

HOW HAS THE LANDSCAPE IN ERYRI BEEN SHAPED BY SLATE?

SUPPORT MATERIALS

If you need further support on specific aspects of outdoor learning these materials can enhance the engaging experiences you are providing. They can support you as you design, plan and implement your curriculum. Outdoor learning is a great way to develop learners' integral skills (creativity and innovation, critical thinking and problem-solving, personal effectiveness, planning and organising). You will want to focus on why learning matters and ensure you are meeting your learners' needs.

These materials show a path that could be taken through the activity. This is not meant to be prescriptive. You should adapt your approach depending on your learners' needs and interests and your local area.

OVERVIEW

Learners explore slate as a material, looking at its properties and uses. They find out about how slate was quarried historically and consider the harsh working conditions in the 19th Century and child labour. Learners produce a video about the everyday life of a child during this time before considering child labour across the world today. They study the demise of the slate industry and how the industry has impacted on the landscape of Eryri. Finding out about regeneration of landscapes, learners think about how the slate landscape of Eryri could have been regenerated differently. They use the UNESCO quote of 'combined works of nature and of man' describing the Eryri landscape to produce an exhibition of photographs that demonstrate the quote. Finally, they assess the value of slate quarrying.

CURRICULUM FOR WALES

Areas explored:

- Expressive Arts
- Health and Well-being
- Humanities
- Languages, Literacy and Communication
- Science and Technology

Activity also incorporates aspects of cross-curricular skills outlined in the LNF and DCF.

RESOURCES



Internet enabled device and internet access.

Means of recording video, e.g. smart phones, tablets, video cameras.

Access to [Find out what every symbol means on an OS Explorer map - OS GetOutside](#).

Means of taking photographs, e.g. cameras, smart phones, tablets, etc.

DOING THE ACTIVITY



- Most tasks require learners to work in pairs or groups.
- Encourage learners to share their ideas, and through open questioning, explain and justify their ideas when possible. Focus questions have been suggested to guide learners through the tasks.
- Some tasks might be more effective if pairs or groups of learners have access to an internet enabled device.
- When taking learners outdoors, it is essential that the [Countryside Code](#) is adhered to and any relevant risk assessments have been carried out with risks mitigated.

TASK 1

WHAT IS SLATE?

Explain to learners that they will look at slate, its properties and uses.

Screen 3

Take learners outside to find a piece of slate.

Screen 4

Ask learners to discuss the questions posed.

Focus questions

- What does the slate look like?
- What does the slate feel like?
- If you had to describe slate to someone who cannot see, what adjectives would you use? List them in the box.

Screen 5

Invite learners to share their adjectives with others. Then, to review them to add any they thought described slate well from others.

Screen 6

Ask learners to use their adjectives to write an acrostic poem about slate. A grid is given onscreen.

Screen 7

This screen lists the properties of slate.

Screen 8

Invite learners to try to complete the table to show how we use the properties of slate to make items. Some items will link with more than one property.

TASK 2

LOOKING BACK AT SLATE

Explain to learners that they will find out about the harsh working conditions in the 19th Century before considering child labour.

Screen 3

Explain to learners that people have been quarrying slate in north Wales for over 1,800 years and then to read the rest of the text.

Screen 4

This screen explains how the slate industry's boom time links with the start of the Industrial Revolution in the 18th Century. Ask learners to discuss the questions posed.

Focus questions

- Why do you think...
 - o the Industrial revolution started in the 18th Century
 - o people worked in mills, factories and foundries rather than working from home
 - o new houses were needed near mills, factories and foundries?

Screen 5

This screen describes how slate became one of Wales's most important industries.

Screen 6

Here historical information about how slate was extracted is given. Ask learners to discuss the questions posed.

Focus questions

- What do you think conditions were like for the workers?
- If you had to do one of the roles given above, which would you choose? Why?

Screen 7

This screen gives an extract from *The Age of Slate*, by Michael Burn, about historical work in a slate quarry. Ask learners to discuss the questions posed.

Focus questions

- How would you feel if this was your daily life?
- Why do you think children had to work in the quarries?
- What do you think about children working?

Screen 8

Text onscreen describes the difficult working conditions in the 19th Century, and references child labour.

Inform learners that they are going to research online to find out more about child labour during the 19th Century and produce a two-minute video about the everyday life of a child at that time.

Screen 9

To prepare for their research, ask learners to discuss the questions posed.

Focus questions

- Where will you search for information and why?
- What search techniques might you need to use? Why do you think that?
- How will you evaluate the reliability of the information you find? Why do it like this?
- How will you link to your sources of evidence within the document? Why do it like this? How else could you do it?

Screen 10

Inform learners that members of each group will need to collaborate to produce their video. Ask learners to discuss the questions posed.

Focus questions

- Who is going to do what in your group? Why?
- Are you going to work in pairs or threes or individually? Why?
- How are you going to record what you find out? Why do it this way?
- How are you going to share your research findings with others? Could this be done digitally? If so, how?
- How are you going to film your video? Who is going to film it?
- How will you write a script for your video – in pairs, threes or an individual?
- Who is going to act in your video? Why?

Then, invite learners to carry out their research and produce their video.

Screen 11

Ask learners to share their video with the class, and ask them to feedback on:

- How well the video reflected their own research findings.
- How well the video showed the everyday life of a working child in the 19th Century.
- One or two ideas that could have improved the video.

Screen 12

Invite learners to use two or more of the reflective sentence starters to reflect on making the video.

Screen 13

Show the video: [Child labour rises globally for the first time in decades](#) (about 2 minutes). Then, ask learners to discuss the questions posed.

Focus questions

- What surprised/shocked you about the video?
- Why do you think child labour has risen?
- What do you think of the projects to ensure children still go to school? Would you like to be part of one of these types of projects? Why?
- What else do you think we should do about child labour? Why?

TASK 3

WHAT HAPPENED TO THE SLATE QUARRIES?

Explain to learners that they will consider how the slate industry became much less important and the ways in which the landscape has changed because of the industry.

Screen 3

The screen gives details of the demise of the slate industry. Ask learners to read the text and answer the question posed.

Focus question

- Why did each of these factors help to end the dominance of north Wales as a slate producer?

Screen 4

Show the video: [Eryri 70](#) (about two and a half minutes), then to discuss the questions posed.

Focus questions

- How has Eryri changed over 70 years?
- What is the same after 70 years? Why do you think these things are the same?
- Do you think more things should have changed? If so, what are these things?

Screen 5

Explain to learners that slate rock that was not good enough to be split and trimmed into roofing slate would be discarded, forming huge waste rubble tips. For every 1 tonne of slate quarried, up to 9 tonnes of rubble was discarded. Ask learners to discuss the questions posed.

Focus questions

- Where on the photograph can you see waste tips?
- What has happened to the waste tips over time?
- How could this area be regenerated?
- What could be built on it? Why do you think that?
- Why might building on it be a problem? Why do you think that?
- What changes could be made to benefit the environment? How would this be a benefit?
- What changes would you want if you lived locally? Why?

Screen 6

Inform learners that Ffos-y-Fran, the last opencast coal mine in Wales closed in 2023. When this happens, the site is usually restored. Ask them to discuss the questions posed.

Focus questions

- Do you think it is important to restore sites such as this? Why?
- What would you do to restore this site? Why?
- Why do you think there was so little restoration of the landscape after the slate quarries closed? Should this have happened? Why?
- What do you think the landscape looked like before the slate industry? Why?

Screen 7

Explain to learners that the UK needs more trees and that woodland cover needs to increase from 13% to 19% by 2050 to reach our national carbon net zero commitment. Despite planting millions of native trees yearly, allowing nature to take its course is also an effective and efficient method of increasing ground cover. Natural regeneration is the process by which trees, shrubs and annual plants self-seed and spread. Given the right conditions, most plants are very good at it. Invite learners to discuss the questions posed.

Focus questions

Why do you think that...

- the Climate Change Committee has said that woodland cover in the UK must increase
- our national carbon net zero goal is important
- trees provide ground cover
- ground cover helps other plants and animals
- trees are good at natural regeneration.

Screen 8

Ask learners to watch the video that shows natural regeneration.

Screen 9

Explain to learners that assisted natural regeneration is when plants are helped to provide more ground cover. This is usually done by local people who eliminate barriers and threats to plants' growth, using their knowledge of the land and ancestral traditions.

Assisted natural regeneration in Wales includes the restoration of ancient temperate rainforests at Bryn Ifan, Gwynedd. The North Wales Wildlife Trust will plant 40 hectares of rainforest. It will use native planting and assist natural regeneration. While some areas will be dedicated to nature-friendly farming, conservationists will also improve nearby wetlands to help the marsh fritillary butterfly. Tree species will include oak, birch and alder, and the area will be managed by conservation grazing. Ask them to discuss the questions posed.

Focus questions

- How could we use natural regeneration to restore more of Eryri's industrial landscape?
- Should we restore more of Eryri's industrial landscape? If so, how?

Screen 10

This screen gives text for learners to read about the slate landscape of north-west Wales being awarded World Heritage status by UNESCO, in 2021.

Screen 11

Inform learners that they are going to produce an exhibition of photographs of Eryri's industrial landscape. The exhibition will illustrate, in a dramatic way, the 'combined works of nature and of man' through exploiting slate.

Show the video: [The slate landscape, north Wales](#) (just over 6 minutes). Ask learners to discuss the questions posed.

Focus questions

- What preparation did Roger do before starting to take these photographs?
- What tips can you take from Roger as to how to take photographs? List as many tips as you can.



Screen 12

Ask each group to plan how they will produce their exhibition, by discussing:

- What types of things do you want to take photographs of? Why?
- Where will you go to take your photographs? Use the map to help you decide.
- What will you use to take your photographs? Why?
- Which of Roger's tips can you use to take good photographs?

Screen 13

Take learners outside to take photographs for their exhibition.

Screen 14

Ask each group to select five of their best photographs. Then, to share these photographs with others and ask for their opinion on:

- How well does each photograph illustrate, in a dramatic way, the 'combined works of nature and of man' through exploiting slate?

Finally, ask each group to select their final photographs and put on their exhibition.

Screen 15

Invite learners to use a PMI diagram to look at the positives, minuses and interesting points of slate quarrying.

Screen 16

Ask learners to look at their minus ideas and discuss with the group:

- How can each minus idea be overcome? What would we need to do?