

In this activity students will use their essential skill of problem solving to interpret the history of a site using archaeological skills. Students will look for relationships between changing habitats and human activity, combining history and geography with STEM subject knowledge to find out how Archaeologists discover history.

Learning objectives

Students will learn how:

- Archaeological processes help us to understand how habitats change;
- To interpret archaeological data to find out how humans lived in the past and impacted on their surroundings.

Curriculum links

These objectives apply to and link to the following area of the KS3 Science 2015 programme of study:

Students should be taught about:

- Interactions and interdependency relationships in an ecosystem;
 - how organisms affect and are affected by their environment, including the accumulation of toxic materials.

In addition, these objectives apply and link to the following area of the KS3 Geography 2013 programme of study:

Students should:

• Understand how human and physical processes interact to influence and change landscapes, environments and the climate; and how human activity relies on the effective functioning of natural systems.

These objectives also apply to the following area of the KS3 History 2013 programme of study:

Students should:

• Understand the methods of historical enquiry, including how evidence is used rigorously to make historical claims, and discern how and why contrasting arguments and interpretations of the past have been constructed.

Skills Builder Essential Skills

In this activity, students will use problem solving steps 6-19.

See the Skills Builder framework (<u>www.skillsbuilder.org/universal-framework/listening</u>) for more explanation.

Inventory

For a class of 30 students you will need:

- 30 x Making History Worksheets
- 1 x Making History Teachers Notes
- 1 x Making History Presentation

Preparation

Review the presentation and presenter's notes. Decide on which content you will include in your session and adjust the timings below to suit your lesson length. This example lesson is based on a 75-minute session with a mixed ability Year 8 class



Sequence

Use the following sequence to plan this activity. You may wish to adjust the timings according to your style of delivery, group and workshop length.

Time (min)	Sequence	Instructions	Slides
5	Welcome NOOSE TO MANING INSTITUTE NOOSE TO MANING INSTITUTE NOOSE TO MANING INSTITUTE LEARNING COLUMN TO MANING INSTITUTE LEARNING COLUMN TO MANING INSTITUTE LEARNING COLUMN TO MANING INSTITUTE No Maning of maning in the local data in the local part of and part of an institute The distribution of the local data in the local part of an institute of the local part	Introduce yourself, the HS2 project and the learning objectives for the lesson.	1-2
5	Archaeology and HS2 Acchaeology and HS2 Acchaeolo	Explain the role of Archaeologists in civil engineering projects such as HS2 using the video and presentation slides. Ask students the slide discussion questions.	3
5	Pollen Analysis Introduction File Analysis Introduction File Analysis Introduction Following Control of Control Introduction Analysis Introduction Introducti	Introduce Challenge 1 using the slide.	4
20	Activity Police Analysis For the Analysis A	Students have 15 minutes to complete the activity, then mark the answers using the answer sheet.	4
5	Making History Introduction Making history Local State of the Control of the Co	Introduce Challenge 2 using the slide. Use the diagram and images on the following slide if students are unsure of what to do in the activity, and work through question a).	5-6
30	Activity Making history 10 Congress was seen instanting or on the congress of the congress o	Students have 25 minutes to complete the activity, then mark the answers using the answer sheet and slide 6	5-6



Questions

Use these questions to stimulate the students' learning during the activity:

- Why would plants from earlier succession stages not grow during the later stages?
 - For example, why might shrubs such as gorse not grow in the deciduous woodland?
- What jobs might the medieval occupants of Thermere Farm have done?
- How else might seeds arrive at each stage of succession?
- How do archaeological processes help us to understand the past?
- How did you use problem solving as an Archaeologist?
- What role does science play in understanding history?
- · What other subjects did you use knowledge from?
- Did you enjoy being an Archaeologist?

Tips and tricks

- This activity is cross-curricular and would work well in a science or humanities context. In science this lesson would fit well as an exciting new context for plant reproduction, ideally after students have studied pollination and the plant gametes.
- To make the activity easier, complete Challenge 2 question a) together as a class.
- To make the activity harder, on a separate sheet of lined paper ask students to write a complete history of the Thermere Farm site. Students should justify their answers using archaeological evidence.

Video content

You may wish to show these videos to compliment the learning from this activity.

- Animation introducing the key time periods HS2 hope to investigate through our archaeological works (3 mins): https://youtu.be/3fFPRKMXALY
- A webinar aimed at young people with members of the HS2 archaeology team talking about their job role and career path: https://youtu.be/LC1]LTbFL7g
- A YouTube playlist collection of webinars looking in detail at the archaeology in local areas along the HS2 line of route. This are not specifically aimed at young people but may provide useful information for a local study:

https://www.youtube.com/playlist?list=PLQHXGU97P0FJaql1Zsg1PfFaRTgxtltjT.

As the HS2 project develops new videos are regularly added to our You Tube channel. There may be more detailed information about your local area, or new videos uploaded since this resource was made. Check out our You Tube channel for the latest updates:

https://www.youtube.com/user/HS2ltd/videos



Answers

Challenge	Answer
1	 a) Students should describe each stage of the succession, including: The change in habitat; The change in species. Students should write in full sentences and justify their answer using pollen analysis. b) Taraxacum are an effective pioneer species because they can disperse their seed over long distances using wind. Accept any other reasonable answer.
2	 a) Beehive Quern – Iron Age Quartzite Macehead – Early Bronze Age Bone weaving shuttle - Medieval Flint blade - Late Neolithic b) Humans settled at Thermere in the late Neolithic period as this is when the earliest artefacts are from. It also coincides with a period of woodland clearance, followed by agriculture, as we see a reduction in deciduous tree pollen and an increase in grasses and grain.
	 c) The inhabitants were of high status as they possessed a quartzite macehead, a precious object symbolising high status. d) During the Iron Age, the inhabitants began farming pasture and cereals. There is a suggestion that these grains were processed into flour for making bread, due to the beehive quern found on the site during this period. This resulted in some deciduous forest clearance, and resurgence towards the end of the Iron Age. e) By the Medieval period farming of both pasture and grain had massively intensified. This continued until the end of the period, vastly reducing deciduous woodland. Some woodland was managed and retained. There is some evidence that the pasture was used to farm sheep
	for wool, as a bone weaving shuttle was found from this period. f) Pine and beech declined due to the continuing habitat succession to deciduous woodland.