



The Stone Age

A teaching resource for Key Stage 2

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Introduction

Welcome to the Stone Age – a challenging but fascinating period of our shared human past. We are delighted that you have chosen to use this teaching resource and hope you'll find it helpful and enjoyable!

The teaching material

People often associate this period with dinosaurs, and Hollywood likes to reinforce this misconception! However, the Stone Age is an *archaeological* concept, and archaeology only studies the *human* past. Because the dinosaurs died out many millions of years before the first human ancestors emerged, there is no overlap between the Stone Age and the time of dinosaurs. Other scientists – for example geologists and palaeontologists – also study prehistoric periods, but they are not so interested in the human story. Human prehistory is an archaeological endeavour, so this resource is based on the archaeological evidence.

The lessons were created around a series of themes:

- **Evolution** (lessons 3 and 4)
- **Art and religion** (lessons 5, 10, and 11)
- **Architecture and technology** (lessons 8, 9, and 11)
- **Food** (lessons 6 and 7)

These themes highlight the links between our Stone Age ancestors and our modern-day lives. Things that concerned and delighted them still resonate with us today. You may be exploring some of these themes in other lessons, so there is plenty of scope for overlap within that context too.

In addition to the lesson plans, there are five **factsheets** and two **glossaries** in this resource. Each lesson plan lists the relevant factsheet(s) and glossary terms for that topic. Finally, you can find tips for good fiction stories, museums to visit, and online material in the **Further Resources** section at the end.

Here are a couple of things to note before you get started:

- It would be useful to divide children up into '**tribes**' at the start of the module. These tribes can work together and share information throughout the module. This can be a good opportunity for teamwork and mixed ability groups supporting each other. They should have a tribe name to reinforce their group identity
- Ideally, each student should have a **workbook** that they can add all drawings and completed worksheets at the end of each lesson (see Lesson 12 for a summary of what might be in the workbook in the end)

- **Keep all material that you create**, such as drawings and mini-monuments. If you do some Stone Age cooking, go on a foraging walk, or do a Stonehenge play – take photographs! You will need all this in Lesson 12

Things to note about the content and context of this material

There are a few excellent resources about the Stone Age **online**, both tailored for use in primary education and more broadly. However, there are also plenty of websites with dubious content. Human prehistory is a captivating topic, and it has inspired all kinds of online content. Some of it is brilliant, some is acceptable, some is politically sensitive, and some is just downright inaccurate. We could provide plenty of web links to good online content to help you navigate this Stone Age internet quagmire, but we have chosen to include only the most necessary web links in this resource because it makes this material more future-proof. Organisations like the BBC, Historic Environment Scotland, English Heritage and the British Museum tend to periodically restructure their webpages, which can result in dead links. Therefore, we often recommend in this resource that you search online for certain key sites or artefacts, and use the information and images from **reliable organisations** (like those just mentioned).

There is some **differentiation** within this material, but you know your class best and what their interests and strengths are. We hope that this resource gives you a good grounding for tweaking and cherry-picking in ways that suits you, your class, and your resources. You may also want to replace or complement some of it with other resources. An excellent complementary set of resources that we recommend is **Schools Prehistory** (www.schoolsprehistory.co.uk), through which you can arrange **specialised workshops and handling collections**. As you come to the end of your Stone Age sessions, we would recommend moving on to the teaching material about the Bronze Age that has been developed by the **Canterbury Archaeological Trust**. They also have artefact handling collections that you may be able to borrow.

However you choose to use this resource, we hope that there is enough information, activities, and thought-provoking questions here to enjoy exploring this enigmatic period with your class. If you do find it useful and want to let us know, we would be very happy to hear about it. Any **feedback will be extremely useful** for us.

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The drawings in this resource were created by Penny Bernard.

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Factsheet 1. What is prehistory?

'History' is the study of the human past through historical documents. Humans have only produced written texts for a few thousand years, but we have been around for hundreds of thousands of years (or millions of years, if we include earlier human species). So for the majority of our human past, there are no written historical sources. 'Prehistory' is that vast period of time before writing emerged. As writing emerged at different times in different regions, prehistory does not always end at the same time. For example, in Britain it is the arrival of the literate Romans that signals the end of prehistory, whereas in Scandinavia prehistory ends when Christianity is introduced around AD 1000. The only way to study human prehistory is through archaeology. That is why this resource is grounded in archaeological frameworks and evidence.

Before considering how we divide and study the prehistoric past, it is important to note that prehistory as a concept is only around 200 years old. Three developments that were underway in Europe in the nineteenth century paved the way:

- Industrialisation processes intensified, which meant that many previously unknown archaeological sites and artefacts were being unearthed across Europe during construction, quarrying, and railway projects
- The Biblical version of the origin and age of humanity was challenged by the work of Charles Darwin and others
- Advances in geology began to demonstrate great age of early stone tools

Taken together, these developments meant that a new understanding of the incredible age of humanity was emerging. Evidence of a remote human past that was much older than the more familiar ancient civilisations (such as Rome) was accumulating. A new intellectual framework was needed to accommodate all this newly unearthed evidence, and this is how our concept of prehistory was born. This realisation that humankind is much, *much* older than what was previously thought was a paradigm shift that laid the foundations for archaeology as an academic discipline.

It was within this context that the idea of successive ages of stone, bronze, and iron was developed. This succession of ages is known as the 'Three Age System' and was devised in Denmark in the mid-nineteenth century AD. The Three Age System was then gradually adopted and further defined across much of Europe. We still use this system today as we continue to divide the prehistoric past into a Stone Age, a Bronze Age and an Iron Age.

The Three Age System is useful as it helps us study and understand the very long period of time that is human prehistory. But it should be remembered that this division of time into a series of 'ages' is, in a way, artificial. It implies that all aspects of life were determined by whether stone, bronze, or iron was the dominant technology. In other

words, it suggests that when bronze technology was introduced and (to an extent) replaced stone technology, other aspects of life also changed. However, this is not necessarily true. Things like house architecture, burial customs, and food habits may not have changed just because metal was introduced. Hypothetically, we could also have settled on labels such as the 'Fishing Age', 'Roundhouse Age' or 'Cremation Age'. The Three Age System also implies that transitions between 'ages' were abrupt and profound. In most cases, however, it is unlikely that people who were alive at the time even noticed the gradual changes that we – with plenty of hindsight – have identified as signalling a transition from one 'age' to another. Although seeing a bronze or gold object for the very first time may of course have been a significant event!

The older, more remote Stone Age is significantly longer than the more recent Bronze and Iron Ages. This is because the amount of archaeological evidence that survives decreases the further back in time we look, and as a result our understanding of the chronologies involved becomes less well defined. So while we may discuss the Iron Age in terms of centuries or even decades, we tend to talk about most of the Stone Age in terms of millennia.

Because the Stone Age is so long (lasting from the emergence of humanity to the emergence of metal technology), it has been subdivided into periods known as the **Palaeolithic**, **Mesolithic**, and **Neolithic**. The Palaeolithic (Old Stone Age) is the oldest and longest of the Stone Age periods. The Mesolithic (Middle Stone Age) is the period between the last Ice Age and the beginning of farming. The Neolithic (New Stone Age) begins with the onset of farming and ends as the emergence of metal technology signals the onset of the Bronze Age.

Note on terminology

It is useful to be aware of the differences between ages, periods, eras, and epochs as those terms are not always interchangeable. In geology, each of those four terms refers to specific units of time. For example, the Holocene is an epoch but the Quaternary is a period (which contains the Holocene). Confusingly, prehistoric archaeology uses the geological definition of *some* of those terms and chronological frameworks, but it also has its own definitions. Accordingly, the terms 'period' and 'age' have been adapted by archaeologists to refer to, for example, the Neolithic period or the Bronze Age – but in geology, those terms are not used in that way. In contrast, archaeologists and geologists both use the terms 'era' and 'epoch' in the same way. That's why you will probably never hear a prehistoric archaeologist talk about 'the Neolithic era'. In Palaeolithic archaeology, geological units of time like Pleistocene (epoch) and Quaternary (period) are sometimes used. You don't need to worry about this but some awareness may be useful!

'Proto-history' and 'protohistorical' are terms that are sometimes used for periods and societies where writing is emerging, or for societies that are living adjacent to writing societies. These terms are not commonly used in relation to British prehistory, although the Late Iron Age in southern England could be considered protohistorical because they had coinage and trade relations with Roman Gaul (modern-day France). Ultimately, all societies have a 'history', even if it is not written down, and most 'prehistoric' societies still have complex systems of non-verbal communication.

Other examples of terms that should be used with caution (but for very different reasons) are 'primitive' and 'savage'. These words were often used by white Europeans in the colonial period to refer derogatorily to people they encountered around the world. Therefore, they have racist connotations today and are usually avoided altogether in archaeology and anthropology. It is also scientifically inaccurate to refer to our prehistoric ancestors as 'primitive' because from the Upper Palaeolithic onwards (in Europe, and much, much earlier in Africa) they had the same cognitive and social capacities as we do today. However, the word 'primitive' is acceptable in relation to, for example, technology. But it is 'safer' to just avoid the term altogether.

Factsheet 2. What is archaeology?

Archaeology is the study of the *human*¹ past through its physical remains. Such physical remains include not only artefacts, but also human and animal skeletal remains, buildings and other structures (like walls and ships), humanly modified landscapes, plant remains, and microscopic or molecular residues that are invisible to the naked eye. Archaeology is strongly associated with excavation in the public perception. Today, it is also widely known that archaeologists sometimes work in laboratories. However, many archaeologists also work or study in universities, commercial archaeology units, museums, archives, and local councils. Moreover, excavation is not the only type of archaeological fieldwork: archaeologists may also spend time outdoors surveying buildings and landscapes, taking soil samples, or diving to explore underwater remains.

Is archaeology a science or a humanities subject?

Archaeology draws on a wide range of techniques and concepts that were originally developed in other academic disciplines (such as geology, philosophy, sociology, chemistry, and medicine). Over the last century or so, archaeologists have adapted these techniques and concepts so that they can be applied to the study of the 'archaeological record'. This means that archaeology is inherently interdisciplinary – and this is why some university archaeology departments are located within a humanities faculty, along with subjects like history and philosophy, whereas at other universities archaeology sits alongside subjects like geography and forensics within earth or life sciences faculties. In the US, archaeology is considered to be one of four tiers of anthropology.

Archaeologists disagree over the extent to which their subject is in fact a science. Some believe that only scientifically supported statements about the human past are valid, whereas others emphasise that concepts from sociology, philosophy, and anthropology are also needed in order to make the past come alive. It is perhaps a moot point – the main thing to be aware of is that archaeology is diverse.

What survives and why is it underground?

Some materials that people used in the past have survived much better than others. Whether or not an object has been preserved depends on: (1) what it is made of, and (2) the environment that it has been in. Objects made of inorganic materials like stone, ceramic, and metal survive much better than those made of organic materials such as leather, textile, wood, and plant matter. It is important to remember that although we find mostly the objects made of inorganic materials, people in the past relied on a wide

¹ No dinosaurs!

range of organic materials for clothing, housing, material culture, and food processing. For example, sinew and intestine from animals were used to make rope and food containers. As soon as an object becomes buried, it starts to chemically interact with the environment that it is in. Conditions of this burial environment – such as temperature, PH value, and microbial activity – determine how well the object is preserved.

Bone consist of both organic and inorganic components, and can survive well if the burial environment is not too acidic. Human and animal soft tissue like hair, skin, and tissue will of course decompose much quicker – unless the body is placed in an environment with unusual chemical composition like a peat bog or a glacier. This is why ‘bog bodies’ and Ötzi the Iceman are so remarkably well preserved.

Archaeological remains are often underground due to natural erosion and deposition. For example, abandoned riverside settlements may be gradually buried by seasonal floods that left thick mud deposits on the river banks. Modern human activity (like ploughing) has also destroyed and buried many archaeological sites. Some kinds of archaeological remains are underground because people in the past deliberately buried them; examples include rubbish pits, human burials, and treasures like the Staffordshire hoard. In urban areas, archaeological remains are underground because people have been constructing new buildings on top of old ones (intentionally or not) for many generations. Animals like rabbits and worms can also contribute to soil movement which eventually buries things.

Note on spelling

‘Archaeology’ is the British spelling, whereas in the US they tend to write ‘archeology’. Another spelling variation is ‘artefact’ (UK) and ‘artifact’ (US).

Factsheet 3. The Palaeolithic

The Palaeolithic (Old Stone Age) is the earliest and by far the longest period of the human past, covering 2.5 million years. It is further divided into the Lower, Middle and Upper Palaeolithic. The Lower Palaeolithic is the oldest and the Upper Palaeolithic is the most recent – think of it as a vertical timeline with the most remote past at the base. The entire human Palaeolithic sits within what geologists call the Pleistocene.

The Palaeolithic is perhaps the most complex of the Stone Age periods. This is because it contains multiple human species and series of profound changes in climate. Archaeologists are not the only ones studying this period; other experts – like climate scientists and geologists – also study it, and they have their own terminology and systems for dividing the period. Confusingly, archaeology has adopted some terminology from other disciplines, and this is why you may come across terms like ‘Anglian glaciation’, ‘Younger Dryas’ or ‘Marine Isotope Stage’. For our purposes, the key things to note are:

- The Palaeolithic contains a series of warm (interglacial) and cold (glaciation) periods, and these have all been given different names. This climatic/environmental framework is important, but:
- Archaeologically, we also have our own way of dividing up the period, and this system is based on the type of stone tools that early humans were producing (more on these stone ‘industries’ below)

Human evolution

Around 4 million years ago, a hominin species now known as *Australopithecus afarensis* evolved in eastern Africa. *A. afarensis* was one of a handful of species of the genus *Australopithecus*. The famous partial fossil of Lucy, which was found in Ethiopia in the 1970s and has been dated to 3.2 million years ago, is of this species. Lucy and her genetic cousins of the other australopithecine species were bipedal (walked on two feet) and probably ate mainly fruits, roots, and small animals. They are important as one of these species later (around 2.8 million years ago) evolved into the *Homo* genus.

The earliest species of the *Homo* genus is *Homo habilis*. Around 2 million years ago another significant species of this genus, *Homo erectus* or ‘upright man’, emerged, also in east Africa. *H. erectus* spread across Africa and Eurasia, and they may have been the first to control fire. They became extinct around 70,000 years ago. During its time, *H. erectus* was not the only *Homo* species in existence; for example, *Homo heidelbergensis* appeared around 700,000 years ago. They were good hunters and may have had some form of archaic language, and lived in Africa and Eurasia until they became extinct around 200,000 years ago.

The fact that *H. erectus* and *H. heidelbergensis* (amongst others) co-existed highlights an important point: evolution is not a linear process in which one species simply evolve into another. It is much more complex; for example, a group may have become isolated due to climatic changes, which over time may have led to genetic changes that eventually resulted in the emergence of what we recognize as a new species or subspecies – but the ‘parent’ species may still have been in existence somewhere else. And so on. What we know about human evolution is sometimes revised and often hotly debated. Many of the names of species come from the archaeological site where they were first identified (for example *H. heidelbergensis* was first defined from a mandible of this species found in Heidelberg, Germany, in 1907).

H. heidelbergensis is thought to be an ancestor of both Neanderthals and ourselves. Neanderthals, or *H. neanderthalensis*, were anatomically well suited to life in colder climates and they were accomplished hunters. They became extinct around 40,000 years ago, probably due to a combination of factors including climatic changes and resource competition. They were genetically very similar to us but they are not our ancestors. They did, however, contribute to the DNA of modern humans; recent research using reconstructed Neanderthal DNA indicates that Neanderthals and modern humans interbred, most recently around 50,000-60,000 years ago. This is a cutting-edge research field so expect new findings to emerge in the media every few years!

Modern humans (*Homo sapiens* and subsequently the subspecies thereof called *Homo sapiens sapiens*) appeared in East Africa around 200,000 years ago, and spread into Eurasia around 60,000 years ago. We are the only human species that has not become extinct (yet). We may consider ourselves remarkably successful, but it is worth remembering that we have only been around for 200,000 years², which in the grand scheme of things is not particularly long. *H. erectus*, for example, existed for nearly two million years.³

This evolutionary dimension is relevant mainly for the Lower Palaeolithic. The Middle Palaeolithic in Europe is most strongly associated with Neanderthals, whereas modern humans took over in the Upper Palaeolithic.

Human occupation in Palaeolithic Britain

The English Channel as we know it is only around 10,000 years old. This means that Britain was connected to mainland Europe for much of the Palaeolithic, although sea levels rose during the warmest interglacials and temporarily cut Britain off from the

² At the time of writing, brand new research has pushed this date back even further – to around 300,000 years ago!

³ As we seem to be heading towards our own self-induced extinction, fuelled by climate change, nuclear war and antibiotic resistance, we should perhaps be more humble about how clever we are – compared to earlier human species...

continent. Human⁴ groups did not live here throughout the Palaeolithic. They left during the cold periods and then returned as it got warmer, following migrating game animals.

The earliest evidence of a human presence in the British Isles comes from Happisburgh (pronounced 'haze-boro') in Norfolk. The important Happisburgh findings actually come from several different archaeological sites, all preserved in river sediment deposits. Here, archaeologists found handaxes, bones from hunted mammals, environmental remains like pine cones (remarkably well preserved!) and – most famously – footprints. The footprints revealed that five individuals, both adults and children, had walked across the silty clay sometime around 800,000 years ago⁵. Soon afterward, the clay dried and was covered with sand deposits, which preserved the footprints. They are currently the earliest known footprints outside Africa.

A bit further south at Pakefield in Suffolk is another important Lower Palaeolithic site. Worked flint from this site indicates that it was inhabited around 700,000 years ago. Britain was connected to mainland Europe when people lived at Happisburgh and Pakefield. For the remainder of the Palaeolithic, humans occupied, left, and reoccupied Britain several times.

Around 500,000 years ago, groups of *H. heidelbergensis* lived in what is now southern Britain. The most famous site of this period is Boxgrove in West Sussex, which has yielded flint handaxes along with the earliest known human remains in Britain. Then around 450,000 years ago a severe ice age, known as the Anglian glaciation, took hold and Britain was deserted. After this glaciation, Neanderthals enter the scene. Evidence of Neanderthal occupation has been found at, for example:

- Swanscombe, Kent (c. 400,000 years ago)
- Beeches Pit, Suffolk (c. 400,000 years ago)
- Pontnewydd Cave, Flintshire (c. 200,000 years ago)

Between c.180,000 and 60,000 years ago, Britain was an island and we have not to date found any evidence of human occupation during this period. So for more than 100,000 years Britain was deserted – by humans, that is. There were plenty of animals here; for example, the skeletal remains of hippo and lion that have been found beneath Trafalgar Square in London belong to this period. Around 60,000 years ago, it gets colder and Britain is again connected to mainland Europe via a landmass. People return – Neanderthals first, then modern humans. Examples of archaeological sites include Lynford in Norfolk (Neanderthal) and Gough's Cave in Somerset (modern human). Finally, during the last Ice Age Britain was abandoned again – this time most larger animals left as well. Animals and humans then returned as the ice receded around

⁴ Including pre-modern humans like *H. heidelbergensis* and Neanderthals

⁵ They may in fact be even older – it is also scientifically possible that the Happisburgh remains date to a previous interglacial, which would make them over 900,000 years old

9,600 BC, and this is the phase of human occupation in Britain that we are still part of today.

Food

Palaeolithic people were hunter-gatherers. They did not have any domesticated animals, and they lived nomadic lifestyles. Scavenging may also have been an important food-procuring strategy, perhaps especially in the early Lower Palaeolithic. Later on in the Upper Palaeolithic and the Mesolithic, fishing becomes important. It is worth remembering that the anthropological concept of a 'hunter-gatherer' actually masks a lot of diversity. What they ate depends on what the regional environment was like at the time. There is not one specific 'hunter-gather diet'⁶. The big game hunting that is strongly associated with the Stone Age and 'cavemen' relates mainly to the Middle Palaeolithic, when Neanderthals (amongst others) hunted mammoth, reindeer, bear, and wholly rhino. However, recent research into microscopic remains on teeth suggests that Neanderthals ate a lot more plant foods than previously thought. It is difficult to assess the proportions of plants versus meat in the diet because animal remains survive so much better than plant remains.

Technology

The main type of material culture that survives from the Palaeolithic is stone tools (lithics). These stone tools have been divided into many different types by archaeologists. We know approximately when and where each type of stone tool was used. Accordingly, when we find a specific type of, for example, flint flake on an archaeological site it helps us assign the site to a specific time period within the Palaeolithic. In some cases, we also know which human species made such a type of tool. In Palaeolithic archaeology, the types of stone tools identified are called 'industries'. Examples of Palaeolithic lithic industries are:

- Acheulean (Lower Palaeolithic handaxes, found across Africa, Asia, and Europe, associated primarily with *H. erectus*)
- Mousterian (Middle Palaeolithic Neanderthal industry comprising handaxes, scrapers, and points made of flint)
- Gravettian (Upper Palaeolithic, made by modern humans and characterised by flint blades)

Many such industries and 'cultures' are named after the site at which they were first found (like with human species). For example, the Gravettian is named after La Gravette in France.

⁶ So the fashionable 'Palaeodiet' is an archaeologically dubious modern construct

In addition to flint, objects were also made out of antler, mammoth ivory, and animal bones. These materials were used to make objects like awls, harpoons, needles and beads. We must assume that a wide range of organic materials were also used.

Art

'Art' – including decorated caves, sculpture, body ornamentation, and musical instruments – first appears in Europe around 40,000 years ago. This 'creative explosion' is associated with the arrival of modern humans⁷, and archaeologically it marks the transition from the Middle to the Upper Palaeolithic. Examples include the 'Lion Man' mammoth ivory sculpture found in Germany and dated to around 40,000 years ago, and the earliest black drawings and charcoal marks in Chauvet Cave, France, from around 37,000 to 33,500 years ago.

Notably, Palaeolithic art (and other expressions of 'behavioural modernity') is not exclusive to Europe, nor does it appear here first. It is a legacy of traditional Euro-centric scholarship to place this creative revolution in Europe, when in fact it belongs in Africa. For example, we have evidence for some of these elements occurring at Blombos Cave in South Africa around 75,000 years ago. Here, numerous engraved red ochre pieces and at least 49 perforated shell beads, with marking from use and the application of ochre, have been found.

Cave paintings are found all over the world, from France to Argentina, Malaysia and Australia. Many of these were made in dark and dangerous caves that were hard to access. In some places, people would have had to crawl for a long time in the dark and wet, surrounded by bats. Giant cave bears must have been encountered at times! Some of those involved in creating the art were children. Child footprints preserved in soft clay have been found, and they seem to have been dancing (it would be great to try this with a school class if you have access to soft clay or mud!). Archaeologists believe that some of the art created in a cave known as 'The Cave of a Hundred Mammoths' (France) was created by children as young as 3 and 5. Around 13,000 years ago, these children would have had to walk 45 minutes into the dark cave system to then stand on grownups shoulders to create the beautiful patterns on the ceilings of the cave.

In Europe are primarily found in France (for example Lascaux) and Spain (for example Altamira). Human hands and animal motifs are widespread, and the artists used charcoal and natural pigments like ochre to make them. There are no examples of cave painting found in the UK (yet!). However, there are some examples of Palaeolithic wall carvings. The best examples of these have been found in caves in the Creswell Crags in

⁷ Recent research exploring just how old some of the art is has pushed some of the dates back into the late Middle Palaeolithic, which suggests that Neanderthals may also have been making art. The jury is still out on this matter!

Derbyshire. Cave art is generally found limestone caves – which may explain why we have no examples in the UK.

Human-shaped figurines have been found in many parts of Europe, primarily at cave sites in countries like Germany, Czech Republic, and Austria. They almost always look female, and are persistently – but highly speculatively – associated with fertility rituals. This is why they are often called Venus figurines or goddess figurines. They tend to be carved out of stone, antler, or ivory. Rare examples of clay figurines are also known from the Czech Republic, and are the earliest examples of people firing clay. The most famous figurine is the Venus of Willendorf, which was made of oolitic limestone and is around 26,000 years old. Other kinds of 'portable art' (stuff you can carry) include things like the reindeer depictions carved into mammoth tusks. We can't be certain why these figurines were made, or whether they had a specific function, but they may have been a response to challenging conditions amidst climatic changes associated with the onset of the last Ice Age.



Factsheet 4. The Mesolithic

The Mesolithic is the period between the end of the last ice age to the beginning of farming. It lasted almost 6,000 years, from 9,600 to 4,000 BC. It's the Middle Stone Age, hence the name – 'Meso' means middle (as in Mesoamerica and Mesopotamia). In many parts of the world, there is no Mesolithic. In regions where the Ice Age was not so severe, there is no Mesolithic (like in southern Europe). In those regions, the latest Palaeolithic is called Epipalaeolithic, and it transitions into the Neolithic. But here, because the Ice Age meant a total hiatus of human life in Britain, we have a 'new' period once the ice is gone.

The ice began to recede around 9,600 BC. This influenced the environment in some important ways:

- Temperatures rose
- Plants, animals and humans crossed back into Britain via the land bridge that still connected Britain to mainland Europe
- By 8,000 BC the tundra environment was replaced by deciduous forest
- The melted ice caused sea levels to rise, which also impacted on rivers
- Doggerland is the name of the area beneath the English Channel and North Sea that became submerged during this period (you may know it from the Shipping Forecast!). As Doggerland used to be dry land, there is plenty of interesting submerged archaeology there
- Between 7,000 and 6,000 BC the land bridge which had connected Britain to mainland Europe became submerged under water, creating the English Channel

In the Palaeolithic, there were severe climatic changes that impacted profoundly on people's lives. But they were generally so slow that people probably rarely recognised in within individual lifetimes, or even across a few generations. In contrast, life in the early Mesolithic must have meant adopting to some unpredictable weather. Hunting grounds and important food plants may have been lost, and communities that used to be neighbours may have been separated by raising seas. Luckily, they were resourceful.

Material culture

Mesolithic technology is in many ways similar to what we find from the Upper Palaeolithic. Important materials are still flint, antler, bone, and shell. Of these, flint survive best, and would have been important to a variety of food-procuring activities like hunting, fishing, and plant gathering and processing.

One common type of flint tool from the Mesolithic is microliths, which are flint flakes which have been shaped, usually small blades. They are often found in hundreds, sometimes thousands, and were probably used attached in a line to a spear point (like a serrated knife) or onto arrows. Some microliths have been found with resin on their surface. Other artefacts that we tend to find on Mesolithic sites include:

- 'Bevel-ended tools' made from antler, bone and stone, which may have been used as hammers, scoops, and leather-working tools
- Harpoons and barbed points made from antler and bone
- Shell beads

As always, we have to keep in mind that a vast range of organic materials were also used. At the amazing Mesolithic site of Star Carr in Yorkshire (see below), some of these organic materials have been preserved. Denmark is also famous for good organic preservation at Mesolithic sites, which helps us to reconstruct a fuller image of what life was like.

Food and settlement

The people who came back into Britain after the last ice age continued with the nomadic hunter-gatherer lifestyles they had had in the Palaeolithic. However, they had to adapt to the changing environment, so we find a somewhat different set of plants and animals on Mesolithic sites. For example, fish and seafood became important, and this is reflected in the material culture and location of settlement sites. In addition to things like harpoons and 'limpet scoops', we are sometimes lucky enough to find wooden fish traps (although not in Britain... yet!). The large shellmiddens of Scotland are testament to the significance of coastal foods in the Mesolithic. Many of the smaller shellfish may have been used as bait. Further inland, we know that they also hunted species like red and roe deer, wild pig, fox, hare, beaver, badger, and waterfowl like crane, swan, duck, and stork.

Mesolithic people also ate their greens! The most common plant found on Mesolithic sites is hazelnut, but there may be a 'preservational bias' in favour of nuts because their shells survive comparatively well (especially when they are burnt, which they often are – roasting enhances flavour and shelf-life of hazelnuts). Other plant foods consumed include nettle, reed, sorrel, chickweed, crab apple, and blackberry.

People were still nomadic, but they were probably *less* nomadic than in earlier periods. They may have had camps for each season, and a community may have divided itself to spend part of the year at different locations – all depending on where the food was. Hunter-gatherers do not wander aimlessly across the landscape – they know their environment intimately and often have strictly regulated systems for where to live and when. That said, the lack of permanent houses makes it difficult for archaeologists,

although we have found a few Mesolithic sites with evidence of structures: most notably Howick and Star Carr.

Howick, Northumberland

This site was found as coastal erosion exposed flint artefacts in a sandy cliff face. Excavation was then undertaken, which uncovered the remains of a circular structure about 6 metres in diameter. The structure, or hut, had been built by driving timber posts into the ground. The posts may then have been brought together at the top – so it may have looked a bit like a tepee. The posts themselves didn't survive, only the holes that they had left in the ground. But archaeologists are so used to finding such 'postholes' that they knew how to interpret it! They also found evidence of what people here had been eating: acorns, hazelnuts, fox (although maybe they wanted the fur more than the meat?) and wild pig. Ochre, bone, and flint was also found.

A hearth that contained a lot of burnt hazelnut shell were found in the middle of the hut floor. In fact, it wasn't just *one* hearth – the archaeologists found evidence of a whole sequence of them, constructed on top of one another. This indicated that rather than being permanently lived in, people used it for a period of time, then left, and then returned. Perhaps it was a summer dwelling? The structural evidence also showed signs of periodic rebuilding or mending. The hut was dated to around 7,800 BC and it seems like it was used intermittently for around 200 years.

Star Carr, North Yorkshire

This is the most famous Mesolithic site in Britain, and it is significant in a European context as well. In the Mesolithic this site was right on the edge of a lake, which we now call Lake Flixton. This lake no longer exists – it is now a peat bog. The fact that this lake slowly became a peat bog after the Mesolithic is good news for us, because it means that the archaeological remains are very well preserved. In fact, Star Carr isn't the only Mesolithic site around this lake, although it was the first to be discovered and it's the most extensively excavated. Findings here include a timber platform or walkway that would have extended into the lake (a landing place for boats? A place for water rituals?), and – more recently – a building. An amazing set of artefacts has also been found, including antler barbed points, shale beads, a shale pendant with engravings, microliths, and several red deer antler 'frontlets' that were probably worn as masks.

So red deer was important to the people who lived here – perhaps ritually and socially as well as nutritionally. Other animals that they hunted were elk, aurochs, wild boar, and waterfowl. They had domestic dogs to help with hunting. The site is earlier than Howick, because it was occupied around 8,970-8,700 BC (but not permanently).

Factsheet 5. The Neolithic

Shortly after 4,000 BC small groups of farmers from mainland Europe came over to Britain to live here. We don't know what motivated them to move – population pressure perhaps? Either way, the farming lifestyle that they brought eventually had profound repercussions. The 'indigenous' hunter-gatherers who already lived here were probably already familiar with farming and pottery – we now know that Mesolithic Britain was not completely isolated from the rest of Europe. But as farmers from the mainland and indigenous hunter-gatherers began to live alongside one another, they influenced one another and became increasingly socially and economically entangled. The newcomers stuck to their farming lifestyles initially, but eventually a more mixed economy based on animal husbandry emerged.

We see these changes in the archaeological record through the appearance of classic Neolithic traits such as monuments, pottery, substantial buildings, polished stone axes, and domesticated plants and animals. Some aspects – like farming and large timber buildings – are found on a large scale initially but then taper off gradually. Other things – like monuments and pottery – quickly became widely established.

The traditional story is that these traits that we associate with the Neolithic period can be traced back to the Fertile Crescent in the Near East. However, we now know that the process was more complex than that. For example, pottery was first developed by Palaeolithic people in what is now Japan, the Korean peninsula, China, Mongolia, and Russia. This important technology may then have spread to the Near East. Also, the timber longhouses of the British Early Neolithic can be traced back to central Europe.

That's a glimpse of the complex but fascinating story of how Europe changed forever, in the Neolithic. Now we'll turn to what the Neolithic actually looks like in the British archaeological record.

Material culture and art

Pottery is an important innovation, because with it you can cook food for longer over a fire. It also helps to protect food from animals and spoilage. Neolithic pottery styles include so-called Carinated Bowls, Peterborough Ware, and Grooved Ware. The latter is what we find a lot of at Stonehenge!

The word 'Neolithic' comes from a new type of stone tool: the polished stone axe. Previously, axes were made of chipped flint, but in the Neolithic the smooth polished axes appear. The most eye-catching were made of jadeite, which is a type of greenish mineral. They were quarried in the Italian alps and probably came to Britain through gift exchange networks. Flint was still used to make, for example, arrowheads and scrapers.

Decorated rock surfaces and artefacts is an enigmatic characteristic of the second half of the Neolithic. The decoration is often 'restricted' to motifs such as zigzags, dots, spirals, lines, and lozenges (diamond shapes). These motifs were created on clay, stone, antler, wood, and chalk across Britain and Ireland. Perhaps they were made on materials like leather too, and as tattoos?

Food and settlement

In the first thousand years or so of the Neolithic, the land was still covered by dense, leafy forests. We know that Neolithic people made small clearings in these vast forests, but also that they tended to let them regrow. This cycle of clearing and regrowth may have been related to a semi-permanent settlement pattern and a way of attracting game animals to the fresh regrowth. Larger areas were cleared to build monuments, and these were better maintained – we know this because we find evidence of extensive grasslands in these places.

As mentioned, domesticated crops like wheat and barley were probably grown on a larger scale early in the period, but later on they became less important. Alongside them, a wide range of wild plant foods were eaten, including hazelnuts, crab apples, blackberries, and hawthorn. For the cereal cultivation, imagine small garden allotments rather than large fields. These gardens need not have been tended to at all times, so they could still be a feature of a semi-mobile lifestyle.

Many of the wild animals that had been hunted in the Mesolithic continue to be hunted, but the smaller ones (like badger, fox, and hare) were perhaps more valued for their fur. By far the most common types of animal bones on the Neolithic sites are from cattle, domestic pig, sheep, and goat.

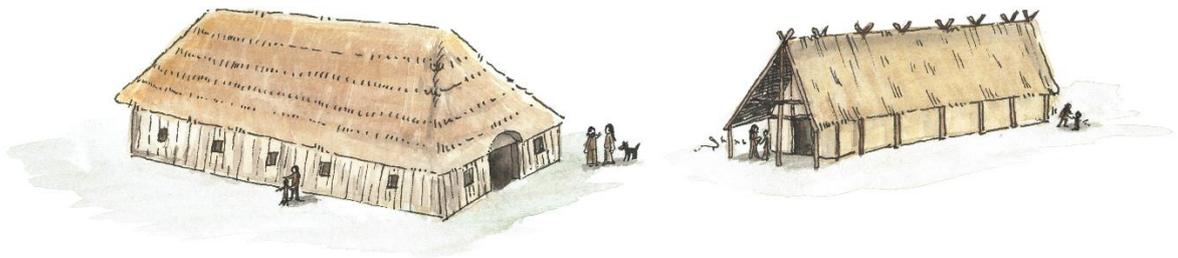
Monuments

Monuments are large human-made structures and come in the many shapes and sizes. Some of the Neolithic ones were circular – for example causewayed enclosures, henges, and stone circles. These may have been places where important rituals were performed, and seasonal gatherings of different groups for gift exchange and marriage arrangements could take place. Other monuments were more associated with burial, such as long barrows, passage graves and portal dolmens. However, we sometimes find human bone at the large round monuments too. The different monuments may have had different functions in the rituals surrounding treatment and burial of the dead.

Not all these monuments are contemporary. Portal dolmens, long barrows, and causewayed enclosures belong in the earlier part of the Neolithic, whereas henges, cursus monuments, and circles come in later on. Some monuments also found elsewhere in Europe and beyond, but others are unique to Britain (i.e. henges and

circles of stone and timber). See also the glossary for more information on these different types of monument.

The Neolithic is considered to 'end' when metal appears in the archaeological record around 2,400 BC. Imagine seeing a shiny metal object – made of bronze or gold – for the very first time! A lot of significant technological, economic, and social changes took place in the Bronze Age (although the Early Bronze Age actually had a lot in common with the later part of the Neolithic). But that's another story...



Lesson plans

There are twelve lessons in this resource:

Lesson	Title	Topics include
1	<i>Welcome to the Stone Age</i>	First impressions, chronology, Three Age system
2	<i>How do we know what we know?</i>	Archaeology, what survives
3	<i>Human evolution</i>	Evolutionary milestones
4	<i>The first Britons</i>	Lower and Middle Palaeolithic Britain
5	<i>Stone Age art I: Palaeolithic art</i>	Upper Palaeolithic cave paintings and figurines
6	<i>Hunter-gatherers of the Mesolithic</i>	Wild foods
7	<i>First farmers of the Neolithic</i>	Farming foods
8	<i>At home in the Stone Age</i>	Settlements and houses
9	<i>Stone Age technology</i>	Fire, tools, clothing, and pottery
10	<i>Stone Age art II: Neolithic art</i>	Rock art and decorated portable objects
11	<i>Neolithic monuments</i>	Dolmens, Stonehenge
12	<i>Conclusions and reflections</i>	What did the Stone Age ever do for us?

Key Skills practiced in this set of lessons can be summarised as:

- Show an awareness of people, objects, places, and events in the world past and present
- Understand that in the past people lived in different ways and begin to identify these differences
- Begin to talk about which historical (and archaeological, in this case) sources are most useful to give us information
- Find information independently and use sources in ways that go beyond simple explanations to answer questions

Have a look at Lesson 11 and the monument-building activity before you start. If you want to do it using empty kitchen roll tubes, begin to collect them now.

Lesson 1. Welcome to the Stone Age

Lesson objectives

- To think about how Stone Age life and people are represented in popular culture
- To prepare to challenge the common perception of Stone Age people as primitive savages, through the rest of the unit
- To begin to grasp how long ago the Stone Age was, and how long it lasted
- To be introduced to key terms, like prehistory and archaeology

Curriculum links

- Literacy, Science, Numeracy, PSHE

Introduction

The Stone Age captures the public imagination, and there is plenty of popular culture reference to it. However, much of the popular image of the Stone Age is wrong. We tend to think of the Stone Age as populated by primitive savages living a difficult life among big beasts that are now extinct (like sabretooth tigers, mammoths, and even dinosaurs...).

In fact, Stone Age people were incredibly resourceful, creative, and resilient. Many of the technologies and foods we depend on today were developed by our Stone Age ancestors. Many of their challenges (climate change, migration) and passions (art) are familiar to us today.

This lesson is about first impressions of the Stone Age, and how these are about to be challenged. Archaeologists have studied the period for at least one hundred years, and we do know a lot about it. The Stone Age is a mind-bogglingly long period of time, so we have divided it up into the Palaeolithic (Old Stone Age), Mesolithic (Middle Stone Age) and Neolithic (New Stone Age). **The lesson also introduces students to what prehistory is, and how the Stone Age is divided up.**

FACTSHEETS: What is prehistory; What is archaeology; The Palaeolithic; The Mesolithic; The Neolithic

GLOSSARY TERMS: archaeology, archaeologist, artefact, excavation, Mesolithic, Neolithic, Palaeolithic, prehistory, Three Age System + the ones in the worksheets

Resources

- Before this lesson, ask the class to talk to their families about the Stone Age. What impressions do people have about this period? Ask the students to come up with one word that summarises the Stone Age and its people (for example: savage, caveman, brutal, druids, Stonehenge...).
- Use online resources to prepare a series of video clips (or pictures) about the Stone Age from popular TV shows, including the *Flintstones*, *Horrible Histories*, *The Croods*, *Ice Age*... (also look out for *Early Man*, a film made by the studio that made *Shaun the Sheep*)
- Toilet roll (use a one-ply roll with 1000 sheets!)
- Marker pens and post-it notes for using on the toilet roll
- Print-outs (or on class computer screens) of the timeline from Schools Prehistory
- A few print-outs (or on class computer screen) of the student glossary
- Print-outs of the Palaeolithic-Neolithic key words worksheets
- Art material for drawing some of the key words

Activities

1. Discuss what the class found out about their families' impressions of the Stone Age, and write the summary words on the whiteboard
2. Watch the video clips or look at the pictures from popular culture
3. Explain that over the next few weeks, they will learn lots of new things about the Stone Age (most of which will probably challenge the popular image of it). But first of all, we have to consider *when* the Stone Age was
4. Draw a long line on the whiteboard (ideally 1 metre long!) and ask the class about the oldest events they can think of (the Romans?). Have a volunteer mark on the line when they think these old events took place
5. Explain that humans have been in Britain for nearly one million years... That means that if your 1 metre-line represents one million years, the last 2000 years (since the Romans) is only 2 millimetres!
6. Explain that the preceding 998 millimetres are what we call *prehistory*...
7. Do the same with the toilet roll and get the class to mark out (with post-it notes and pens) some key events (1066, the Tudors, the Pyramids, the Romans, etc.) as you unroll it – explain that 'history' is only 2 sheets!
8. Introduce the class to Stone Age, Bronze Age, and Iron Age and mark these out on the toilet roll
9. Explain that we divide up the Stone Age into three smaller periods: Palaeolithic, Mesolithic, Neolithic (use the fact sheets and glossary)
10. Using the student glossary and worksheets, explore the key words about each Stone Age period (perhaps each student gets a keyword to look up?)

Plenary

- Choose certain key words (the nouns will be the easiest...) and have the students draw these
- Explain that in the next lesson, we will look closer at how we know things about life in the Stone Age

More information

If you unroll the entire 1000-sheet toilet roll, the last one million years of human habitation in Britain would look like this:

Norman conquest to present day	1 sheet
Roman and early medieval period	1 sheet
Iron Age	1 sheet
Bronze Age	1 ½ sheets
Neolithic	1 ½ sheets
Mesolithic	6 sheets
Palaeolithic	988 sheets



Palaeolithic (Old Stone Age)

Evolution

Neanderthals

hunter-gatherer

megafauna

ice age

ivory

hominid



Mesolithic (Middle Stone Age)

harpoon

microlith

shell midden

hunter-gatherer



Neolithic (New Stone Age)

sherd

settlement

pottery

portal dolmen

megalith

passage grave

ceramic

domestication

henge

monument



Lesson 2. How do we know about the Stone Age?

Lesson objectives

- To consider the evidence we have for life in the Stone Age. What survived, and why? What didn't survive?
- To consider how archaeologists use the material remains to learn about the human past
- To reflect on the environmental impact of our own common materials

Curriculum links

- Science, Numeracy

Introduction

Now that we have been introduced to the Stone Age and challenged some common misconceptions about it – but before we go into more detail – we need to consider the evidence itself. Because historians only study texts, and there are no texts from the Stone Age, the only way to study the Stone Age is through archaeology.

The Council for British Archaeology (CBA) offers this definition of archaeology:

Archaeology is a way of learning about people who lived in the past; where and how they lived, what they believed, and the effects they had on the environment.

Archaeology is often most associated with artefacts, but archaeologists also study monuments, buildings, historic landscapes, skeletal remains of humans and animals, plant remains, and – increasingly, through various scientific techniques – microscopic and molecular-level evidence like residues, isotopes, and pollen. **This lesson is about what and how archaeologists study to learn about life in the Stone Age.**

FACTSHEETS: What is archaeology; What is prehistory

GLOSSARY TERMS: Archaeology, archaeologist, artefact, context, ecofact, excavation, Holocene, in-situ, interpretation, radiocarbon dating, Three Age System

Resources

- One bin with 'artefacts' (for example a bus ticket, a banana peel, hair clips, gloves, food wrappers, an earring, school newsletter...) for each group
- Printed copies of the 'How long does it take to degrade?'

Activities

1. Introduce the class to archaeology (use the fact sheet and relevant glossary terms)
2. Explain that they are going to be archaeologists by exploring some bins that you have discovered! They will 'excavate' the contents of the bins to explore: (1) who owned the bin, (2) what the owner had been up to, and (3) when it was used
3. Explain that when they study the contents of their bin, they will need to consider the order in which things were put in it. Was the stuff at the top but in last, or first? Hopefully they will conclude that the content at the bottom of the bin was put in first
4. Divide the class into groups and give each group a bin. When they have sorted through it, have each group present their interpretation of their bin to the rest of the class. The conclusions must be justified – for example, this person liked fruit because there are banana peels and apple cores in the bin
5. Ask the class what materials they are wearing and what materials are in the classroom. What would you be left with if you took out all textile, metal, glass, and plastic? That's the Stone Age material world!
6. Use the 'How long does it take to degrade?' worksheet to try and work out how long some of our common objects will survive if they are buried in a back garden (match each object with the right amount of time)
7. Ask the class what the things that survive less than one year have in common. Hopefully they will conclude that these are the *organic* materials, in this case mainly plant matter (fruit and paper)
8. What are the things that survive for much longer made of? (Metal, glass, plastic – and the leather shoe, which is organic but not as fragile as plant matter...)
9. Explain that in the Stone Age, people didn't have any metal, glass, or plastic. Ask the class what they had instead...
10. Write up all the Stone Age materials the class can think of on the whiteboard
11. Ask the class which of those materials they think have survived in the thousands of years that have passed since the Stone Age. Hopefully they will conclude that objects made of stone, ceramic, antler, and bone is most likely to survive. Those are indeed our key types of evidence!

Plenary

- If relevant, links can be made with science lessons to consider the difference between organic and inorganic materials in more detail
- If an archaeologist came back in 200 years' time to excavate the classroom – what would still be there?
- Discuss what we throw away. How long does our plastic waste take to decompose? How can we reduce plastic waste? Were Stone Age people more environmentally friendly?

More information

The CBA has many good resources on its website, in addition to the definition of archaeology given above. It is well worth a browse around: www.archaeologyuk.org

Schools Prehistory has an excellent 'Raw materials in the woods' information sheet with the documentation for Lesson 1 (Everyday Life in Prehistory block).

Stone Age people used a wide range of geological, plant and animal materials – many of them we don't immediately think of today because we don't use them. It is helpful to divide them up depending on where they come from:

Plant materials:

- Wood
- Resin
- Bark (used for clothing, containers, and objects)
- Roots (used for cordage)
- Plant stems and fibres (for example flax and hemp used for sewing and textiles)
- Pine needles (used for basketry)
- Leaves (used to wrap food during cooking, for example)

Animal source materials:

- Bone
- Horn
- Antler (very useful because it is very hard!)
- Ivory (mammoth ivory was used in the Palaeolithic!)
- Teeth
- Shells
- Skins (not only land mammals but also fish skins)
- Furs

- Dung (used on hut walls, for example)
- Feathers (as body ornaments)
- Intestine (useful for containers and sometimes clothing, like the Arctic seal stomach parkas)
- Sinew and tendons (used for cordage)

Geological materials:

- Stone (of course!)
- Ceramic (from the Neolithic onwards, in Britain)
- Amber and jet (but mainly used from the Bronze Age onwards)

A couple of things to note:

- **Woven textiles** probably come in during the Bronze Age. Before then, people used animal skins and furs for clothing in regions with cold winters. However, they were extremely skilled at processing skins to make them soft and to make intricately stitched garments. We have bone needles that survive to indicate this, and the clothing worn by the well-preserved Ötzi the Iceman is very well made.
- **Glass** was probably invented in Ancient Egypt. Glass is found in the British Bronze Age in the form of beads, but not in the Stone Age.
- Materials like wood and leather need **special circumstances like very wet, dry, or cold conditions** to survive. In these circumstances, we talk of archaeological sites with '**good organic preservation**'. Bronze Age Must Farm in Cambridgeshire is an excellent example.

Answers to the 'How long does it take to degrade?' exercise:

Banana peel - 3-4 weeks
 Paper bag - 1 month
 Newspaper - 6 weeks
 Apple core - 2 months
 Orange peel - 6 months
 Sock - 1-5 years
 Cigarette butt - 10-12 years
 Leather shoe - 25-40 years
 Tin can - 50 years
 Foamed plastic cup - 50 years
 Aluminium can - 200-500 years
 Plastic bottle - 450 years
 Disposable nappy - 550 years
 Plastic bag - 20-1,000 years
 Glass bottle - 1-2 million years

How long does it take to degrade? Match each object with the time it would take to disappear if it was buried in the back garden!

<i>Banana peel</i>	<i>10-12 years</i>
<i>Paper bag</i>	<i>550 years</i>
<i>Newspaper</i>	<i>50 years</i>
<i>Apple core</i>	<i>6 months</i>
<i>Orange peel</i>	<i>25-40 years</i>
<i>Sock</i>	<i>3-4 weeks</i>
<i>Cigarette butt</i>	<i>1 month</i>
<i>Leather shoe</i>	<i>450 years</i>
<i>Tin can</i>	<i>2 months</i>
<i>Foam plastic cup</i>	<i>1-2 million years</i>
<i>Aluminium can</i>	<i>50 years</i>
<i>Plastic bottle</i>	<i>6 weeks</i>
<i>Disposable nappy</i>	<i>1-5 years</i>
<i>Plastic bag</i>	<i>20-1000 years</i>
<i>Glass bottle</i>	<i>200-500 years</i>

Lesson 3. Human evolution

Lesson objectives

- To consider how modern humans evolved to become so successful
- To learn about key evolutionary milestones
- To consider the social characteristics that make us 'human'

Curriculum links

- Literacy, Science, Numeracy, PSHE

Introduction

'Evolution' is the process of genetic change by which biological organisms adapt to various demands of their physical (and sometimes social) environment. Modern humans evolved over millions of years, and we belong to a genus called *Homo* (which means 'human'). This genus first emerged in East Africa around 2 million years ago. The first *Homo* species was *Homo habilis*. Since then, complex evolutionary processes resulted in several different *Homo* species that emerged and went extinct at different times. Some of them are our direct ancestors, but others are more like our cousins. Today, we are the only surviving species of the *Homo* genus. How did this happen?

For this lesson, we consider a few key **milestones** in our evolution. These milestones are **bipedalism** (walking on two feet), **big brains**, **cooking**, and **precision grip**.

FACTSHEETS: The Palaeolithic

GLOSSARY TERMS: *Australopithecus afarensis*, Cro-Magnon, DNA, evolution, extinct, hominid, hominin, *Homo*, *Homo erectus*, *Homo habilis*, *Homo heidelbergensis*, *Homo sapiens sapiens*

Resources

- Worksheets of milestones (if working independently in groups)
- Pens and coloured pencils
- Balls (or equivalent, see Challenge 1)
- Calculators (Challenge 2)
- Sticky tape
- Printed copies of the 'To cook or not to cook' worksheet

Activities

1. Introduce the class to human evolution, using the relevant fact sheet and glossary terms
2. Explain each milestone, using the information sheets below
3. Try the milestone challenges (after each explanation, or all together at the end)

Plenary

- Which milestones are most important? Discuss in groups what the order of importance should be. (Remember that there are no right or wrong answers here – the key thing is to be able to explain your reasoning)
- The milestones introduced in this lesson relate mainly to physical traits. But social characteristics have also been very important for the development of our species. At the end of the lesson, brainstorm with the class how social aspects like **creativity, adaptability and teamwork** has helped make us humans so successful

More information

Excellent online sources with good images include the Natural History Museum website *How we became human* (<http://www.nhm.ac.uk/discover/how-we-became-human.html>) and the Smithsonian Institute website *What does it mean to be human?* (<http://humanorigins.si.edu/human-characteristics>). If you want to make this lesson longer, or use it over several sessions, you could consider including other milestones like **sexual dimorphism** and **long childhood** (see the websites).

For further reading on the co-evolution of modern humans and cooking, see Richard Wrangham's popular science book *Catching Fire: How Cooking Made us Human* (Profile Books 2010).

If **Challenge 2** is pitched too high for your class, discuss instead what the children have learnt to avoid and to do, that is useful in everyday life. For example: tie shoelaces, count to 100, or avoid touching hot stoves, or eating too much cookie dough... Or perhaps they have learnt that some things have disadvantages but are worth the risk (like staying up late on New Years Eve and being sleepy the next day)?

Bipedalism: standing on two feet

Can you think of a modern-day higher primate (for example a gorilla or a chimpanzee) that can stand comfortably on two feet? Probably not! That's because modern humans are the only modern-day primate that can stand, walk, and run on two feet for a long period of time.

We can do this because around six million years ago, our ancestral species began to leave the trees to also walk around on the ground. This resulted in the gradual development of *bipedalism*, or the ability to walk upright (in contrast to walking on all fours). 1.9 million years ago, a hominid species called *Homo erectus* (which means 'upright man') emerged in Africa, and they were fully adapted to walking on two feet. It took at least four million years for this key evolutionary milestone to take place!

We don't know for sure how or why our ancestors started to walk on two feet, but we have some good hypotheses:

- They could see further into the distance, to spot dangers and food
- They could run away from danger (for example hungry animals) faster
- They could carry more food with them, because walking on two feet freed up the hands and arms
- They could walk around in shallow water to look for food

Which one do you think is most likely? Perhaps all of them are accurate? **The development of bipedalism resulted in changes to these parts of the skeleton:**

- Base of the cranium
- Spine
- Pelvis
- Knees
- Feet
- Hands

Try to walk on all fours and think about how your hands and feet would need to be different for it to be comfortable. Are there disadvantages to bipedalism? For example, we can't climb trees as well as many monkeys. Evolution can be a trade-off: you gain something but lose something else... The environment you live in determines which is the most important (the ability to live in trees or the ability to carry things and see far).

CHALLENGE 1

1. Divide the class into two teams. One team walks on all fours, the other is bipedal
2. Each team moves as many balls from one end of the classroom to the other in one minute
3. Which team moved most balls?
4. Imagine that the balls were fruit. Who would have most food tonight?

Big brains

During the long process of human evolution, the brains of our hominid ancestors gradually became larger. This happened very, very slowly from around six million years ago. We can tell how large their brains were by looking at fossils of the skulls.

Then, around two million years ago, dramatic changes to the weather began. This unpredictable weather meant that our ancestors had to be much more creative and adaptable to find food. As a result, between two million and 800,000 years ago, the brains of our ancestors *Homo erectus* became much larger than before. Today, our brains are larger than any other living primate.

It is difficult to know *why* the brains got bigger, but one reason was access to good food – as we will see when we talk about cooking!

Why is it good to have a big brain? They can:

- Store a lot of information
- Solve problems and think in *symbols*
- Process information quickly

But, are there any *disadvantages*? Yes – big brains are ‘expensive’, they need a lot of energy. Our ancestors must have been good at getting a lot of high-quality food! (The invention of cooking gave us a major advantage – see below)

The brain in numbers:

- Your brain weighs 2% of your overall body weight
- Your brain uses up to 20% of your energy intake
- The average weight of the adult modern human brain is 1,330 grams
- The average weight of the adult chimpanzee brain is 380 grams

CHALLENGE 2

1. Think about how the ability to store a lot of information is useful for you every day. For example, you may get stung on a nettle once and because you remember it, you can avoid getting stung again. Or, you have learnt and remember the alphabet, which helps you read and write every day. Imagine if you had to re-learn the alphabet every time you needed to read something!
2. **Maths challenge:** Can you convert the weights of the modern human and chimpanzee brains from grams to pounds (1lb = 454 grams)?
3. **Maths challenge:** Can you work out how many times larger the modern human brain is compared to the chimpanzee brain?
4. **Maths challenge:** If you eat five bananas, how much of that energy goes to fuelling your brain?

Precision grip

Some other animals use tools (for example crows and sea otters), but they don't have the precision grip that we humans have. Our hands are unique! This is because our ancestors evolved a special little bone in their hands called the *third metacarpal styloid process*. It is the lower half of your middle finger.

This bone – and the shape of our fingers – mean that we touch the tips of our fingers with our thumb. It also helps us squeeze things between the fingers and thumb. The ability to pinch and squeeze things in our hands enabled our ancestors to do many new things, for example:

- Make more intricate tools
- Use smaller tools like needles and knives more effectively

You can test the usefulness of precision grip by having the students put on a mitten or taping some fingers together, and then try to pick up things like pens and fruit.



Cooking

What our ancestors ate influenced the evolution of our species. One major change in our evolutionary history was the invention of cooking. 'Cooking' alters the chemical composition of foods. **We cook because it makes food:**

- Taste better
- Safer to eat (harmful bacteria dies at high temperatures, for example)
- Easier to digest (imagine eating a raw potato!)
- Last longer

When we cook food, it begins to break down in various ways. So cooking is actually just a way of starting the 'digestion' of food before it has even entered our bodies!

'Cooking' includes many techniques, for example:

- Smoking
- Fermenting (fermented foods include bread, chocolate, alcohol, cheese, etc...)
- Boiling
- Frying
- Roasting

We don't know exactly *when* our ancestors began to cook (it may have been more than a million years ago). **We can see the *effect* that cooking had on our ancestors if we compare ourselves with chimpanzees (who obviously don't cook!). We have:**

- Smaller stomachs – because we don't need to digest food so much
- Larger brains – because we get more nutrients out of cooked foods, our brains have grown
- Smaller jaws – because cooked foods are softer, we don't need to chew as much

For the 'To cook or not to cook' challenge, considering that even fruit, nuts and berries can be cooked there are actually very few foods that we never cook. Ask the class to think about what this tells us about the significance of cooking.



To cook or not to cook?

Draw each of these foods:

BANANA

PINEAPPLE

PANCAKE

SAUSAGES

MILK

STRAWBERRIES

BROCCOLI

BACON

FISH FINGERS

OATS

YORKSHIRE PUDDING

EGGS

LENTILS

SESAME SEEDS

WALNUTS

OYSTERS

Which of them do you always have to cook?

Which of them can you eat raw?

Which of them can you eat either raw or cooked?

Which of them are already cooked when they come into your house?

Can you think of more foods that we always have to cook?

Can you think of more foods that we never cook?

Which ones are there more of - the always cooked or the always raw?

Lesson 4. The first Britons: Life in the Palaeolithic

Lesson objectives

- To learn about the past by looking at evidence from archaeological sites
- To discuss what life was like in the very distant past, for our hominid 'cousins' and ancestors
- To consider how resourceful and resilient early humans must have been to survive with very simple tools and sometimes in harsh climates

Curriculum links

- Literacy, Maths, Science

Introduction

In Africa and large parts of Eurasia, the evidence for early human existence dates back millions of years. Britain is on the fringe of the world in the Palaeolithic, so the first early human life here is much more 'recent' – it dates back to around 900,000 years ago. But early humans did not live here continuously from that point onwards. They came and left, following prey animals and avoiding harsh climates as ice ages expanded and receded. At times, there was a land bridge connecting Britain to the rest of Europe. At other times, Britain was cut off and there were no humans here at all.

This lesson is about the first waves of occupation of the British Isles during the Lower and Middle Palaeolithic. During these periods, our own species of human had not yet evolved or migrated into Europe. So all the humans we look at in this lesson belong to other species of the *Homo* genus. **The lesson focuses on three important Palaeolithic sites in Britain: Happisburgh, Boxgrove, and Pontnewydd.**

FACTSHEETS: The Palaeolithic, Evolution

GLOSSARY TERMS: artefact, ecofact, flint, handaxe, hominid, hominin, *Homo*, *Homo erectus*, *Homo habilis*, *Homo heidelbergensis*, hunter-gatherers, Neanderthals, nomadism

Resources

- Printed copies of the information sheets for Happisburgh, Boxgrove, and Pontnewydd
- Printed copies of the table
- Paper to draw on and coloured pens

Activities

1. Identify the Palaeolithic on your timeline (and/or toilet roll timeline)
2. In groups or pairs, read the information sheets for the Happisburgh, Boxgrove, and Pontnewydd archaeological sites
3. Look up these terms in the glossary: artefact, ecofact, flint, handaxe, hominid, hunter-gatherers, Neanderthals, nomadism
4. Use the information sheets and the glossary to fill out the table

Plenary

- Make a mind map of what different types of evidence can tell us about life in the Stone Age: handaxes, animal bones, human skeletal remains...
- Draw pictures of life at the sites
- Discuss what life was like in the Palaeolithic, and what you would need to be good at to survive

More information

Information about Happisburgh from the Natural History Museum:

<http://www.nhm.ac.uk/our-science/science-news/2014/february/we-were-here-earliest-humans-prints-norfolk-beach.html>

Information about Pontnewydd from the Museum of Wales:

<https://museum.wales/articles/2013-07-09/The-oldest-people-in-Wales---Neanderthal-teeth-from-Pontnewydd-Cave/>

Note that if you are using the detailed timeline from Schools Prehistory you can find Happisburgh, Boxgrove and Pontnewydd on it.

Happisburgh

Happisburgh is an archaeological site on the coast in Norfolk. Happisburgh is sometimes pronounced 'haze-boro'.

The site is very important because it has the *oldest* evidence of human presence in northern Europe. The evidence is around 850,000 years old.

So what evidence did the archaeologists find when they excavated? They found:

- Artefacts (hand axes and other tools made of flint)
- Animal bones
- Plant remains (for example pine cones)
- Fossilised footprints

The people who left this evidence were a species called *Homo antecessor*, which means 'pioneer human'. Their species existed from 1.2 million years ago to 800,000 years ago.

The footprints tells us how many of them there were and how big their feet were. There were footprints of at least five individuals, and some of the footprints were so small that they were probably made by children.

What did they do here at Happisburgh? The evidence suggests that they:

- Made some stone tools
- Hunted and butchered land animals
- Collected wild foods from the sea like shellfish and seaweed

The plant remains and other 'climatic' data tells us that the weather was probably quite cold during this period.



Boxgrove

Boxgrove is a sand and gravel quarry in West Sussex. Within this quarry, many important archaeological finds have been made. For example:

- Flint tools (like handaxes)
- Skeletal remains (a leg bone and two teeth)
- Animal bones (from for example lion, bear, rhino, horse, and birds)

The human leg bone comes from a species called *Homo heidelbergensis*, which existed in Africa and Europe from 700,000 years ago to 200,000 years ago.

The bone that was found is called the 'tibia', which is the scientific name for shin bone. The teeth were incisors, and they may have come from the same individual as the tibia.

Many of the animal bones had cut marks on them, which tells us that people hunted and ate them. They probably used handaxes to butcher the animals.

The archaeological evidence at Boxgrove is around 500,000 years old. At that time, the weather was warmer than it is today. That is why some animal species that prefer hot weather - like lions and rhinos - lived in Britain at that time!

Pontnewydd

Pontnewydd is a cave in Denbighshire in north Wales. When archaeologists excavated the cave, they found 19 teeth. Scientists have identified the teeth as coming from Neanderthals. The 19 teeth from Pontnewydd cave came from at least five individuals, including a child.

Neanderthals lived in Europe from around 250,000 years ago to 40,000 years ago. The Neanderthals in Pontnewydd have been dated to around 230,000 years ago.

They were well adapted to cold weather, and were shorter than we are today. They had broad hips and shoulders, and were very strong. They may have had better eyesight than we do, and perhaps they could see better in the dark.

We used to think that Neanderthals were just primitive savages, but now we know that in their own ways they were very resourceful and could survive in harsh climates. We know that they used animal skins to make warm clothes and shoes.

Archaeologists also found stone tools and animal bones in the Pontnewydd cave.

Neanderthals made handaxes, but they also made other types of tools from flint. For example, they made scrapers, flakes, and spear points. This diversity of tool types tells us that Neanderthals were smarter than their ancestors. They could adapt the flint to many different purposes - for example, for scraping the fur off an animal skin to make leather.

They hunted many wild animals, for example horse, deer, and mammoth.



	Happisburgh	Boxgrove	Pontnewydd
How old is the site?			
What species of early human lived there?			
What artefacts were found there?			
What other evidence was found?*			
What did the people who lived there eat?			
What was the weather like?			

*for example ecofacts, human skeletons...

What was the most important type of artefact in the British Palaeolithic?

Can you draw a scene from one of these sites - for example a picture of people walking along the shore at Happisburgh, looking for shellfish? (don't forget their footprints!)

Lesson 5. Stone Age art I: Palaeolithic art

Lesson objectives

- To look at the different types of art produced in the Upper Palaeolithic, including cave paintings, decorated tools, and carved figures
- To think about who created the art and why
- To think about how it was created and what the art was made of
- To have a go at making cave paintings

Curriculum links

- Art, D&T, Literacy, Science, Geography, PSHE

Introduction

Humans have always been creative, and everyone is creative. We tend to associate creativity with artists, and forget that creativity is important in other areas of life as well. For example, creativity is important in cooking, marketing, teaching, decorating, gardening... In prehistory, people had to be creative in making the tools and clothes that allowed them to survive and thrive. **This lesson is about the earliest and most tangible expression of creativity from the Stone Age: Palaeolithic art.**

The earliest known art in Europe dates from around 40,000 years ago. The appearance of art in Europe is associated with the arrival of our own species, *Homo sapiens sapiens* (although there *may* be some evidence that Neanderthals also made art). In Africa, art was created much earlier; for example, engraved ochre pieces dating from around 75,000 years ago have been found at Blombos Cave in South Africa.

Cave paintings are the most famous type of Palaeolithic art, but we also find figurines and decorated objects. There are many theories as to why the objects and paintings were created. Perhaps we will never know – just like we don't really know why we create art today. One thing to note, however, is that our modern approach to art is to focus on the finished object. In the past, the process of *making* the art, and/or the place it was made in, may have been much more important than the finished artwork.

FACTSHEETS: The Palaeolithic

GLOSSARY TERMS: Anthropomorphic, Aurignacian, figurine, Gravettian, ivory Magdalenian, ochre, ritual, zoomorphic

Resources

- A large roll of lining paper that can be cut into 5 metre lengths, one length per group
- 1 pestle and mortar per group (these can be proper ones or made of a flat stone for grinding on with a small hand held stone. These can be sourced as a challenge by the kids!)
- Natural pigments (for example charcoal, chalk, berries, earth)
- 1 egg per group
- A small bottle of vegetable oil, or a small tub of margarine
- A collection of small disposable containers, like yoghurt pots, cups or even egg boxes to mix the paints in
- Sticks, feathers, leaves and the like, to use as paintbrushes and mixers (these can be collected by the children along with the grinding stones)
- Printouts of the 'How to make Palaeolithic paint' information sheet
- Photographs of famous cave paintings on a screen or printed out

Activities

1. Introduce the class to Palaeolithic art (use the images below, for instance)
2. Divide the class into 'tribes', and give each group: a 5 metre roll of paper, an egg, some fat, mixing boxes, and a pestle and mortar
3. Perhaps go outside to collect stones and 'paintbrushes'
4. Ask the groups to discuss what they want to paint (a hunt? A dance? A herd of grazing buffalo or deer? A map?)
5. Ask each group to choose their pigments from the selection
6. Using the information sheet, get the groups to work together to make two types of paint
7. Create some cave paintings!
8. Ask each group to develop a story around what they have painted

Plenary

- Discuss the stories that the groups developed. Did they write it down? Which form of storytelling is easier, most detailed, and/or most engaging – written, verbal, or pictorial? Which type survive the longest, and why?
- Why do you think the drawings were made? Are they magic spells to help with the hunt? For remembering important events? Asking the gods for help?
- What do we ourselves record through art like drawings and photographs? Think about selfies, photo albums, drawings on the fridge...

More information

Aspects that may be interesting to discuss with the class include:

- The animals in cave paintings were **drawn from memory**. The animals were not posing for the artists in the cave!
- In some paintings, the animals seem to have **feelings or personalities**. For example, mammoths look angry. Did people associate animals with different personalities? Did they think of animals as 'people'? Ethnographers who have studied non-Western societies often find that the boundary between human and animal is much more blurred than it is for us in the modern Western world.
- How did the artists become so **good at painting animals**?

An image search for Altamira, Chauvet, or Lascaux cave paintings will turn up some excellent photographs. For example, **the Bradshaw Foundation** has excellent photographs of the Chauvet paintings, and several other great image galleries and good texts.

The film *Cave of Forgotten Dreams* by Werner Herzog is worth watching. It is usually available on YouTube or Vimeo.

Children with [egg allergies](#) could make paint with oil and fat instead.

Examples of figurines and engraved objects

Here are a few objects that you can use for a PowerPoint introduction to the topic. They are copyrighted to The Trustees of the British Museum, and released under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International (CC BY-NC-SA 4.0) license. This means you can use it for teaching. If preferred you can download them from the British Museum website.



Horse engraved on bone from Robin Hood Cave, Creswell Crags, Nottinghamshire.

Note the realistic depiction of the horse running – the upright lines might be fences to keep the horse running in a straight line. The marks on the left are more aggressive, and look like someone trying to scrub out the horse. This is one of the best and earliest examples of art in the UK.



Tip of a mammoth tusk carved as two reindeer depicted one behind the other, found in France.

The leading, more detailed figure is a female with smaller body and antlers. Finely incised notching and shading outlines the variation of colours in her coat. The following male figure has larger antlers and equally detailed carving of the ears and eyes but its body is unshaded. Both animals are depicted with their chins up, the antlers laid back, the front legs extended forward and bent at the knee and the back legs extending back.

This is probably how the reindeer were seen when swimming across rivers when migrating. (Great opportunity to discuss them near Christmas, as they could be flying instead of swimming!). The Swimming Reindeer was one of the objects in the BBC and British Museum programme *A History of the World in 100 Objects*. You can listen to the programme online – try searching 'BBC history of the world'. It's episode 4.



Decorated horse chin, found in Kendrick's Cave, Great Orme's Head, Wales.

The object consists of the horse chin which has been broken off from the jaw in front of the molar teeth. The underside of the chin is decorated with five panels of incised chevrons; each panel is different in the number of lines present and their width.

How to make Palaeolithic paint

Palaeolithic people did not have modern paint like oils and watercolour. Instead, they had to use natural materials that they could find.

Here is how to make two types of natural paint:

1. Use your pestle and mortar to grind your pigments (but don't mix the pigments with each other!)
2. Use a cup to mix one of your pigments with a little bit of fat
3. Use another cup to break your egg and whisk it with a stick
4. Use a third cup to mix a little bit of the whisked egg with one of your pigments

Now you should have two different paints - one with egg and one with fat. Which one do you think works best?

Make a few different paints, and then make some cave paintings!



Lesson 6. Hunter-gatherers of the Mesolithic

Lesson objectives

- To learn about wild food, hunting and gathering, and the Mesolithic
- To consider where food comes from

Curriculum links

- Literacy, Maths, Science, PSHE

Introduction

The last ice age ended in north-west Europe around 10,000 years ago. This marks the beginning of the Mesolithic period, or Middle Stone Age. In Britain, the Mesolithic lasted until around 4000 BC, when people began to farm and adopted other things that signal the beginning of the Neolithic.

Mesolithic people were skilled hunters, fishers, and plant gatherers. They were probably semi-nomadic, which meant that they lived in a few different places throughout the year. Some coastal groups relied on seafood for much of the year.

In this lesson, we look at the kinds of wild foods that hunter-gatherers of northwest Europe ate. A key type of Mesolithic archaeological site is introduced: shellmiddens.

FACTSHEET: The Mesolithic

GLOSSARY TERMS: Holocene, hunter-gatherers, ice age, last glacial period, Mesolithic, midden, nomadism, sea level change, shellmidden

Resources

- Printed copies of the wild food and shellmiddens worksheet (add numbers to the shellmidden maths challenge to suit your class)
- Potentially a book with images of wild plants and animals of Britain, for reference when drawing
- Gloves if you are going to pick nettles on the foraging walk
- If relevant, the equipment and ingredients needed for cooking

Activities

1. Use the glossary terms and factsheet to introduce the class to the Mesolithic and to hunter-gatherers (see also the BBC video clip link below)
2. In groups or pairs, do the wild foods and shellmiddens worksheets
3. Make drawings of each wild plant and animal species you identified on the wild foods sheet (keep the drawings for the next lesson)
4. Go on a foraging walk to identify and collect some wild foods
5. Time and resources allowing, cook a 'wild food' dish

Plenary

- Consider where our food comes from today
- Discuss the differences between Mesolithic and modern diets – which is healthier? Tastier?

More information

This clip about life in the Mesolithic, from BBC's *The Story of Britain* is a useful introduction to the period: <http://www.bbc.co.uk/programmes/p01zfxnh>

Regarding **shellmiddens**, shellfish species include molluscs like scallops, clams, mussels, winkles, and oysters, and crustaceans like crabs, prawns, and crayfish. The mollusc species are the most commonly found in Mesolithic shellmiddens. You can amend the maths in the shellmidden challenge to suit your class.

For the **foraging walk**, look for edible wild foods like dandelion, nettle, mushrooms (beware the poisonous ones!), and hazel would be great – many Mesolithic sites yield thousands of hazelnut shell, and they probably used the trees for firewood and building material as well.

The Modern Forager blog has many useful tips (but he is American so we don't have all the same plants of course): <https://www.modern-forager.com/>

The book *Prehistoric Cooking* by Jacqui Wood (The History Press 2001) may be of use if you want to get the class cooking.

If you aren't able to cook with the class, some children may want to take the recipes home with them to try?

Wild foods

If you travel back to the Mesolithic in a time machine and join a group of hunter-gatherers, which of these foods, plants, and animals may you encounter?

roe deer
wild horse
mussels hazelnuts
mushrooms
cornflakes yoghurt
bacon wild boar
deer seal fox spaghetti
rice salmon
fish fingers potatoes apples
blackberries trout
oysters
cheesecake
crisps



Shellmiddens

Mesolithic people liked to eat a lot of fish and seafood. Many tribes had camps near the beach, so they could collect shellfish, go fishing, and hunt marine mammals like seals.

Because they ate so much shellfish, large mounds of shells were gradually created near the coastal camps. These large mounds are called shellmiddens.

Shellmiddens can be huge - sometimes they are several metres high. That's because they accumulated over a very long time. For archaeologists, the shellmiddens are important sources of information about Mesolithic life.

What shellfish species do you know?



Shellmiddens contain shell (of course!) from shellfish that was eaten and used as bait for fishing.

Sometimes, the shellmiddens also contain bone from land-living animals (for example deer), artefacts, hearths, and even human skeletal remains.

Let's imagine a tribe of _____ people, eating _____ shellfish each day. How many shellfish are in the midden after:

- One week?
- The month of June?
- One year?
- One year - but the tribe only lived at the coastal camp for half the year?
- Ten weeks?
- Ten weeks - but _____ members of the tribe were away on a hunting trip during five of those weeks?



Wild food recipe 1: fish baked in dandelion and nettles

Prehistoric people cooked fish and meat by wrapping it in leaves or grasses, then wrapping this in a layer of mud. This was then cooked in the embers of the fire. This method stopped the meat or fish burning in the ashes or getting lots of ashes stuck to them. For this recipe we'll use tinfoil and an oven instead – but do experiment with more authentic materials if you have the resources! You can also add nuts.

Equipment and ingredients:

1 large roasting tray, tin foil, 2 trouts (filleted), apples

Several handfuls of nettles and dandelions (picked from areas not sprayed by pesticides or dogs preferably)

Method:

1. Using rubber gloves so you don't get stung, stuff some of the nettles and dandelions inside the fish
2. Place the fish on a bed of more nettles and dandelions on the roasting tray
3. Cover with yet more nettles and dandelions, place apples on the side
4. Cover with tin foil
5. Bake for 20 minutes at 200°C (the fish will be opaque when cooked)
6. Carefully remove any bones and serve with some of the greenery



Wild food recipe 2: meat and wild plant skewers

Prehistoric people would have cooked a lot of their meat over an open fire. Barbecues are just a modern version of this!

Equipment:

A barbeque or oven

Wooden skewers soaked overnight in water so they don't burn (get the class to do this the day before)

Knives and chopping boards

Ingredients:

500 g meat (beef, pork, lamb, chicken, or a mixture – or Quorn chunks for veggies)

Mushrooms

Apples (blackberries may be good too!)

Herbs and or honey could be used to make these more interesting. Wine or beer could also be poured over them if you are adventurous!

Method:

1. Chop the meat into small chunks (about the size of a wine cork)
2. Chop the mushrooms and apples into similar sized chunks
3. Thread the ingredients onto the skewers (don't pack them too tightly – they cook better with some space in between)
4. Brush some honey (and wine or beer) over the kebabs and sprinkle with herbs
5. Cook until done on the barbecue or in the oven (25 minutes at 190°C, turning occasionally, if in the oven)

Always wash your hands and equipment carefully with lots of soap when you have handled raw meat!

Lesson 7. First farmers of the Neolithic

Lesson objectives

- To learn about the invention of farming and the Neolithic
- To think about where food comes from today and in the past

Curriculum links

- Geography, Literacy, Science

Introduction

The Neolithic is considered to 'begin' when people abandon their hunter-gatherer lifestyles to grow crops and keep animals instead. In Britain, this happened around 4000 BC. The domestic plant and animal species (wheat, barley, cattle, pig, sheep, and goat) that were introduced into Britain at this time were *not domesticated here*. Instead, they were domesticated mostly in the Middle East, from around 12,000 years ago. It then took many thousand years for the farming lifestyle to spread across Europe.

Other things that were introduced to Britain around 4000 BC are: pottery, polished stone axes, sedentary lifestyles, and monumental architecture.

In this lesson, we look at the farmed foods of the Neolithic, and how domestic plants and animals compare with wild ones.

Although domestic species were introduced in the Neolithic, people did not stop eating wild foods. Indeed, we still eat some wild foods today! The significance of farmed foods – both nutritionally and socially – to people in the Neolithic is still hotly debated among archaeologists. In most places around the world, early 'farming' communities in fact practiced some form of 'mixed economy' for a very long time, before becoming 'fully' agricultural.

FACTSHEETS: The Neolithic

GLOSSARY TERMS: crop, domestication, Fertile Crescent, monument, Neolithic, quern, sedentism, settlement

Resources

- Printed copies of the farmed foods worksheets
- Art materials for creating the menus and farmed species drawings
- If relevant, the equipment and ingredients needed for cooking

Activities

1. Introduce the class to the Neolithic and to farming (see also the BBC video clip link below)
2. Do the farmed foods worksheet
3. Create a Mesolithic and a Neolithic restaurant menu, with starter, main course, and dessert
4. Time and resources allowing, cook a 'farmed food' dish

Plenary

- Put the wild and domestic food species drawings (from this and previous lesson) on the walls or in portfolios
- Discuss how many of our most important staples (wheat, milk, etc.) were first adopted in the Neolithic, and how our uses of them have changed in recent times
- Make a mind map of the many foods we produce from these staples (for example pasta, biscuits, and pie crust from wheat)

More information

This clip about life in the Neolithic, from BBC's *The Story of Britain* is a useful introduction to the period: <http://www.bbc.co.uk/programmes/p01zfxgg>

From Schools Prehistory, Lesson 2 in the Everyday Life in Prehistory block is about farming in the Neolithic, with activities about the farming year. The slides are also very useful for introducing the class to the invention and spread of farming.

The domestic 'cousin' of junglefowl is the chicken (although, strictly speaking, that doesn't come into Britain until later on in prehistory). For the table, tomatoes and potatoes of course come to Europe only after the 'discovery' of the Americas, so a reminder of Columbus may be needed here.

The overlap in the Venn diagram between prehistoric and modern foods (for example bread, beer, butter, and honey) of course show how prehistoric diets have influenced modern ones. In some ways we still eat like our prehistoric ancestors! But in other ways, we don't... Compared to prehistoric diets, modern food is much more industrially processed, has more sugar, and contains an extraordinary mix of foods from around the world.

Farmed foods

In the Neolithic, people started to grow their own food instead of gathering wild plants. For example, they developed four important types of cereal:

- Wheat
- Barley
- Rye
- Oat

A domestic animal is like a tame cousin of a wild animal. The wild cousin of cattle is called aurochs. Aurochs are now extinct, but when they existed they were much larger than modern cows.

It would be difficult to keep large, wild animals on a farm! Because of this, domestic animals are smaller and less aggressive than their wild cousins.

Can you think of the domestic cousins of these wild animals?

Wild animal	Domestic cousin
Wild boar	
Aurochs	
Wolf	
Tiger	
Junglefowl	

Can you place these plants, animals, and foods in the right box in the table?

mushrooms

barley

sugar

eggs

honey

nuts

beer

insects

nettles

ketchup

bread

jam

butter

potatoes

deer

chicken

wheat

dried meat

boar

fish

lamb

apples

biscuits

oatmeal



Mesolithic food	
Neolithic food	
Modern food	

What differences are there between Neolithic food and modern food? Why do you think that is?

Can you make a Venn diagram of Mesolithic, Neolithic, and modern food to show if there is any overlap between them?

Can you draw these Neolithic species: wheat, oat, cattle, pig, and sheep?

What foods can you make from the Neolithic species? For example: cheese...



Farmed food recipe 1: oat flat breads

Archaeologists have found evidence of oats being cooked from over 32,000 years ago (in a place called Grotta Paglicci in Italy). This simple bread (and ones made from barley or wheat etc.) might well have been eaten by your Stone Age ancestors.

Equipment:

Large frying pan

Large mixing bowl, or separate mixing bowls for multiple groups

Pancake flipper

Hotplate or hob for cooking on (or a hot cooking stone outdoors!)

Mortar and pestle

Hand blender or blender for pulverising the oats in (they don't have to be completely pulverised)

Ingredients:

500g oats

300ml water

1 teaspoon salt

Optional: herbs, nuts or berries

Method:

1. Divide the ingredients between pairs/groups
2. Grind oats into flour (at first get the kids to try the mortar and pestle. If this takes too long then point out that they are lucky and can use the blender instead. Many skeletons from the Neolithic show wear marks on their knees and joints from spending a long time every day grinding grains into flour)
3. Mix the oat flour, water and salt together into a dough
4. Pinch off golf ball-sized rounds and flatten out like pitta breads. They need to be as thin as a digestive biscuit if possible or they won't cook in the middle
5. Cook them in the frying pan on a medium hot hob, until browned on either side

Serve with honey drizzled on top or use them as scoops for other foods!

Farmed food recipe 2: barley pudding

This is a very old recipe and although it takes a little while to cook it is very easy, doesn't require much work, and is very, very tasty!

Equipment:

Hob for cooking on (you can cook this in the oven at 180°C for an hour if this is easier, use a greased casserole dish)

Large saucepan

Weighing scales

Wooden spoon

Bowls for eating

Ingredients:

100 grams of barley grains

1.2 litre goat milk

2 tablespoons of honey

Optional: herbs, nuts, or berries

Method:

1. Measure the barley and milk into a large saucepan
2. Cook over a medium hob for half an hour, stirring occasionally to stop it sticking
3. Add honey when the barley is soft

Spoon into bowls and enjoy with berries or on its own!

Lesson 8. At home in the Stone Age

Lesson objectives

- To learn about where people lived in the Stone Age
- To consider the difference between temporary and permanent settlement

Curriculum links

- Literacy, D&T, PSHE

Introduction

Where did people live in the Stone Age? **What was 'home' to them?** These are key questions for archaeologists. In the **Palaeolithic**, people used cave sites – probably not only for living in but also for ritual purposes (maybe they had different caves for different purposes?).

In the **Mesolithic** the first evidence of small houses or huts appears, although that doesn't mean there were no huts before – only that we haven't found them yet. This is an important point: many of the pre-Neolithic shelters were deliberately temporary, so they are very hard for us to detect. But that doesn't mean that people didn't have homes that were central in their lives.

The **Neolithic** is a bit complicated when it comes to settlement evidence. In the earliest Neolithic, people built large timber halls – just like elsewhere in Europe. Then the evidence gets more elusive. Did people shift to more temporary houses, perhaps as part of a more mobile existence? If so, that was probably connected to the rise of pastoral lifestyles – people followed their cattle herds so they didn't want permanent villages. Later on in the Neolithic, stone-built houses appear in the Orkney islands. These sites are very famous, and Skara Brae is the best known.

The bottom line is that the type and degree of permanence of houses is closely linked to how people got their food. Hunter-gatherers move to new areas as the seasons change and game animals migrate. Farmers want to live close to their fields. **In this lesson we look at the houses from some important Mesolithic and Neolithic sites.**

GLOSSARY TERMS: midden, nomadism, sedentism/sedentary, settlement

Resources

- Pictures of different types of Stone Age houses, including Skara Brae and the reconstructed Howick hut (see useful websites below)
- Small sticks, straw or dry grass, small stones, bits of plain cloth (instead of animal skins), clay, and water to make the clay wet enough to stick together (you can use sugar cubes instead of clay blocks for the Skara Brae houses)
- Print-outs of the 'Where should I build my house' worksheet

Activities

1. Introduce the class to nomadism, sedentism, and settlement
2. Show pictures of a Mesolithic hut (Star Carr, Howick), an early Neolithic timber house (Horton, White Horse Stone) and a late Neolithic stone house in Orkney (Skara Brae)
3. Discuss the link between food and settlement, and do the 'Where should I build my house' worksheet
4. Build a Mesolithic hut and a Skara Brae stone house!

Plenary

- Discuss what you would bring with you if you had to move to a new settlement every couple of months
- Discuss what kind of lifestyle the class would prefer – nomadic hunter-gatherers or settled farmers? Have a vote, are you settlers or nomads?

More information

The information sheet about **how to build models of Mesolithic and Neolithic houses from Schools Prehistory** (Lesson 3 from the Everyday Life in Prehistory) will be extremely useful, do get copies of this!

You can find lots of good information and images about the key sites for this lesson online. A search for 'Skara Brae Neolithic' takes you to the **Historic Environment Scotland's webpages** about the site. **Orkneyjar** is another excellent resource.

The most recent archaeological project at Star Carr has its own website (**starcarr.com**), which also has an excellent set of lesson plans about life in the Mesolithic.

Wessex Archaeology has some online resources about the Neolithic timber houses found at **Kingsmead Quarry, Horton**. This includes a digital reconstruction of a house. A

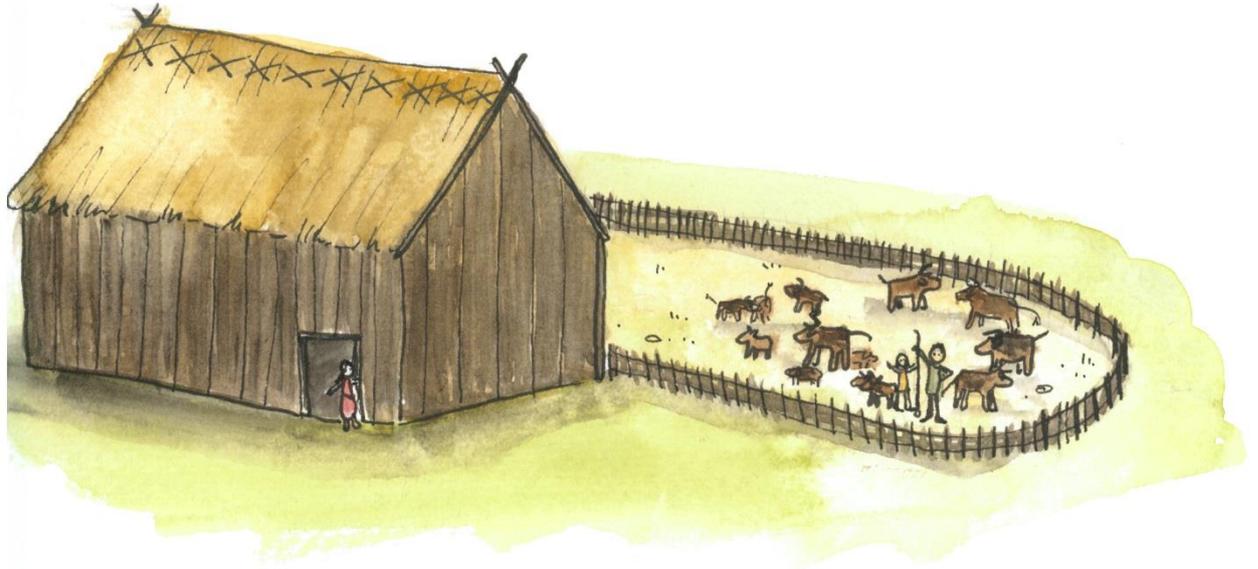
drawing of the house at **White Horse Stone** in Kent and other Stone Age houses are included in the Image Bank for this resource.

Here's a summary of house types from British prehistory:

Period	Types of shelter	Example sites
Palaeolithic	Caves, temporary shelters	Goat's Hole Cave (Gower), Creswell Crags (Derbyshire)
Mesolithic	Small, temporary houses (huts)	Howick (Northumberland), Star Carr (Yorkshire)
Neolithic	Stone-built houses (Scotland), large timber halls. Probably also temporary huts	Skara Brae (Orkney), Balbridie (Aberdeenshire), Claish (Stirling), White Horse Stone (Kent), Horton (Berkshire)
Bronze Age	Roundhouses	Black Patch, Sussex
Iron Age	Roundhouses, wheelhouses (Scotland), brochs (Scotland)	Little Woodbury (Wiltshire)



A house at the Neolithic village Knap of Howar in Orkney



Where should I build my house? Which of these places should I avoid? Which of them should I build my house close to?

A river

A bear's cave

My field of wheat

On top of a hill

A bog

An old grave where dangerous spirits live

A place in the woods where deer gather to eat

A grassy area where my cows like to eat

A stony beach with lots of shellfish



Lesson 9. Stone Age technology

Lesson objectives

- Understand that creativity and technological skill helped us survive and thrive
- Identify key Stone Age technologies
- Create a piece of Stone Age technology

Curriculum links

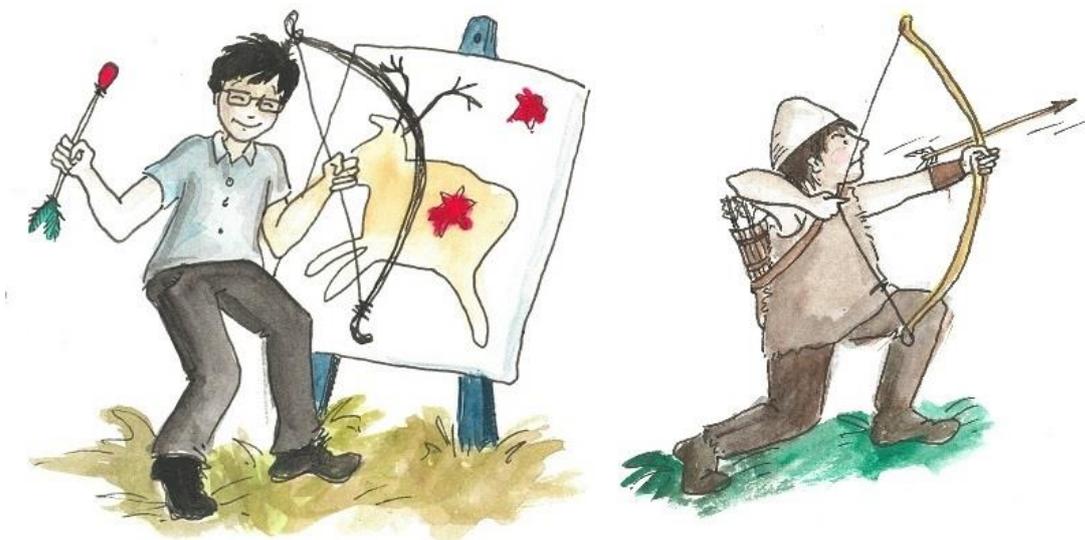
- Literacy, Science, PSHE, D&T

Introduction

Stone Age people survived and thrived thanks to their ingenuity, creativity, and craftsmanship. They had to *make* every single thing they needed – their houses, clothes, tools, cooking implements, hunting weapons, musical instruments, medical equipment...

We still use many Stone Age technologies today – from fire and projectile weapons to ceramics and querns. **In this lesson we look at certain crucial technologies: fire, clothing, and pottery.** We also look at some important everyday objects. The *materials* people used are important for archaeologists, so there is some emphasis on raw material use as well.

GLOSSARY TERMS: awl, blade, burin, ceramic, composite tool, flake, flint, harpoon, lithics, microliths, pottery, quern, scraper, sherd, temper



Resources

- Printed copies of fire, everyday objects, pottery, and clothing worksheets
- To make bows: long bendy sticks + string
- To make arrows: medium length sticks + cotton wool and bits of fabric (to make the ends blunt for safety!) + elastic bands
- A big sheet of paper to draw a target on + red paint

Activities

1. Ask the class what we need to survive (food, equipment for getting and cooking food, warmth, shelter...)
2. Ask the class what they would do if they could not buy anything they needed
3. In pairs or groups, work through the worksheets on fire, tools, pottery, and clothing
4. Make bows and arrows (or save this activity for another day!)

Plenary

- Make a mind map to consider the things we still use today that were invented in the Stone Age (fire, clothing, knives, querns, ceramics, canoes, jewellery like pierced beads, musical instruments like flutes and drums...)
- Use the format of Dragon's Den to discuss which technologies are most important, and why (maybe have a vote!)
- If relevant, continue the discussion of where our own objects and clothes come from (China?)

More information

There are many good online resources on how to **make a simple bow and arrow**. The end of the arrow should be a ball of cotton wool wrapped in fabric and fastened with a rubber band. Dip this tip of the arrow in red paint (blood!) so you can see where the arrow hit the target. Or have different colours for different teams! You may want to do this activity outdoors.

An alternative (or addition) to making bows and arrows would be to make pottery.

An **artefact handling kit** would work well with this lesson, if you have access to one (you can buy one from Schools Prehistory!).

Regarding **clothing**, note that woven textiles come in during the Bronze Age. The evidence for this (in addition to the textile itself, which survives in rare circumstances) is weaving technologies like loom weights and combs for making thread. You may want to follow up on this during the Bronze and Iron Age components. But in the Stone Age, we must envisage mainly animal skin clothing (but very intricately made!). They were

made using ivory, bone and antler needles, and thread made of sinew and plant fibre. The girl with an antler headdress has beads made of cowrie shell stitched onto her top. (Look up finds from Mesolithic Star Carr for real antler headdresses.) The girl preparing a hide to make leather is using a flint scraper.

Regarding **pottery**, other objects made of fired clay may be figurines, beads, and building material like pipes and tiles. Pottery first appears in Britain in the Neolithic. Before pottery (and alongside it) people made containers of wood, leather, animal intestine, basketry, and stone.



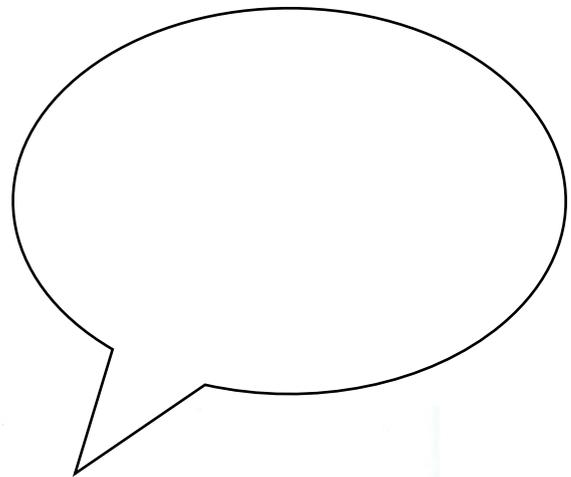
Fire

Our human ancestors learned how to control fire in the Palaeolithic. We don't know exactly *when* early humans learned to control and use fire, but it may have been as long ago as 2 million years.

The use of fire gave early humans a big advantage over other animals. Without fire, life was often cold, dark at night, food could not be cooked, and scary animals and insects could not be kept away.

List four things that a fire can provide. And what do you think the Stone Age girl is saying about their fire?

- 1.
- 2.
- 3.
- 4.



Everyday objects

People in the Stone Age made many different objects, such as musical instruments, jewellery, weapons, fishing gear, and cooking equipment.

They used materials like stone, antler, bone, wood, shell, and clay.

pottery
quern arrow
scraper
harpoon bead
flute spear
axe awl
needle
knife



Which of these objects do I need for:

- 1. Hunting*
- 2. Hidesworking*
- 3. Sewing*
- 4. Fishing*
- 5. Cooking*
- 6. Making music*
- 7. Collecting firewood*
- 8. Butchering an animal*
- 9. Grinding grain*

Clothing

Because the Stone Age lasted for so long, the climate changed several times - from warm periods between ice ages to very cold periods during and after an ice age. People had to adjust, especially to the cold periods. Without good clothing, they would not have survived!

We have very little evidence of Stone Age clothing. It was made of organic materials, which very rarely survives. But we know that they were very good at making clothes out of skins and plants.

'Oetzi the Iceman' is an archaeological find from the Alps. He was a man who lived in the Early Bronze Age, and because he became frozen in ice after he died, his clothing survived very well.





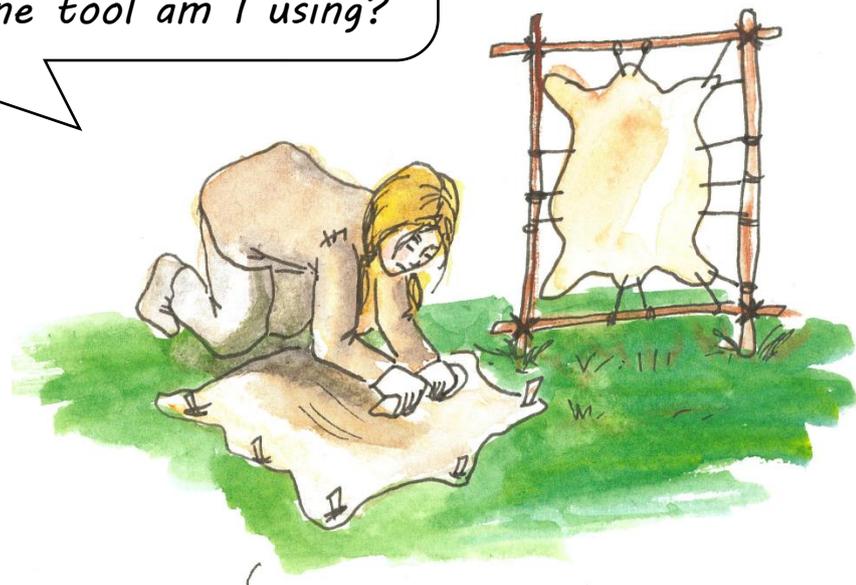
What am I wearing?

What objects were used to make my clothes and what were those objects made of?

What animals did my tribe hunt to make my clothes?

What am I doing?

What stone tool am I using?



What are your clothes made of? How were they made? Who made them?

Pottery



A pot is a bowl made of fired clay. Fired clay is called 'ceramic'. In Britain, pottery was first used when people became farmers.

Pottery was an important technological invention because it makes it easier to cook food over a fire, and to keep stored food dry.

In what Stone Age period was pottery first used in Britain?

What can I use my pottery bowl for?

What else can you make out of ceramic?

What materials could you use to make bowls, if you didn't have clay to make pots?



Lesson 10. Stone Age art II: Neolithic art

Lesson objectives

- To look at the different types of art produced in the Neolithic of Britain (and its context), including portable objects and art on stone surfaces at monuments, settlements, and open-air rock panels
- To think about who created the art and why
- To think about how it was created and what it was made of
- To compare Neolithic art to Palaeolithic art (lesson 5) and reflect on why art seems to play an important role in what it means to be human

Curriculum links

- Art, D&T, Literacy, Geography, Religious Education, PSHE

Introduction

In Lesson 5 we explored some of the earliest art in Europe: the cave paintings from the Upper Palaeolithic. The British Late Neolithic is also famous for its art, but now it consists of **decorated rock surfaces** at open-air sites, monuments (like passage tombs) and – in rare cases – at settlements. There are also **decorated portable objects**, including pottery, maceheads, and stone balls.

An interesting and important aspect of Neolithic art is that the range of motifs used was quite limited. In other words, Neolithic people didn't just sit down and carve whatever came into their minds. Instead, they almost always chose from a repertoire of known motifs, which included **zigzag lines, lozenges (diamond shapes), dots and circles, spirals, and 'eyes'**.

We find these motifs on many different materials: stone, pottery, wood, chalk, antler, and bone (and on gold and bronze in the Early Bronze Age). So archaeologists talk about 'motifs shared across different media'.

This lesson is about this set of motifs and the different surfaces they were created on (but instead of using bone and stone, we use paper, clay, and cardboard).

FACTSHEETS: The Neolithic

GLOSSARY TERMS: Anthropomorphic, figurine, long barrow, passage grave, ritual

Resources

- Clay + sticks or something to carve symbols into the clay with
- Paper and coloured pencils or watercolour
- Pipe cleaners, yarn, or string
- Beads, sequins, or the tiny leftover bits of paper in the hole puncher
- Cardboard
- Glue
- Print-outs of images of the range of motifs

Activities

1. Introduce the class to Neolithic art in Britain and Ireland
2. Show the specific motifs that most Neolithic art consists of: zigzag lines, lozenge (or diamond) shapes, dots, circles, spirals, and 'eyes'
3. In tribes, pairs, or on their own – have the students create Neolithic art by filling up a sheet of paper with the Neolithic motifs (look at how the entrance stone at Newgrange is completely covered in shapes)
4. Now make art on a clay surface: each student makes a ball of clay, flattens it, and carves the motifs into the clay (you can make them into pendants by making sure each clay disc has a hole at the top)
5. Now create the motifs on the cardboard surface (maybe paint it first?) using the yarn/pine cleaners and sequin/paper bits and glue

Plenary

- Discuss the *physicality* of creating art on different surfaces. Can you use the same tools to create art on a paper and on clay? What about if you had to create art on a rock surface? (Clue: you'd need something harder than the rock itself – for example quartzite). Which of the Neolithic surfaces can you carve into most easily?
- Arrange these materials from softest to hardest: clay, chalk, wood, antler, stone (that's probably the right order but it depends on the type of wood)
- Archaeologists don't know what the motifs/symbols mean. Maybe they are a kind of language? Could they be maps, of the landscape or the night sky? Ask the class to suggest what each symbol 'meant' (if anything...).
- If the symbols meant certain things, could they mean the same to people in Ireland, Kent, and Orkney? If so, what would it take?

More information

There are over 1200 **decorated portable artefacts** from the Neolithic in Britain and Ireland. They are found across the British Isles, but certain types cluster in certain areas. The intricately made carved stone balls and other stone shapes of Neolithic Orkney and the northeast of Scotland are one example. In southern Britain, carved chalk objects are more common. In Ireland, decorated artefacts are associated with passage tombs, and one of the most famous artefacts is the Knowth macehead (a type of (?)ceremonial hammer).

Figurines are rare in the British Neolithic, but they are common in the Neolithic elsewhere in Europe and Asia. For example, an online image search for 'Catalhoyuk figurines' will return images of the incredible female statuettes of this important Neolithic site in Turkey. However, a handful of anthropomorphic figures have been found in Britain in the last decade. The most famous one is called **The Westray Wife** and was found during an excavation of the Links of Noltland site on Westray in Orkney in 2009 (image below). She is only 4 cm tall and was made of sandstone.

It is generally difficult to determine how old these artefacts are, partly because many of them were collected before modern standards of archaeological excavation were developed. This means that we have little or no knowledge of their original context. The scarcity of reliable dating evidence is a challenge also for understanding open-air **rock art**. We think that much of it was made in the Bronze Age, but we now know that some of it was first made in the Late Neolithic. So it is Stone Age art!



The Westray Wife

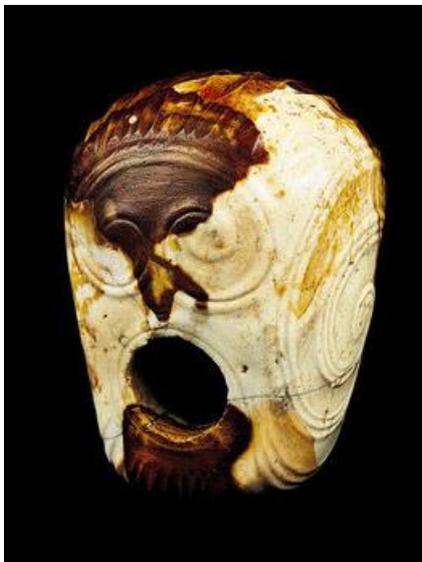
Copyright images in worksheets: Andrew Cochrane (2, 3, 7, 9); Andrew Cochrane and Aaron Watson (1); Trustees of the British Museum (4, 5, 8); Andrew Jones (6)



Left: carved stone objects found at Skara Brae, Orkney © National Museums Scotland



Right: carved stone ball found at Towie, Aberdeenshire © National Museums Scotland



Left: the Neolithic flint macehead found at the Knowth passage tomb in Ireland © National Museum of Ireland



Right: carved stone balls found in Aberdeenshire, Scotland © The Trustees of the British Museum



Dots and circles



1

Carved into the rock at Ormaig, Scotland



2

The 'Folkton Drums' made of chalk

'Eyes'



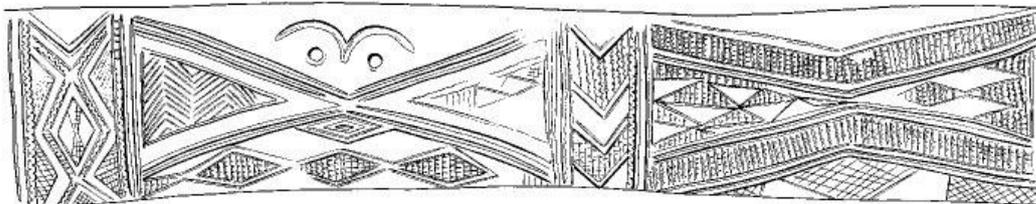
3

Eyes with eyebrows at a stone tomb in Orkney



4

Eyes with eyebrows on the Folkton Drums



5

Spirals



6

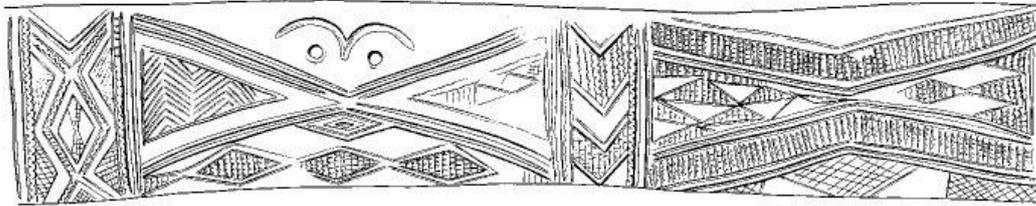
The Garboldisham macehead made of antler



7

The decorated kerbstone at Newgrange passage tomb in Ireland

Zigzags, lines, and diamond-shapes



The Folkton Drums again!



8

A pottery vessel



9

The Newgrange decorated kerbstone again. Can you see the diamond-shapes?

Lesson 11. Neolithic monuments

Lesson objectives

- To learn about some of the monuments of the Neolithic
- To reflect on why we build monuments – both today and in the past
- To reflect on religion and myth in the Stone Age

Curriculum links

- D&T, Literacy, Drama, Geography, Religious Education, PSHE

Introduction

One of the most enigmatic aspects of the Neolithic period is the many monuments. The first to appear (shortly after 4000 BC) are dolmens, long barrows, and causewayed enclosures. Then cursus monuments, stone and timber circles, and henges are made in the middle and late Neolithic. The most famous henge is of course Stonehenge.

Many of the monuments were graves, and ceremonies were probably carried out at them as well. Many archaeologists believe that ancestors were important in Neolithic religion and myth, so perhaps the dead were buried at these special places to become ancestor spirits. Neolithic people didn't necessarily bury their dead and then leave them alone. Instead their burial rites may have had many stages, and once the bodily remains were placed inside a monument they were sometimes returned to and moved around. The dead were still members of the community, and the monuments and skeletal remains were the links between different realms. Such long-term 'curation' of the remains of the dead still occurs today in many parts of the world, in various ways.

Other monuments were probably places for large seasonal gatherings (causewayed enclosures and henges). Here we find evidence of feasting, including conspicuous consumption of large quantities of meat.

This lesson is about some of these monuments: dolmens and Stonehenge. The lesson is quite long so you may want to save the dolmen-building activity to an art or D&T lesson instead, or save Stonehenge for a drama lesson.

FACTSHEETS: The Neolithic

GLOSSARY TERMS: barrow, causewayed enclosure, cursus, excarnation, henge, long barrow, megalith, monument, passage grave, portal dolmen, round barrow, trilithon

Resources

- Images of dolmens (Wikipedia has plenty)
- Dolmen materials – you can make these out of kitchen roll tubes, clay, or flat pebbles
 - For kitchen roll dolmens you need: the tubes (cut in half), glue or tape, and pens
 - For clay dolmens: clay, water, and something sharp for incising the motifs on the megaliths
 - For pebble dolmens: lots of flat rocks and pebbles, strong glue, marker pens
- A hat (or equivalent) with five pieces of paper that say: PRIEST, ARCHITECT, BUILDER, COOK, PILGRIM (one paper with each)
- *The Secrets of Stonehenge* by Mick Hanning and Brita Granström
- Camera for filming/photographing the Stonehenge drama

Activities

1. Look at pictures of modern monuments (e.g. Canterbury Cathedral, Nelson's Column, Deal Castle...). What are they for? Worship, a place for gathering, remembrance, status symbol, display of power, or to make people scared?
2. Introduce the class to Neolithic monuments, using the glossary. Explain that Stonehenge is the most famous, but it is one of many different kinds
3. Explain the terms megalith and dolmen
4. Build a dolmen! (see below)
5. Now turn to Stonehenge. Watch the English Heritage film (8.44 mins – link below) and read *The Secrets of Stonehenge* by Mick Hanning and Brita Granström
6. First, explore five key roles that people at Stonehenge may have had (see more information below about the roles) through charades: get five volunteers, each of them picks a paper out of the hat and acts the role on it (priest, cook, etc.) for the class to guess (you can either explain the different roles to the class beforehand or let them guess wildly, perhaps depending on the ages/abilities)
7. Once your volunteers have identified the five roles, divide the class into five groups – one group for each role
8. Each group now creates a small drama (3-5) minutes on their role at Stonehenge. Use the guidelines below and *The Secrets of Stonehenge* to get them going on developing their role
9. Finally each group performs their drama to the class. This could be filmed or photographed for the end of the module, or even for a mini-documentary on Stonehenge

Plenary

- Discuss the human desire to create 'sacred' places
- Discuss the impact that large, impressive buildings have on us
- Ask the class why Stonehenge is still such an important place for us?
- If you have a world map in the classroom, mark out where Stonehenge is and some of the places where dolmens were built during the Neolithic

More information

Dolmens are fascinating because they are the earliest megalithic monuments, and they were made in so many parts of the world (for example in Spain, Malta, France, Ireland, Sweden, Russia, Korea, India, Iran, Jordan, and Algeria). Originally they were probably covered with turf and soil, but that has now eroded away leaving only the stone structure.

In reality, the megaliths of portal dolmens were not decorated. Instead, decorated stones in monuments are associated with the passage graves of the late Neolithic. But it's more fun to make a dolmen if it is decorated!

Here's how to build clay dolmens:

1. Divide the class into pairs and give each pair some clay
2. Divide the clay into four and make three large "legs" (trilithons) for the dolmen. They don't all have to be the same size – just like real megaliths!
3. Flatten out the fourth piece of clay to make a roof (capstone) to stick on to the legs. Make sure it isn't too thin so it doesn't droop
4. Inscribe some Neolithic motifs (like in the previous lesson) on the trilithons
5. Assemble the dolmens – three trilithons with a capstone on top!

Here's how to build kitchen roll tube dolmens:

1. Give each pair four tubes (two cut in half)
2. Flatten the tubes and glue or tape together the ends (you can fold in the 'corners' to make them more rounded). Don't flatten them completely – let it be a bit wider in the centre (you can put cotton wool or old bits of paper inside)
3. Draw some Neolithic motifs on the tubes
4. Assemble the dolmen with glue or tape – three trilithons with a capstone

If you want to build **pebble/rock dolmens**, you may want to source the pebbles with class beforehand on a day out. Follow the same procedure and don't forget to draw motifs on first!

You can visit a dolmen in Kent: **Kit's Coty in Medway** is open to visitors all year round. If you visit, think about the landscape placement of this impressive monument. Many Neolithic monuments were built in high places – they have great views!

The English Heritage **educational film about Stonehenge** can be found here:
<http://www.english-heritage.org.uk/visit/places/stonehenge/schools/education-film/#>

English Heritage also has great resources about Avebury, West Kennet long barrow, and Silbury Hill.

There are some excellent **comics about the monuments Bryn Celli Ddu and Barclodiad y Gawres**, on Anglesey in Wales that can be downloaded from the Cadw website:
<http://cadw.gov.wales/fun/cadw-comics/?lang=en>. They were illustrated by John Swogger, who is an archaeological illustrator. Have a look at his website for many other fantastic images! They also have a board game and instructions on how to build a long barrow. Best suited for older children.



Kit's Coty dolmen (or Kit's Coty House) in Medway, Kent, is one of the earliest monuments in Britain and dates to c.4000 BC. The iron railings are modern – they were put in place in the twentieth century AD. In fact, Kit's Coty was one of the first archaeological sites to become legally protected.

Questions for the groups to consider about their 'role' at Stonehenge:

PRIESTS (or shamans, or druids): what is the circle for? Is it a place of worship, a cosmic calendar, or a place to gather and exchange foods and other commodities? Does visiting the site protect from harm or famine? Is it a place where people can ask for healing? Was it built to please the gods? What rituals may be performed here, and why? Why should the stone circle line up with the sunrise at a certain time of the year (the solstice)?

ARCHITECTS: Why was this site chosen? Why not build on a mountain top? Why replace the old wooden henge and the bluestone circle? How are you going to get the Sarsen stones from Wales to the site? How will you the centre of the stone circle to line up with the sunrise at a certain time of the year (the solstice)?

BUILDERS: How do you feel about working on this site? Are you forced to work here or did you volunteer because it is considered to be an honour? Have you had any injuries getting the stones to the site? What are the most difficult parts of the building? How did you get those capstones up on top of the large trilithons?

COOKS: You are busy preparing the autumn feast. We know from animal remains found that lots of animals (mostly pig and cattle) from a wide area were slaughtered here. Is the meat just for eating, or is it also for making sacrifices to the gods? What are you cooking for the feast? Who will be eating your food at the feast? Do you all cook together or do you have different jobs (butchering, roasting meat, making bread, serving food...)?

PILGRIMS (or visitors): Archaeological evidence from human and animal skeletons show that both people and animals travelled from far away to visit Stonehenge (the animals didn't travel on their own of course – they were brought by humans!). People came from, for example, Scotland and central Europe to visit. How far have you travelled to be here? Did you bring any animals? Which ones – your pet dog and/or some cows to slaughter for the feast? Why did you travel here? Have you been here before, and has the henge changed since last time? What are you hoping to return home with – a healed injury? Blessings from the gods? New objects that you have exchanged? A new husband or wife?

Advice on developing the drama:

Ask the group to create a 'snapshot' or 'freeze frame' of the group they are representing. Each member of the group should have a role (for example the cooks have different jobs) and be seen frozen in action.

- The Priests could be mid ceremony with their hands raised to the sun
- The Architects could be working out the angles for the circle
- The Builders could be dragging a large stone into position
- The Pilgrims could have just arrived and had their first glimpse of Stonehenge

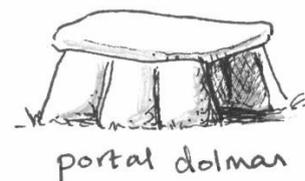
Each person in the group then needs to come up with one word from what they are doing or thinking, for example a Cook might be worried they have burnt the meat or over salted it (Burnt! Salty!). A Priest say 'praise!', a Pilgrim may say 'wow', and a Builder may say 'ow'!

Now develop that word into a sentence. An Architect may say 'is this wonky, or does it line up straight?'

Everyone says their sentence to the other people in the group. Putting them all together and try to develop a short scene around what you have come up with.

For example one of the Cooks could be getting told off for spoiling the meat, and another could be worried there isn't enough food as lots more people have turned up this year. Perhaps some of the Pilgrims have never seen Stonehenge before, but their older comrades have and they notice some changes (more stones this year, they're nearly finished!). The Priests may be preparing for sacrifices to please to gods?

Finally, once each group has had a quick practice, perform the dramas together and then discuss why they chose to do that particular snapshot view of life at Stonehenge? What did they like best about each drama?



Lesson 12. Conclusions

Lesson objectives

- To consider whether the first impressions of the Stone Age (Lesson 1) were accurate
- To look back on what we have learnt about the Stone Age
- To reflect on how much we have to thank our Stone Age ancestors for
- To reflect on how learning about the Stone Age helps us learn about ourselves

Curriculum links

- PSHE, Art, D&T, Literacy

Introduction

In the first lesson of this module we considered what people tend to think about the Stone Age. Then we set about challenging these common (mis)conceptions by looking at many ways in which Stone Age people were creative, resourceful, and adaptable. Appreciating this helps us to also think about what the Stone Age can teach us about ourselves and our modern-day world. **In this lesson we reflect on what we have learnt about the Stone Age, and what it has taught us about ourselves.**

Resources

- All the material produced during this module (see summary below)

Activities

1. Ask the class to think back on what the first impressions of the Stone Age were that you discussed in Lesson 1. Have these been challenged? Were some of them accurate? Is the Stone Age more or less fascinating than they had thought?
2. Divide the class into three groups: the Designers, the Archaeologists, and the Philosophers. Give each group its task (see below)
3. Each group presents the conclusions of their task to the rest of the class. The other two groups then get to add things that may have been missed – so that all students have engaged with each element
4. Once a plan for showcasing the module outcomes has been developed, and the facts and reflections have been shared among all groups – either continue to

work in the three groups, divide the class into smaller groups, or work all together to put the plan into practice

Plenary

- Ask each student to summarise the Stone Age with just one word
- What did they like best about the Stone Age? What did they like the least?

More information

The group tasks are:

DESIGNERS: This group is tasked with bringing together all the materials created during this module. That includes the workbook content and the other things made. The task now is to design a way to showcase some of this material. Should it be an exhibition? A play? A booklet? A really big fact sheet? A huge mind map? A board game? A comic book? The group then need to pitch their idea to the other two groups.

ARCHAEOLOGISTS: This group is tasked with summarising what the class has learnt about the Stone Age during this module. The group can produce a summary by making a list of bullet points or a mind map, for example. When the Designers have pitched their showcase-idea, the Archaeologists need to provide a list of Stone Age facts to be included.

PHILOSOPHERS: This group is tasked with summarising what learning about the Stone Age has taught us about ourselves. The group can produce a summary by making a list of bullet points or a mind map, for example. When the Designers have pitched their showcase-idea, the Philosophers need to provide a list reflections for our own modern-day society to be included.

You may want to steer the Designers towards a certain idea for showcasing the module outcomes, so you can prepare whatever is needed for that activity.

Lesson	In the workbook	Things created	Stone Age facts	Implications for ourselves
1 – Welcome to the Stone Age	Explanations of Palaeolithic, Mesolithic, and Neolithic keywords	Timeline	The Stone Age in Britain is 1 million years and is divided into three periods	We shouldn't always believe what's on telly! Question things
2 – How do we know?	'How long does it take to degrade' worksheet		Which materials they uses, and which survived	The environmental impact of our modern society
3 – Human evolution	'To cook or not to cook' worksheet		Bipedalism, big brains, cooking, precision grip – important milestones	The significance of creativity, teamwork, and adaptability + cooking
4 – First Britons	Table of key Palaeolithic sites in Britain		Life at Happisburgh, Pontnewydd and Boxgrove	
5 – Palaeolithic art	A story around the cave painting	Cave paintings	Palaeolithic people made cave art and figurines	The desire to make art is significant and ancient
6 – Mesolithic foragers	'Wild foods' and 'Shellmiddens' worksheets + drawings of wild foods	Photos of wild foods collected and cooked	People in the Palaeolithic and Mesolithic were nomadic hunter-gatherers	Where our food comes from today, problems w. modern diets
7 – Neolithic farmers	'Farmed foods' worksheet + Mesolithic and Neolithic restaurant menus		In the Neolithic people started farming and live in permanent villages	Where our main staples come from
8 – Settlement		House models	Design of temporary huts of nomads and permanent villages	Home is where the heart is
9 – Technology	Fire, tools, pottery and clothing worksheets	Bows and arrows	Stone Age people invented pottery, clothing... etc.	We have a lot to thank Stone Age people for!
10 – Neolithic art		Art on clay and paper	Neolithic people decorated many surfaces (e.g. clay)	The desire to make art is significant and ancient
11 – Neolithic monuments		Mini-dolmens, Photos or video of drama	People built large monuments in the Neolithic (e.g. dolmens)	The desire to create large, sacred spaces is significant and ancient



Do let us know how it went!



Further resources

Books

Introductions to the Stone Age for you and the class:

Prehistory: Hands On by Catherine Henderson
Activities and a time-travelling story.

History - Stone Age to Celts Study Book by CGP, part of the KS2 Discover & Learn series
A good introduction with great pictures and activities.

The Stone Age by Jerome Martin
A lovely introduction with a good glossary and pictures. A bit brief but would be helpful for students to read at home, alongside the lessons in this resource.

The Secrets of Stonehenge by Mick Manning and Brita Granström
Fun book with great picture and a useful timeline.

The Stone Age (Britain in the Past) by Moira Butterfield
A good clear introduction with excellent pictures. The books in this series (see also Bronze and Iron Age equivalents) has more text than the books listed above, so would be suitable for Years 5 and 6.

Life in the Stone Age, Bronze Age and Iron Age by Anita Graneri
Full of beautiful drawings with many archaeologically accurate details.

Stories set in the Stone Age for the class:

Stone Age Boy by Satoshi Kitamura
Highly recommended time-travel book, full of pictures and not text heavy. Probably most suitable for Years 3 and 4.

Archer, Journey to Stonehenge by Jane Brayne
Story based on the burial named the Amesbury Archer, found near Stonehenge. Plenty of archaeologically accurate details and up-to-date interpretations. The burial is from the early Bronze Age and more information about the archer can be found on the Wessex Archaeology website.

The Boy with the Bronze Axe by Kathleen Fidler

Novel set at late Neolithic/early Bronze Age Skara Brae in Orkney. Suitable for Years 5 and 6.

Chronicles of Ancient Darkness by Michelle Paver

A series of novels set in some kind of Stone Age past. Suitable for Year 6 and older. Sometimes a bit scary!

The Secret Cave by Emily Arnold McCully

The story of when the Lascaux cave, with its now-famous cave paintings, was first discovered in 1940.

Accessible archaeology books for adults (and the very precocious):

Ice Age Britain by Nicholas Barton (Batsford 2005)

The Oxford Illustrated History of Prehistoric Europe by Barry Cunliffe (Oxford University Press 2001)

Star Carr: Life in Britain after the Ice Age by Nicky Milner, Barry Taylor, Chantal Conneller and Tim Schadla-Hall (Council for British Archaeology 2013)

Wild Harvesters. The First People of Scotland by Bill Finlayson (Historic Scotland 1998)

Homo Britannicus. The Incredible Story of Human Life in Britain by Chris Stringer (Allen Lane 2006)

Museums and archaeological sites in Kent

A few museums in the region offer Stone Age workshops, or other relevant activities or displays, for Key Stage 2 school visits. [Please see the online resources for information about museums and archaeological sites beyond Kent.](#) In addition to museums, it may be worth contacting a local archaeological unit (like Canterbury Archaeological Trust or Wessex Archaeology) to see if they have artefact loan boxes or other resources for educational visits.

Dover Museum

Dover Museum has an extensive amount of material on the Bronze Age (built around the amazing Dover Bronze Age boat), but it also has displays, teaching materials, and loan kits relevant to the Stone Age.

Swanscombe Heritage Park

This site is not only of significant archaeological interest, but is also a Site of Special Scientific Interest and a nature reserve. Flint tools made 400,000 years ago have been found here alongside the remains of hunted animals, and the skull of a young woman from that period of the Palaeolithic. It is well worth a visit.

Tunbridge Wells Museum

This museum has a good collection and offers archaeology sessions that explore the concept of the 'Stone Age' and its importance, in which students get to handle objects up to 40,000 years old. Links are made between the collections and the local Wealden landscape.

Museum of Kent Life

This museum near Maidstone runs Stone Age Explorer events for schools and groups where you can discover the changes from hunter-gather life to the emergence of agriculture.

Quex Park, Thanet

This museum has a range of resources and a good schools programme.

The Guildhall Museum, Rochester

This museum has some amazing finds – which is unsurprising considering they are right next to the Medway Megaliths! They also do excellent training days on how to teach the Stone Age, and good school visits.

Samphire Hoe, Dover

This is a wonderful place for exploring the Stone Age and they do a range of activities including searching for artefacts (and there are plenty around the site) and foraging for food like our ancestors. They can put together a terrific school visit on the Stone Age, with activities like cave painting or looking at the science behind the mega flood that separated Britain off from Europe.

Canterbury Museums

This group of museum has some excellent prehistoric finds and a good education service that is based in the Beaney House of Art & Knowledge, where they offer valuable Stone Age workshops for school groups.

Coldrum long barrow

One of the Early Neolithic monuments known as the Medway Megaliths, this 5,000 year-old burial chamber still looks impressive today. It was excavated before modern standards of excavation, so some information and the main capstone has been lost. At least 17 individuals were buried here, including women, men, teenagers, and children.

From the skeletons that were recovered, we have evidence of blunt-force injuries. It seems as though some of the people buried here died violently, and a few were attacked during life but survived for some time. The monument they were buried in sits on an escarpment and still commands an impressive view. It is managed by the National Trust – search their website for information on how to visit.

Kit's Coty and Little Kit's Coty House

These are the remains of two other megalithic monuments in Medway, but they are portal dolmens. Kit's Coty also has some of the earliest examples of modern-day protection of archaeological remains in England (i.e. the iron fence around it – now old enough to be of archaeological interest itself!). They are managed by English Heritage.

Websites

There are plenty of websites with Stone Age-related content. Many are not carefully regulated to ensure safe and accurate information, but there are several excellent resources too.

As mentioned elsewhere, our favourite online resource specifically for teachers is **Schools Prehistory** (www.schoolsprehistory.co.uk). Other useful sites include:

Museums and archaeological sites:

- **British Museum**
 - For example, look at their 'Teaching History with 100 Objects' pages
- **Natural History Museum**
 - Including lesson plans on evolution
- **Museum of London**
 - Including 'London before London' lesson plans and resources
- **Star Carr**
 - Including thought-provoking lesson plans on the Mesolithic
- **Creswell Crags**

Organisations:

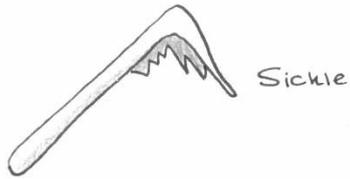
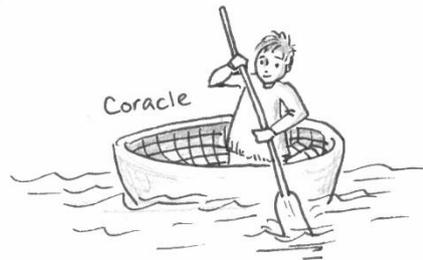
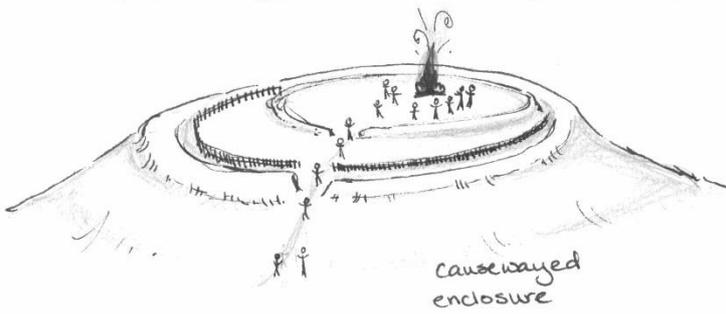
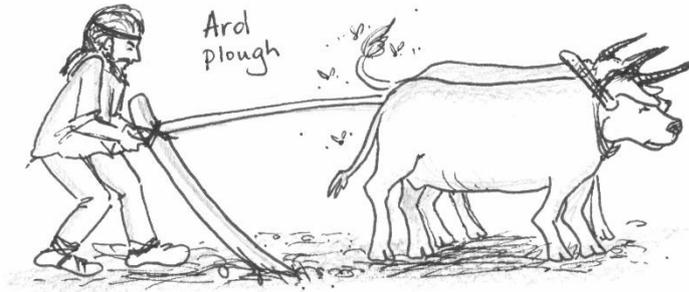
- **Council for British Archaeology (CBA)**
- **English Heritage**
- **Wessex Archaeology**
- **Canterbury Archaeological Trust** (especially useful for the Bronze Age)

There are also many online resources for archaeologists, other heritage specialists, and sometimes the public. These can be difficult to navigate, depending on what their purpose is, but they can be useful – especially if you want information about specific archaeological sites:

- **Archaeology Data Service (ADS)**
 - Mostly for researchers, contains information about archaeological investigations and hosts a few large databases
- **Pastscape**
 - Historic England’s online and searchable records of over 400,000 sites and buildings
- **Heritage Gateway**
 - Contains so called Historic Environment Records
- **The Portable Antiquities Scheme (www.finds.org.uk)**
 - The PAS operates out of the British Museum and has a Finds Liaison Officer (FLO) in each county. This is where metal detectorists record their finds, for example. The website has a large searchable database of artefacts

Finally, for older students, a suggestion for additional activities is to explore the *Archaeological Oddities* comics by Dr Hannah Sackett. They can be found by clicking around on her and Dr A’s **Prehistories blog** (prehistories.wordpress.com), which also has plenty of other fun and interesting content. The objects relevant for the British and Irish Stone Age are:

- The Red Lady of Paviland
- The Westray Wifey / Orkney Venus
- The Star Carr Antler Frontlets
- The Knowth Macehead
- The Folkton Drums



Glossary

This glossary contains many of the terms and concepts that are common in Stone Age archaeology. Some of them have different meanings in other fields, but only the archaeological meaning is explained here. For some more general terms (for example 'sea level change') the relevance to Stone Age archaeology is explained. It is not an exhaustive list of Stone Age jargon, so you may want to create an additional glossary specific to how you explore the Stone Age in your classroom. [Please also see the more accessible student glossary on the online platform!](#)

Some entries were compiled using these books, which are also recommended further reading:

The Concise Oxford Dictionary of Archaeology (2nd ed.)
Timothy Darvill (Oxford University Press 2008)

Archaeology: The Key Concepts
Edited by Colin Renfrew and Paul Bahn (Routledge 2004)

Archaeology: A Very Short Introduction
Paul Bahn (Oxford University Press 2012)

Acheulean

Lower Palaeolithic stone tool 'industry' dating to around 1.8 million years ago to 300,000 years ago. Characterised by [handaxes](#) and mainly associated with [Homo erectus](#).

Adze

A cutting tool shaped like an axe, generally used for trimming and shaping timbers.

Anthropology

The study of humans. There are four tiers of anthropology: social/cultural, linguistic, biological, and archaeological. In the US, archaeology is a subfield of anthropology.

Anthropomorphic

Shaped like a human. See also [figurine](#).

Archaeology

The study of the human past from the physical remains they left behind.

Archaeologist

Someone who studies the human past by recovering and examining the physical remains left behind by people. Archaeologists do not only work on excavations but also in museums, archives, laboratories, local councils, universities, and heritage organisations.

Ard

A type of simple plough, also known as scratch plough. There is evidence for this type of ploughing in the prehistoric record in the form of 'ard marks', which are linear cut features in the soil. Such ard marks are generally only found where a burial mound was constructed shortly after the ploughing took place, thereby sealing and preserving the ard marks. Ard marks are rare indicators of farming practices, and when found beneath monuments they indicate long-term attachment to specific places, which is interesting as Neolithic and Early Bronze Age communities were probably not fully sedentary.

Artefact (US spelling: artifact)

An object that has been made by humans, generally small enough to be carried (compare: monuments, houses). Examples include tools, weapons, cooking equipment, figurines, and jewellery. Prehistoric artefacts are often made of, for example, wood, bronze, clay, antler, bone, leather, gold, and iron. Artefacts made of inorganic materials like clay and bronze survive better than those made of organic materials like wood and leather.

Aurignacian

Early Upper Palaeolithic culture, dating to around 43,000 to 28,000 years ago and found across Europe (except in the British Isles and Scandinavia, which were covered by ice). Characterised by flint tools such as blades and scrapers, and bone and antler artefacts including flutes and zoomorphic figurines. Associated with the arrival and spread of modern humans (*Homo sapiens sapiens*) in Europe, and named after the French site Aurignac.

Australopithecus afarensis

An extinct species of early human who existed in East Africa between around 4 and 3 million years ago. The famous fossil skeleton Lucy, found in Ethiopia in 1974, is of this species.

Awl

A long pointy tool used for punching holes in things such as leather or marking wood. Prehistoric awls were often made of bone or antler.

Barrow

A mound of earth and stones raised to cover one or more burials. There are different kinds of barrows in British prehistory; see also long barrow and round barrow.

BCE

Before Common Era. BCE and CE (Common Era) can be used as secular alternatives to BC (before Christ) and AD (*anno Domini*), but chronologically the two systems are the same.

Blade (stone tool)

A long narrow flake with sharp edges, that is at least twice as long as it is broad.

BP

Stands for 'before present' and used by quaternary geologists and archaeologists to refer to the age of something. The 'present' is the calendar year AD 1950, because the term was first adopted following the development of radiocarbon dating in the 1950s. In archaeology, BP is used (instead of BC) primarily for the Palaeolithic. BP and BC are not entirely interchangeable because there is an almost 2000-year long difference between them!

Burin (stone tool)

A pointed tool of flint or stone with a very sharp edge that can be used to work bone, antler, ivory and wood. Widespread in the Upper Palaeolithic and Mesolithic.

Causewayed enclosure

A type of Early Neolithic monument, consisting of a large enclosure created by a series of concentric circuits and interrupted ditches. Used to be called 'causewayed camps' and interpreted as large settlements, but today considered to have been places where people gathered for large seasonal feasts.

Examples: Abingdon (Oxfordshire); Whitehawk (East Sussex); Windmill Hill (Wiltshire)

CE

Common Era. BCE and CE (Common Era) can be used as secular alternatives to BC (before Christ) and AD (*anno Domini*), but chronologically the two systems are the same.

Ceramic

Something made of fired clay, for example pottery, figurines, tiles, or beads.

Clan

A group of people that are either related to each other or bound together by perceived kinship.

Composite tool

A tool made of two or more materials joined together, for example a stone axe attached to a wooden haft.

Context

A very important concept in archaeology; context can refer to both physical entities and abstract ideas. An example of a physical context is a deposit found in an excavation. Each deposit is given a unique 'context number'. Artefacts founds within a specific deposit are referred to as coming from the same context. Context can also refer to the social and political circumstances of past societies, which may be very different from our own. When findings from an archaeological site are interpreted, the relevant cultural context has to be taken into account.

Coracle

A small round boat made of thin, strong branches woven together with an animal hide stretched between them.

Core (stone tool)

The piece of flint (or other stone) that is struck to produce flakes and blades during flintknapping.

Cremation

The practice of burning the dead either on a pyre, in a cremation pit, or occasionally by burning the house in which they lived. Prehistoric cremations did not reach the same temperatures as modern cremations, so many fragments of bone were left behind. These fragments were then often gathered up and placed in a container such as a pottery vessel, which was then buried. This type of burial practice was common in the Late Neolithic and Bronze Age in Britain. Human remains from a cremation are sometimes known as 'cremains'.

Cro-Magnon

Obsolete term for the first members of our own human species, who migrated into Europe at the beginning of the Upper Palaeolithic. The term has no scientific meaning; today we refer to them as European early modern humans or *Homo sapiens sapiens* instead.

Crop

A plant that is deliberately grown for food or animal fodder. Neolithic crops include wheat and barley. In the Near East, crops like lentil and chickpea were also grown in the Neolithic.

Cursus

Type of Neolithic monument comprising of a long rectangular enclosure within an earthen bank with external ditches. Their purpose is unknown although they are believed to have been ceremonial pathways. The longest cursus monument in Britain is the Dorset cursus, which is 10 kilometres long.

Examples: Dorset Cursus (Dorset); Stonehenge Greater Cursus (Wiltshire)

Debitage

The waste material (flakes and chips) that is produced during manufacture and maintenance of stone tools.

Dendrochronology

Tree-ring dating, based on counting the growth rings that living trees develop annually. Weather conditions influences the size of tree rings, which means that the ring patterns from different trees can be correlated with one another to create a complete tree-ring profile for an entire region. When timber is found on an archaeological site, the tree-ring profile of that particular tree can be matched against the overall regional profile, which tells us exactly what year that tree was felled.

DNA

Deoxyribonucleic acid, or DNA, is in every cell of every living thing. It is the key ingredient that carries all the genetic information that determines how a living thing will look and function. Archaeologists can sometimes recover DNA from ancient skeletons, which tells us how groups of people are related to one another. This can then help us reconstruct how people migrated and mixed. Also, the study of DNA from plants and animals can shed light on domestication processes and farming practices. See also evolution.

Dolmen

See portal dolmen.

Domestication

The slow and cumulative process of selective breeding of plants and animals that resulted in the emergence of domestic species such as cattle, sheep, wheat, maize, and millet. Each domestic species has one or more wild progenitor. For example, cereal crops originate from wild grasses, and the wild variety of European cattle is aurochs (now extinct). Domestication of species like wheat and cattle began in the Upper Palaeolithic in the Middle Eastern region known as the Fertile Crescent.

Ecofact

Natural materials that are present on archaeological sites as a result of human action, such as food waste like nutshell and animal bone. The term can also refer to environmental evidence of human activity, like seeds, wood, and pollen. The difference between an ecofact and an artefact is that the ecofact has not been crafted into something by human hands.

Evolution

The process of intergenerational genetic change by which biological organisms adapt to various demands of their physical (and sometimes social) environment.

Excarnation

The practice of exposing the body of the deceased to the natural elements, sometimes on a sort of platform, in order to facilitate the decomposition of flesh and soft tissue. The bones are then gathered up and buried or deposited elsewhere (for example in a long barrow or in water).

Excavation

One of the main ways in which archaeologists find evidence of past people. Excavation involves the systematic exposure of deposits which are recorded for future reference and study. Recording the deposits is very important, because excavation is destructive so we cannot excavate the same deposits twice. The records of excavation and the artefacts recovered become the 'archive' of the excavated site. Excavation is generally preceded by non-intrusive types of investigation, like geophysics. See also context.

Fertile Crescent

The region often thought to have contained the origins of farming and other 'civilising' features like sedentism and the development of writing and states. In ancient geographical terms, the region stretches from the Nile Valley to Mesopotamia. In modern terms it roughly contains the countries between Egypt and western Iran. Moreover, domestication of plant and animal species also occurred independently in other parts of the world, so today we talk of different 'centres of domestication' rather than one 'cradle of civilisation'. That said, the developments that took place in the Fertile Crescent were probably the earliest.

Figurine

A model of a human (anthropomorphic) or animal (zoomorphic), often small enough to be held in the hand. Generally made of clay, stone, bone, antler, or ivory. Famous prehistoric figurines include the Upper Palaeolithic female figures found in many parts of Europe, such as the 28,000 year-old Venus of Willendorf from Austria. Female figurines have traditionally been interpreted as related to goddess worship, hence the expression 'Venus figurines', but their purpose and meaning to people in the past remain unknown.

Flake (stone tool)

A stone or flint tool made by removing flakes from a prepared core.

Flint

A hard and brittle sedimentary rock that was important to people throughout prehistory because of its suitability for manufacturing sharp cutting, scraping, and projectile tools. Geologically, flint is the type of chert that occurs as nodules or seams within chalk or marly limestone. Flint nodules and pebbles can also be found as redeposited rocks within clays and gravels. The surfaces of nodules are covered by a chalk-coloured crust. Flint is often black, brown, or grey in colour, but it can sometimes have blue, white, or red tones as well. Prehistoric flint tools can still be very sharp so be careful!

Flintknapping

The craft of making flaked stone tools, usually by removing flakes from a core in a deliberate way using a hammerstone.

Flint scatter

A collection of material resulting from episodes of either flintknapping or use of flint tools in the past. Can be recovered either in-situ or as redeposited items within, for example, plough soil. See also debitage.

Geophysics

Short for geophysical survey, which is a set of techniques designed to non-intrusively investigate the presence and character of buried archaeological remains. Examples include magnetometry, resistivity survey, and ground penetrating radar. Geophysics is often undertaken prior to excavation, to assess whether and where excavation should take place.

Glaciation

See ice age.

Grave goods

Things that are deliberately left with the cremated or inhumed body of a deceased person at the time of burial. May include food items, weapons, and ornaments. Grave goods are important sources of information for archaeologists, but they are difficult to interpret as they do not necessarily relate to the socio-economic status of the deceased or ideas of what is needed in the afterlife.

Gravettian

Upper Palaeolithic stone tool 'industry' (i.e. specific styles of stone tools) found across Europe and dating to the period around 27,000 to 19,000 years ago. Some cave art is associated with people who used Gravettian-style tools. Named after the site La Gravette in France.

Grog

Broken pottery that is crushed to be added to clay in the making of new pottery. In Britain, it was common from the Late Neolithic onwards to use grog as pottery temper.

Handaxe

A type of stone tool primarily associated with the late Lower Palaeolithic period. Consists of a large core of flint that is worked on both sides (therefore a type of 'bifacial tool') to form a point at one end and a rounded butt on the other end. Handaxes were probably multi-purpose tools used for things like chopping and cutting, and they could be held in one hand (although some are very large and heavy!). Associated with hominid species such as Homo erectus and Homo heidelbergensis. See also Acheulean.

Harpoon

A type of spear or spear point with sets of barbs that prevent the point from being dislodged from within the body of a prey animal. Fastened to a line for retrieving the prey. Mainly associated with marine economies of the late Upper Palaeolithic (see Magdalenian) and Mesolithic; used for hunting fish, seals, and whales.

Henge

A type of Late Neolithic monument (mid-late 3rd millennium BC) found across Britain. Roughly circular, defined by an earthen bank and often with an internal ditch. Henges have between one and four entrances, and pits, postholes, and standing stones are often found within them.

Examples: Durrington Walls, Avebury, and Stonehenge (Wiltshire)

Hoard

A deposit of a significant quantity of intact and/or broken artefacts placed in the ground or in water, either deliberately or by accident. Traditionally interpreted as accidentally lost (for example during a river crossing) or hidden (for example during a raid) but never recovered. Today, many prehistoric hoards are considered to have been 'votive deposits', which means that they were deliberately left as offerings or for other ritual purposes.

Examples: Boughton Malherbe hoard (Bronze/Iron Age, can be viewed in Maidstone Museum); Langdon Bay hoard (Bronze Age, can be viewed in Dover Museum)

Holocene

Geological term for the later of the two epochs that make up the quaternary period (the earlier quaternary epoch is the Pleistocene). The Holocene dates from around 12,000 years ago to the present day. In British prehistory, the Mesolithic, Neolithic, Bronze Age, and Iron Age are in the Holocene. Scientists now suggest that we have recently left the Holocene and entered the Anthropocene, which is characterised by human influence on the climate.

Hominid

All modern and extinct hominins and other Great Apes, including gorillas, chimpanzees, orang-utans, and all their immediate ancestors.

Hominin

All modern and extinct members of our own evolutionary tree. That is, modern humans, extinct human species and our ancestors. It is confusing because the term 'hominin' has recently been adopted to mean what 'hominid' used to mean. The distinction was created to delineate between our own evolutionary ancestors and Great Apes in general. To be on the safe side, you could refer to them all as 'hominids', because hominins is a subgroup within the hominid group.

Homo

The genus comprising modern humans (*Homo sapiens sapiens*) and extinct species such as *Homo erectus* and Neanderthals (*Homo neanderthalensis*). Compare with *Australopithecus Afarensis*, which is an extinct species of the *Australopithecus* genus. Not all members of the *Homo* genus are our direct ancestors – some are more like our ‘cousins’.

Homo erectus

An extinct human species that emerged up to 2 million years ago and occupied not only Africa but also Europe and Asia. They were bipedal (walked on two feet), hence the name, which means ‘upright man’. Associated with Acheulean flint tools (see also handaxe). Their place in the evolutionary tree is debated, but many scientists believe that *Homo erectus* is a direct ancestor of *Homo heidelbergensis*, Neanderthals, and modern humans. It is unclear when they became extinct but they were still in existence around 60,000 years ago.

Homo habilis

An extinct human species that lived in Africa between 2.4 and 1.5 million years ago. The name means ‘handy man’ and they are associated with ‘Oldowan’ style stone tools. Co-existed with *Homo erectus*.

Homo heidelbergensis

An extinct human species that existed between 700-200,000 years ago. Around 400-300,000 years ago, some members of this species left Africa and settled in Europe and west Asia. Some of them later evolved into Neanderthals, whereas the *Homo heidelbergensis* that stayed in Africa evolved into modern humans around 160,000 years ago. That means that *Homo heidelbergensis* may be the last common ancestor of Neanderthals and modern humans. The species is named after the first discovery of a skeletal element of this species (a mandible) near Heidelberg in Germany. Members of this species were present in Britain – an example site is Boxgrove in West Sussex where skeletal remains and teeth of *heidelbergensis*, along with Acheulean handaxes, have been found.

Homo sapiens sapiens

Our own species of anatomically modern humans (AMH), and a subspecies of *Homo sapiens*. The *Homo sapiens* (‘wise man’) species is thought to have emerged in Africa around 200,000 years ago, and left Africa from around 100,000 years ago. In Europe, the arrival of modern humans around 40,000 years ago marks the beginning of the Upper Palaeolithic.

Hunter-gatherers

People whose food economy is based on wild plants and animals, rather than on agriculture and animal husbandry of domestic species. Before the Neolithic period, all people were hunter-gatherers. Non-farming people who use a lot of marine foods are sometimes called hunter-gatherers-fishers.

Ice age

A long period of temperatures low enough to result in expansion of polar ice sheets and mountain glaciers. Within an ice age, temperatures fluctuate. The coldest periods within an ice age are called 'glaciations' and the warmer periods between them are called 'interglacials'. Colloquially, the term 'ice age' is used to refer to a glaciation. The expression 'the last Ice Age' is widely used for the last glacial period, which ended around 10,000 BC. Although, strictly speaking, we are currently in an interglacial period within the Quaternary glaciation, which began 2.6 million years ago.

Inhumation

Type of burial practice by which the body of the deceased is placed unburned in a grave.

In-situ

When something is 'in-situ' in archaeology, it means it has been found in its original position. For example, a pot that was placed in a grave may be found in-situ when the grave is excavated. In contrast, if an artefact – like a stone axe – has been moved around in plough soil is not in-situ. As a 'stray find' the axe has less archaeological research potential, because we don't know exactly where it came from.

Interglacial

A warm period between glaciations during an ice age.

Interpretation

The process by which archaeologists make sense of evidence from the past. We do not simply dig up 'data' that provide 'facts'. Instead, archaeology is the act of interpreting the human past.

Interstadial

A short warmer period during a glaciation, but not as warm as during an interglacial period. Interstadials (<10,000 years) and stadials (<1000 years) are shorter than glaciations (c.100,000 years) and interglacial (>10,000 years) periods. See also ice age.

Isotope

All chemical elements (for example oxygen, nitrogen, carbon) exist naturally as different isotopes. The different isotopes of the same element differ in how many *neutrons* are in the atom's nucleus. However, all isotopes of the same element have the same number of *protons* in the nucleus. For example, carbon – which is present in all living organisms – always has six protons in the nucleus. Along with these six protons in the carbon atom's nucleus are either six, seven, or eight neutrons. This means that carbon occurs naturally as three different isotopes: carbon-12 (6 protons + 6 neutrons), carbon-13 (6 protons + 7 neutrons), and carbon-14 (6 protons + 8 neutrons). The existence of different isotopes is useful for archaeologists in a variety of ways, for example when we reconstruct past diets or migration patterns. See also radiocarbon dating.

Ivory

Animal tusk, usually from elephant, walrus or narwhal. In the Upper Palaeolithic, mammoth ivory was used to make awls and to carve figurines or animal depictions.

KYA

Thousand years ago.

Last glacial period

Widely known as 'the last ice age', this is the most recent glaciation within the much longer Quaternary glaciation, which began 2.6 million years ago and continues to this day. The last glacial period lasted between around 100,000 and 12,000 years ago. The coldest part of this 'last ice age' is known as the Last Glacial Maximum (LGM) and lasted between around 22,000 to 13,000 years ago. This was followed by a period of warming known as (confusingly) the Late Glacial Maximum or the Late Glacial. See also ice age.

Lithics

General term for all worked stone, debitage, and stone raw materials recovered from an archaeological site. Examples: flint and quartz

Long barrow

A type of Early Neolithic burial monument found across Britain, generally comprising of a mound of soil and stone covering stone or timber-built chambers in a long rectangular overall shape. Bodies of deceased individuals were left within the chambers, probably sometimes as skeletal elements after the body had been excarinated elsewhere. **Examples:** West Kennet (Wiltshire); Belas Knap (Gloucestershire); Coldrum (Kent); Wayland's Smithy (Oxfordshire)

Man

In archaeology, an outdated and sexist term for 'humanity' or 'human', as in 'the antiquity of man' or 'man-made'.

Magdalenian

One of the last of the Upper Palaeolithic 'cultures' of Europe, lasting between 17,000 and 12,000 years ago. Associated with artefacts like harpoons, spear throwers, microliths, blades, and portable art such as engraved mammoth ivory. The famous cave art at Altamira (Spain) and Lascaux (France) was made during the Magdalenian period.

Megalith

A large stone, often used in the construction of monuments in the Neolithic and Bronze Age.

Megafauna

Large game animals of the Pleistocene, including mammoth, bison, mastodon, and sabre-tooth tiger. They became extinct in the early Holocene, probably due to a combination of changing climate and human hunting.

Mesolithic

The middle Stone Age. The period between the Palaeolithic and the Neolithic, it begins at the end of the last ice age and ends with the onset of farming.

Microlith

A very small stone tool with sharp edges, commonly made of flint. Microliths were stuck with resin to wood or bone shafts, creating a series of barbs or a single long sharp edge (see composite tool). Associated with the late Upper Palaeolithic and Mesolithic periods.

Midden

An accumulation of waste material, often found in association with a settlement site. Some Stone Age middens are very large: for example the Mesolithic shellmiddens (or shell mounds) or the Neolithic middens full of butchery waste and broken objects that can be several metres thick.

Monument

In Neolithic archaeology, a monument is a large artificial structure that is generally thought to have been built for ritual or ceremonial purposes, like for burials or seasonal feasts. There are many different kinds of monuments, such as portal dolmens, long barrows, and henges. Many monuments – but not all – were built using megaliths.

Mousterian

Middle Palaeolithic stone tool 'industry', mainly associated with Neanderthals. Named after the site Le Moustier, France. The tools include triangular flakes, small handaxes, burins, and awls.

MYA

Million years ago.

Neanderthals

Homo neanderthalensis is an extinct species of human that lived around 250,000 to 40,000 years ago in Eurasia. The name comes from the Neander Valley in Germany, where the first fossils of this species were found ('thal' means valley in German). Neanderthals developed in Europe, and like modern humans their ancestors were Homo erectus and Homo heidelbergensis. We are very closely related to Neanderthals, but they are not our direct ancestors. They were well adapted to the cold climate of ice age Europe and were skilled hunters. The reasons for their demise are still debated, but it may have been due to a combination of factors such as climate change, resource competition with modern humans, and declining demographic health.

Neolithic

The new Stone Age, the most recent and the shortest of the Stone Age periods. It was originally defined by the appearance of polished stone axes, but later it became synonymous with the onset of farming. It is also traditionally associated with the emergence of settled, non-nomadic lifestyles, construction of large monuments, and the first use of pottery. In Britain it last between c.4000-2400 BC.

Nomadism

Lifestyle that involves some degree of regular movement of the settlement base. There are different kinds of nomadism. Some groups move only between two different settlements each year (summer and winter camps), but others move much more frequently. Hunter-gatherers and pastoralists (groups focused on animal husbandry) can both be mobile.

Compare with sedentism/sedentary.

Ochre

Pigment made from earth rich in certain iron oxides. Colours vary from red and brown to yellow. Widely used in the Stone Age to give colour to, for example, cave paintings. It was also sometimes used in burials. As the main component is iron, the colours have often survived in the archaeological record.

Offering

Something presented as a gift, perhaps to a deity or between social groups as a sign of peaceful intentions or to obtain favours.

Palaeolithic

The earliest and longest of the Stone Age periods. It literally means 'old stone'.

Palynology

The study of pollen grains and spores by archaeologists and other scientists. Each plant species or group of plant species produce unique pollen grains, and by studying such grains within 'pollen cores' from the past we can reconstruct the environment. This tells us, for example, what crops people grew and what the flora and climate were like.

Passage grave

A type of Neolithic megalithic monument that contains one or more burial chambers covered by a turf mound. The chamber is accessed via a narrow passage. The entrance to this passage is sometimes aligned to the winter or summer solstice, so that the sun lights up the passage and parts of the central chamber at those times of year. Passage graves were built across Ireland and western Britain, Scandinavia, Spain, and France. Some passage graves were decorated internally and on the outside with patterns incised into the stone walls.

Examples: Newgrange and Knowth (Ireland), Maes Howe (Orkney)

Pleistocene

Geological term for the earlier of the two epochs that make up the quaternary period (the later quaternary epoch is the Holocene). The Pleistocene dates from around 2.6 million years ago to 12,000 years ago. Most of the Palaeolithic period is within the Pleistocene (with the exception of the first million years of the Lower Palaeolithic, which is in the Pliocene). The Pleistocene (geology) and the Palaeolithic (archaeology) both end when the last glacial period ended around 10,000 BC.

Pollen

See palynology.

Portal dolmen

Type of Early and Middle Neolithic megalithic monument, generally constructed of at least three large upright slabs and one massive capstone (like a giant stone table!). Thought to have been associated with burial rites, but little evidence in the form of human remains or grave goods have been found at portal dolmens.

Pottery

Containers made of ceramic. Traditionally, archaeologists associate pottery with the Neolithic but we now know that many Palaeolithic and Mesolithic hunter-gatherers also used pottery (for example in eastern Europe, Russia, China, and Japan). In Britain, pottery was first introduced in the Neolithic, and it was primarily used to process food. Sometimes, cremated remains of dead people were buried in pottery vessels, particularly in the Late Neolithic and Bronze Age. Pottery is an important archaeological material because it survives well when it is buried in the ground, and it can tell us a lot about chronology, trade and exchange, social identity, and food practices.

Prehistory

The period of time before writing emerges; the vast majority of the human past.

Protohistoric

Non-writing societies that are adjacent to writing societies, or the period when writing is emerging or being adopted from elsewhere. For example, the late Iron Age in southern Britain can be considered protohistoric because of contacts with Roman Gaul.

Quern

Hand-operated tool used primarily for grinding grain into flour, generally consisting of two coarse stones. A 'saddle quern' consists of a stationary lower stone and a smaller rubber or handstone that is used to crush the grain in a to and fro motion. 'Rotary querns', consisting of two circular stones of which the upper stone is turned around in a circular motion to crush the grain in between, begin to be used in the British Iron Age. It is thought that prehistoric querns often left some grit in the flour that resulted in damage to people's teeth. Such tooth wear from bread grit can still be observed today in skeletal remains of prehistoric farming populations. Querns were also used to process non-food items such as natural pigment, temper, and bark.

Radiocarbon dating

Carbon occurs naturally as three different isotopes: carbon-12 (6 protons + 6 neutrons), carbon-13 (6 protons + 7 neutrons), and carbon-14 (6 protons + 8 neutrons). The first two (carbon-12 and carbon-13) are stable, but the last one (carbon-14) is radioactive. This is useful for archaeologists, because:

- when an organism (like a human, an animal, or a plant) dies it ceases to absorb carbon-14, and instead the carbon-14 it already contains starts to decay
- Scientists have worked out the *rate* of this decay, and it is always constant
- About 5,730 years after the organism died, half of the carbon-14 it originally contained is gone (this is the 'half-life' of carbon-14)
- Thanks to this, we can measure how much carbon-14 is left in something organic from the Stone Age, and use that amount to calculate how old the thing is

The dating technique is called 'radiocarbon' because it uses the radioactive isotope of carbon. Carbon-14 is also written as ^{14}C . Only organic materials (like wood, bone, or hazelnut shell) can be dated like this, because they are the ones that contain carbon. Around 50,000 years after the organism died, all the carbon-14 is gone. Therefore we cannot use radiocarbon dating on Middle and Lower Palaeolithic material.

Ritual

A term archaeologists often use to refer to practices and objects related to religious, magic, or ceremonial traditions and beliefs. Traditionally, the term 'ritual' has been used for practices and objects that have no clear functional explanation. However, it is important to remember that many non-Western societies do not distinguish between 'ritual' and 'domestic' or 'secular' areas of life. This means, for example, that many 'functional' items may also have a ritual purpose.

Round barrow

A Bronze Age burial monument, both chronologically and morphologically distinct from Early Neolithic long barrows. Often contains cremated human remains and sometimes rich grave goods.

Scraper (stone tool)

Stone tool used for tasks such as hideworking or plant fibre processing. A scraper is made by chipping the edge of a flake to create a sharp end.

Sea level change

Increase or decrease of water volume in the world's oceans, related to climatic changes. Sea levels changed during and after the prehistoric period, which has implications for the archaeological record. For example, as sea levels rose after the last glacial period much of the coastline of southern Britain became submerged, which means that large areas of land inhabited by Upper Palaeolithic and Mesolithic people are now underwater.

Sedentism / sedentary

Lifestyle based on permanent settlement. Compare with nomadism.

Settlement

An area where people live. Prehistoric settlements from periods when people were sedentary tend to comprise houses, communal structures for food and livestock, roads, and (sometimes enclosed) fields and paddocks. Settlement evidence from nomadic societies are harder to find in the prehistoric record as they tend to comprise ephemeral structures not intended for permanent habitation.

Shaman

In a society with shamanistic beliefs, a shaman is a person thought to have special abilities. For example, a shaman may be able to communicate with spirits by reaching an altered state of consciousness, and he or she may have healing powers. A shaman is generally a powerful and sometimes feared individual. See also shamanism.

Shamanism

Anthropological concept for types of 'ethnic' religions that involve interaction with spirits during an altered state of consciousness. Today it is a very broad concept that contains a lot of variation in religious practice. Some archaeologists believe that it is a relevant concept for understanding prehistoric religious practice.

Sherd

A piece of broken pottery (potsherd). Note that 'shard' refers to a piece of broken glass.

Shellmidden (shell mound)

A large heap of waste material (mainly shell) from marine food exploitation, which took many years to accumulate. They are a key type of site from the British Mesolithic, but they are also found elsewhere in Europe and beyond, for example in Japan and Argentina. They sometimes contain terrestrial animal bone, human bone (see excarnation), graves, and/or hearths as well. Also known as 'køkkenmødding', which is Danish for 'kitchen midden', because they were first excavated in Denmark in the 19th century.

Examples: Cnoc Coig (Oronsay, Hebrides); Téviec and Hoëdic (Brittany, France)

Sickle

A sharp hand held tool, like a curved knife, designed for cutting crops. Neolithic sickles were made of flint and had hafts made of wood or bone.

Stadial

The coldest period during a glaciation, when ice sheets were most extensive. Interstadials (< 10,000 years) and stadials (< 1000 years) are shorter than glaciations (c.100,000 years) and interglacial (> 10,000 years) periods. See also ice age.

Temper

Material added to clay to make it more elastic, firing resistant, or in other ways better suited for pottery manufacture and use. Common 'tempering material' for prehistoric pottery in Britain includes crushed flint, shell, sand, and grog.

Three Age System

A scheme for dividing prehistory into the three successive stages of the Stone Age, Bronze Age, and Iron Age. It was developed in Denmark in the mid-19th century and is still in use today, although the Stone Age has been further divided into Palaeolithic, Mesolithic, and Neolithic.

Trilithon

Two large upright stones supporting a third stone (lintel) across the top, like at Stonehenge.

Wetland

A terrestrial area that is permanently or periodically waterlogged, including river and lake margins, peat bogs, and inter-tidal zones. Wetlands are important archaeologically because they offer good preservational conditions for organic materials like wood and textile.

Zoomorphic

Something that is shaped like an animal, and/or perceived as having characteristics of an animal. See also figurine.

