

**East Renfrewshire Council: Education Department
Practitioner Moderation Template**



Prior to the moderation exercise, please complete the following information and submit it to your facilitator with assessment evidence from one learner that you judge to have successfully attained the Es' and Os'.

Experiences and Outcomes:

Soc 2-07a I can describe the physical processes of a natural disaster and discuss its impact on people and the landscape.

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

Soc 4-07a I can explain how the interaction of physical systems shaped and continue to shape the Earths surface by assessing their impact on contrasting land scape types.

Learning Intentions:

- To understand the cause of earthquakes.
- To understand the impacts of earthquakes on people and the landscape.
- To understand the methods to limit the impact of earthquakes.

Success Criteria:

- I can explain the cause of the earthquake with reference to plate movements.
- I can describe in detail the impact of the earthquake on the people and the landscape.
- I can describe the methods used to limit the impact of the earthquake.
- I can present and organise information clearly in a poster.

Briefly outline the context and range of quality learning experiences that have been provided making reference to the chosen design principles.

- In previous lessons pupils developed their understanding of the structure of the earth (information hunt)
- Pupils learnt about the different types of plate boundaries. (video, models playdough, worksheet task)and the distribution of earthquakes throughout the world.
- Pupils gained an understanding of how earthquakes occur, terminology, how to measure earthquakes.
- Pupils learnt about the impacts of earthquakes (game, video, photographs)
- Pupils learnt about the role of aid –sorting exercise and a decision making task on priority of different types of aid.
- Pupils learnt how to minimise impact of earthquakes –group task plan a disaster kit, build earthquake proof building.
- Pupils carried out individual research in the computer room and at home to gather facts and figures for their poster

Record the range of assessment evidence that was gathered to meet the success criteria (Say, Write, Make, and Do) considering breadth, challenge and application.

- **Say** I can say what went well with the poster and how I can improve.
- **Write** – I can select the most important points for the poster, use headings and diagrams.
- **Make** – I can make an information poster using a success criteria grid. 3 levels given and they can work to the level they are capable of.
- **Do** – I can research facts and figures about my chosen earthquake.

Briefly outline the oral/written feedback given to the pupil on progress and next steps, referring to the learning intention and success criteria.

S2 pupil profile booklet- Pupils have the success criteria and E and O related to the task and the teacher marks if it has been achieved or not. Also given written feedback from teacher.

There is also a teacher comment box and pupil comment box.

Pupils also record the skills they have learnt in the unit.

Pupil Voice:

What have you learned? How did you learn? What skills have you developed?

The profile contains the success criteria expected however there is class discussion first on what makes a good poster and what information should be included.

The success criteria go up in level to develop higher order learning.

Teacher comment and pupil comment box to reflect on task and how to improve.

Pupils also record the skills they have learnt in the unit in their profile booklet.

Did the learner successfully attain the outcomes? YES/NO

Yes

Aiysha

S1 Research Homework



As part of our planet Earth documentaries you need to find out about living things in your climate zone.

For homework you should find out about at least one plant and one animal.

To prepare, think in groups about what type of information might be useful. Make headings in the boxes below to help you structure your research at home. You can use books, TV programmes or the internet to help.

Climate Zone Chosen:

Plant

- Arctic Moss

one of the few plants in the tundra.

It is the slowest growing, longest living freshwater macrophyte ever recorded. Adapt well to climate by storing nutrients.

- Bearberry

Bearberry is a family member of the dwarf shrubs and have adapted to the tundra climate. It is low growing and evergreen.

Animal

- Snowy Owl

The Snowy owl is circumpolar. They feed on small rodents and build their nests on high ground. Their life span is 9.5 years. They are diurnal.

- Polar Bears

largest land carnivores and are marine mammals. They have thick fur and are good swimmers. Found in arctic.

S1 Climate Zone – Planet Earth

As part of our next task we will be making documentaries on the different climate zones we have studied in class.

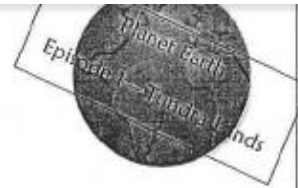
To help you prepare, you should research and make notes on the topics in the table.

You can use sources such as books, TV programmes or the internet. You may find the following web-sites useful to get you started. If you need to use the internet at school, just speak to your teacher. If searching, use phrases like 'tundra for kids'

http://www.ducksters.com/science/ecosystems/tundra_biome.php

<http://kids.nceas.ucsb.edu/biomes/tundra.html>

<https://www.reference.com/science/major-threat-tundra-biome-c652ed0345405617>



Climate	Landscape
<p>What is the climate like in the tundra? Describe the summers and winters.</p> <ul style="list-style-type: none"> • The climate in the tundra is cold and dry all year round. • In the tundra the winter lasts eight months • Winter temperatures never reach over -6 and 6-10 inches of rainfall. • There is permafrost in the tundra. Sun barely rises 	<p>Describe the landscape in the tundra - what can you see as you look around?</p> <ul style="list-style-type: none"> • The Tundra is mostly cold and frozen ground. • There is also permafrost • People travel on dogs and sleds. • houses are on stilts • ground is freshwater frozen as ice • The tundra's landscape is broken into 3 distinct zones
Living Things	The Future
<p>What types of plants and animals might I find in the tundra? Research at least one of each and explain how it survives.</p> <p>Arctic Moss is one of the few plants in the tundra slowest growing, longest living freshwater macrophyte</p> <p>Bearberry is also slow growing and evergreen</p> <p>Polar Bears are the largest land carnivores, they are found in the arctic</p> <p>The snowy owl is circumpolar</p>	<p>Why is the tundra under threat? What impacts will this have on the people living there?</p> <ul style="list-style-type: none"> • The tundra is slowly melting due to climate change and global warming. • This means a loss of habitat to some animals • Exploration of oil/gas cause habitat fragmentation • Oil spills are damaging the tundra's ecosystem



...Planet Earth Documentary - Script...



Your task is to prepare a script for a news report on the ^{Tundra} rainforest. You need to prepare each section, and then we will collate the best ideas for each group and film them!

When writing your script, you should refer to the success criteria for each level in your jotter.

- | | |
|---|---|
| ① | Introduction – Describe the climate – use figures for temperatures and precipitation. Talk about seasons if appropriate. |
| ★ | Hi Today we are going to talk about the Tundra. We will cover many aspects of the tundra such as climate, landscape, living things and the future. First of all I am going to tell you about the climate. The climate in the tundra is extremely cold and dry it's always freezing and it rarely goes over 6°C. The winter lasts for about eight months. They don't really have seasons but you get summer for 6-10 weeks. In the tundra you get 6-10 inches of precipitation. The sun barely rises over there. |
| ② | Describe the landscape – what can you see around you – use 'wow' words. |
| | We are now going to talk about the landscape. The ground is mostly frozen in permafrost. The tundra's landscape is broken into three distinct zones. The ice is made up of frozen freshwater. Traveling in the tundra so that's why they use dogs and sleds. The houses in the tundra are on stilts so the heat won't melt the permafrost. A lot of the world's water is frozen as ice in the arctic and you won't find many people there. |
| ③ | Describe the living things – at least one plant and one animal, and explain how they survive |
| | Let's talk about the living things in the tundra. There are many animals in the tundra but few plants. Many polar bears live in the arctic but none in Antarctica. Did you know that they are the largest land carnivores in the world? And they have white fur to blend in the ice and snow. They are good at catching fish because they can swim well. You can find Arctic moss in the tundra. It is the slowest growing ever and it can store nutrients. The colour is green. |
| ④ | Why is the area under threat? How will this impact the people who live there (level 4 only) |
| | The last thing we are going to talk about is the future. The tundra is slowly melting due to global warming and because of this many animals will lose their habitat and it will also cause floods. Exploration of oil, gas and minerals are also causing habitat fragmentation. Oil spills can cause major damage to the tundra's ecosystem. People who live there will soon have to move. |

Everest 1953!

S2 Geography - Earthquakes

Experiences and Outcomes	Activities	Success Criteria	Not yet achieved	Achieved
Soc 2-07b I can describe the physical processes of a natural disaster and discuss its impact on people and the landscape.	Produce an information poster on an earthquake	You will be able to: <ul style="list-style-type: none"> • Make general reference to plates. • Describe general impacts of earthquakes. 		✓ ✓
Experience and Outcome achieved?				
Soc 3-07a Having investigated processes which form and shape landscapes I can explain their impact on selected landscapes in Scotland, Europe and beyond.	Produce an information poster on an earthquake	You will be able to do all of the above, plus: <ul style="list-style-type: none"> • A basic explanation of the cause of earthquakes. • Make reference to different plate boundary types and World distribution of earthquakes. • Describe in detail the impacts of a named earthquake on the people and the landscape. 		✓ ✓ ✓
Experience and Outcome achieved?				
Soc 4-07a 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.	Produce an information poster on an earthquake	You will be able to do all of the above, plus: <ul style="list-style-type: none"> • Explain the cause of a named earthquake in detail, actual named plates. • Refer to focus, epicentre, geology, distance from sea, susceptible to other hazards (hurricanes, tsunamis) • Types of plate boundaries are explained and the processes at each type of plate boundary. • Impacts on the landscape / people in a ELDC and MEDC. • Suggest ways to limit the impact of an earthquake. 		✓ ✓ ✓ ✓ ✓ ✓
Experience and Outcome achieved?				

Teacher comment: A fantastic poster! Very detailed information on the cause of the Haiti earthquake. You have a sound understanding of the different plate boundaries. You have provided very detailed facts and figures on impacts and the role of Aid. Well done! Great effort

Pupil comment: I satisfied with my work and it justifies all the hard work I have done.

Haiti Earthquake

Prevention * ETO suggest ways to limit the impact of an earthquake

Soc 4-07a

To prevent or limit an earthquake's destructibility, you can follow key well planned procedures and plans such as:

- earthquake proof structures
- earthquake proofing system created to get into open space under a table
- have emergency services or stand by
- try to have an early earthquake warning system

ERO Explain cause in detail

The cause of this earthquake was due to the North American Plate sliding past the Caribbean plate on a conservative plate margin. SOC 4-07a

Both of them move in the same direction but only if there was more friction than the other. The pressure was built up because of friction between the 2 plates was eventually released, causing a magnitude 7 earthquake on the Richter scale with the epicentre 16 miles west of Port-au-Prince and a shallow focus of 5 miles.

The earthquake struck on Tuesday 12th January 2010. * ETO impacts on the landscape/people

Effects on the people Soc 3-07a

Differences on impact on a landscape (water) or on changing society Soc 4-07a

316,000 killed

1 million made homeless

3 million affected

1 in 5 people lost their jobs in the areas because of the amount of destruction caused

250,000 homes and 30,000 other buildings destroyed

Large no. of health and emergency services and resources were full up, so they threw junks the bodies up onto the street

transport and communication was broken

main power was destroyed and 4,000 minutes escaped

People separated into shanty towns and the streets looking like a poor satellite

lost health, and other things

Developed Countries	Developing Countries
- Healthy built buildings	- Poor built buildings
- Viable emergency services	- Reliable emergency services
- Low speed of disaster	- Emergency water supply and electricity supplies as less out of date
- Less chance to die when help arrives	- No power within 48 hours

Impact on the landscape Soc 3-07a

even before the earthquake, Haiti had major problems because since the 1980s, when there was 60% of their country in debt, it reduced to less than 2% per cent today

after the earthquake water-borne illness ran rampant and chemicals and cars could leak out of the damaged storage facilities due to the school disaster, but surprisingly no spillages have been reported.

back-filled beaches, freshly overflowing, rivers of dead fish and homes of floating debris now stand testament to Haiti's water pollution issues, many exacerbated by the earthquake

before the earthquake Haiti had committed a 2 year project to restore Haiti's forests, coral reefs and other natural systems

ERO Ways to limit the impact Soc 4-07a

\$430 million given by ECU and USA

810,000 people placed in aid camps

1 million people still without homes, but still in aid camps

115,000 people provided

healthcare provided to limit disease

initially, people had to try and rescue themselves

4.3 million provided with food rations

Seismograph (one of the pieces of equipment that measures the magnitude of the earthquake)

Types of Plate Boundaries * ETO Types of plate boundaries explained

Soc 4-07a

- Sliding plates (conservative margin) - Sliding plates can join two plates can moving/sliding past each other or are sliding in the same direction
- Retreating plates (destructive margin) - Retreating plates are when two plates move away from each other and either require to come to the surface and become lava and / from then volcanoes
- Destructive Plates are when a heavier plate goes under a lighter plate, and as it goes down, it melts due to the heat into magma
- Collisional plate boundaries are where two parts of continental crust collide and create fold mountains, and earthquakes can happen