

Dig into Ancient Ireland

How do we know about life in ancient times?



Archaeology and artefacts

Archaeology is the study of how people lived in the past. By carrying out excavations, archaeologists discover material remains usually referred to as artefacts. They use this evidence to create a picture of what life might have been like in early times.

Artefacts can help with dating archaeological sites. For example, we can usually tell Neolithic pottery from Bronze Age pots based on the shape and decoration. This is the same for lots of different types of artefacts, and they can all be used to help figure out what period a site belongs to.

Sometimes materials are found during excavations which can be used for radiocarbon dating. This is a cutting-edge technology which can determine an accurate age-range for organic materials, such as wood and bone.

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As well as finding out how people lived, an important aspect of archaeology is trying to investigate the landscape and climate during the past. By using a range of methods, archaeologists have built up a pretty good idea of what conditions were like. This helps us understand why and how people adapted to change over time.

Excavating with a numbered grid system is a good way to easily record where artefacts came from.



Excavation

It is important to know that an archaeological excavation isn't just 'digging for treasure'. It is a systematic process, where the aim is to gather as much information as possible. Because excavation involves the removal of material, it is a destructive process. This is why archaeologists have to be so careful and make sure that everything is recorded. You can't excavate the same thing twice!

In excavations, the layer that an artefact comes from is very important. Lower layers (and artefacts) are older than the upper ones, as they must have been deposited first. By recording which layer an artefact came from, it can help to date the different layers.

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This is an example of a site which has been used multiple times in the past. Each period of occupation builds up a layer of material associated with it. The oldest material is laid down at the bottom, and the following periods on top. This layering is called stratigraphy, and is how archaeologists figure out a site's use over time.



Evidence archaeologists might find

Archaeologists come across all sorts of evidence for past activity during an excavation. This can take the form of tools, houses, art, food and other objects and structures. Inorganic (stone, clay) materials survive much better in the ground than organic (wood, bone, animal hides) materials, as they can resist decay.

Lithics

Lithics are worked stone tools. These change over time and can be used to help determine which period the site dates to. They can also help identify the types of activities that were taking place at a site.

Pottery

Just like lithics, pottery styles changed over time, allowing a site to be dated. A feature of prehistoric pots is that they were often buried with the dead.

Worked bone

These are human or animal bones/antlers/ teeth which have been modified into tools or pendants. For example, red deer antlers were worked into harpoons; wild pig tusks were worked into necklaces; and bones were worked into needles and pins.

Wood

Wood is generally only preserved under very wet or very dry conditions. Samples of wood can be identified to species, giving information about landscape use by people in the past, as well as indicating the types of trees that were present.

Seeds

The seeds from plants provide information about the surrounding environment, as well as how people were using it. They can provide evidence for plants that were used for food, clothing, bedding or medicine.

Charcoal

Charcoal is burned wood. It can help us identify the types of wood that were used for fires. Charcoal is also a reliable material for radiocarbon dating.

Unworked bone

Bones which haven't been modified into tools or pendants are usually indicators of animals which have been cooked and eaten at the site. The quantities of bones can tell us which species were the most important. Sometimes bones are burned or have cutmarks indicating how meat was removed from the carcass.

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5 cm

Collections in focus

One of the ways that archaeologists can date a site is by the type of technology used by the inhabitants. In the Neolithic, 'leaf-shaped' arrowheads became more common. A different form of arrowhead became common during the Early Bronze Age - the 'barbed-and-tanged' arrowhead - the barbs are the bits of flint sticking out at the side, and the tang is the stem in the middle.

Neolithic (left) and Bronze Age arrowhead (right). Both would need to be attached to a wooden shaft before they could be fired from a bow.

Classroom activity

Dustbin detective

Rubbish is very useful – especially to archaeologists! By sifting through objects that people have thrown away in the past we can get a good idea of how they lived - what type of food they ate, what trade links they had with other groups of people, what work people did – pottery, wood working, metal working, weaving and what diseases they had - from scientifically analysing their poo!

There was no bin collection until really very recently in human history. In early times, people would have dug dumps to put rubbish in called middens. People would also have recycled the rubbish they found.

3 Rubbish diary

Ask the class to keep a rubbish diary from their home for 3 days, detailing 5 items the family has thrown out each day in that time.

Mystery family

The second part of the activity is to see what pupils can work out about a mystery family from the dustbin detective sheets. To do this cover over the name at the top of the sheets and distribute around the class. This would also work well as a group activity. Pupil/s study the rubbish from their mystery classmate.

- What type of food are they eating?
- Is there any clue as to the age range or number of people in the family?
- Are there any clues about household technologies dish washer, washing machine powder packs? Microwave only cartons, packaging that states item must be kept in fridge, shower gel container?
- Get a number of pupils or groups to feed back with what they think they have found out about the mystery family.
- The child to whom the rubbish belonged can then say how accurate they were.

Further discussion can be around what from the household picture was missing or not accurate. This will give pupils the understanding that what is found through archaeology gives us a sense of the time but only a part of the picture- a bit like trying to complete a jigsaw with only half the pieces!

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Dustbin detective's logbook

Name

Write or draw what is thrown out each day

DAY ONE

Il plastic milk carton Pizza box Baby food packing Toilet roll tube DAY TWO

DAY THREE

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