that I value others' contributions and use these to build on thinking. LIT 2-02a

I can select ideas and relevant information, organize these in an appropriate way for my purpose and use suitable vocabulary for my audience. LIT 2-06a

Literacy and English – Listening and talking (Creating texts)

I am developing confidence when engaging with others within and beyond my place of learning. I can communicate in a clear, expressive way and I am learning to select and organize resources independently. LIT 2-10A/LIT 3-10a

When listening and talking with others for different purposes, I can:

- *communicate information, ideas or opinions*
- *explain processes, concepts or ideas*



- *identify issues raised, summarise findings or draw conclusions*

LIT 3-09a

When listening and talking with others for different purposes, I can:

- *communicate detailed information, ideas or opinions*
- *explain processes, concepts or ideas with some relevant supporting detail*
- *sum up ideas, issues, findings or conclusions*

LIT 4-09a

Literacy and English – Listening and talking (Finding and using information)

I can independently select ideas and relevant information for different purposes, organise essential information or ideas and any supporting detail in a logical order, and use suitable vocabulary to communicate effectively with my audience. LIT 3-06a / LIT 4-06a

Description

Working in groups, pupils will select a geologically inspiring location in Scotland to research.

We have suggested a few locations in the 'resources' section below to help get you started, there are some great online resources as well as some booklets we think are really useful.

Pupils should aim to discover how their chosen location was formed, what it used to look like in the distant past and also consider what has shaped the Scottish landscape since.

Once pupils have researched their chosen area in their groups, pupils are tasked with delivering their findings to the rest of the class. Method and type of delivery could be left to the pupils' discretion. Pupils may opt for a more traditional method of delivery using ITC ie powerpoint and/or smartboards when available to them. However maybe a few other options could be suggested at the beginning.

Maybe the pupils could report 'live from the scene of the action' as if reporting for the BBC! Transporting themselves back in time 360 million years ago for example they could describe the eruption of Arthurs Seat complete with eye witness accounts. Forward in time to 20,000 years ago and Edinburgh and much of Arthurs Seat would have been covered in great sheets of ice scouring the landscape to give us the shape of Edinburgh as we know it today. Of course a considerable degree of dramatic license is allowed here, no humans being around all those many millions of years ago! It is however the process of research and the factual information conveyed about the eruption and the processes behind it that is of most import.

Pupils may want to actively involve the rest of the class in their research creatively copying the format of the quiz show 'who wants to be a millionaire'. Members of the group could act out the part of quizmaster and contestants with active class participation through an 'ask the audience' component.

Other productions could include a drama based demonstration of, for example, the closure if the Iapetus Ocean and the crashing together of Scotland and England producing the highlands and Southern Uplands. Craft and experiments could be incorporated as a support to the productions (see 3D volcano activity).

At the end of the pupil productions peer review could take place with pupils offering structured feedback on the other groups work. We would recommend an approach where groups are offered 2 pieces of good feedback for every suggestion of improvement.

Self evaluation could be encouraged through the use of videoing the productions – but be warned; this can be a very noisy exercise!

Resources

General Information:

<http://www.snh.org.uk/publications/on-line/geology/scotland/default.asp>

This is an excellent site covering the natural formation of Scotland's landscape from its early beginnings in the southern hemisphere, through its journey to the equator and finally to it's current position today. While



text orientated, it is accessibly written and will provide great background information for you and your pupils; some of the concepts covered may require further discussion for younger pupils though.

www.scottishgeology.com/findoutmore/publications/publications.html

This website will link you directly to a fabulous range of booklets covering Scotland's geological area by area. With 16 areas to choose from covering many areas from 'Rum and the Small Isles' to 'Edinburgh and the Lothian's', 'The Outer Hebrides' and 'The Parallel Roads of Glen Roy'. The booklets are nicely illustrated and explain how our countryside was shaped over an enormous span of geological time. These booklets are particularly useful in that they relate familiar views of the landscape to the rocks beneath, great if you are looking into a local site. The series has been produced jointly by Scottish Natural Heritage and the British Geological Survey. Booklets cost from £2.00.

More specific locations:

The Cuillin hills on Skye

<http://en.wikipedia.org/wiki/Cuillin>

<http://www.virtualhebrides.com/gallery/cuillins/>

<http://www.scottishgeology.com>

The Cairngorm Mountains

<http://www.fettes.com/cairngorms/granite.htm>

<http://www.scottishgeology.com>

Arthur's seat and Edinburgh's hills

<http://www.geo.ed.ac.uk/arthurseat/geology/geology.html>

<http://www.geowalks.demon.co.uk/iarthur.html>

<http://www.scottishgeology.com>

The mountains of north Arran

<http://www.castlekirk.co.uk/arran.html>

<http://www.scottishgeology.com>

<http://www.snh.org.uk/publications/on-line/geology/arran/default.asp>

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