Stone Age Essex
A Teacher’s Guide

Colchester and Ipswich Museums
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Overview of Stone Age Essex

The Stone Age had three distinct periods: the Palaeolithic (Old Stone Age), the Mesolithic (Middle Stone Age) and the Neolithic (New Stone Age). The people from each of these periods had different levels of technology and methods of survival.

Palaeolithic

The Palaeolithic began in Britain around 800,000 years ago when early humans, including Homo antecessor and Homo neanderthalensis, crossed the land bridge that connected Britain to mainland Europe. The cold temperatures of the last Ice Age had left most of Britain covered in ice and snow, rendering it uninhabitable. Interglacial periods, when the ice sheet retreated and the temperature warmed, allowed early humans to cross the land bridge and take advantage of the rich flora and fauna in Britain. Palaeolithic people who crossed the land bridge into Britain were hunter-gatherers. They developed tools made of stone to exploit the environment around them. Evidence of butchery on animal bones shows that they used these tools to hunt species including mammoth, red deer, hare and antelope.

PALEOLITHIC SITES (Essex and Suffolk)

Marks Tey

*Why is Marks Tey important?*

In the last Ice Age, most of Britain was covered by an ice sheet. The area that is now Marks Tey lay at the easternmost edge of the ice sheet. This was the edge of the habitable world for both humans and animals. The Ice Age made living in Britain very difficult because of the extreme cold. As the area around Marks Tey was not entirely covered in ice, animals and hunter-gather communities lived there, especially around water sources. As there were more people living and hunting in this area, many Palaeolithic tools have been found in and around the modern village.

Colchester

There is not much Palaeolithic evidence in Colchester although seven hand axes, dating from the Lower and Middle Palaeolithic, have been found in the town centre area.

Mildenhall High Lodge, Suffolk

This Lower Palaeolithic site can be found north-east of Mildenhall. Excavations of clay silts in the area have revealed the remains of early humans alongside those of an extinct rhinoceros (Diceros rhinoceros). Many Palaeolithic tools such as hammers and hide-scrapers were found, which are similar to those found at the significant Palaeolithic site located in Boxgrove, Suffolk.
Mesolithic

The Mesolithic began around 10,000 BC in Britain, at the end of the last Ice Age. While Mesolithic people were still hunter-gatherers, they developed finer tools in response to their environment. This now consisted of forests and woodland areas and was inhabited by a wider range of animals. These finer tools, microliths, were more versatile hunting and cutting implements, and were used as arrowheads and spear points as well as multipurpose cutting tools. Microliths allowed Mesolithic people to thrive in their woodland environment, hunting elk, deer, pig and beaver. At the start of the Mesolithic, Britain was still connected to Europe by a land bridge. By 6000 BC rising sea levels flooded the land bridge and Britain became an island.

MESOLITHIC SITES

Colchester

Mesolithic flints have been found at Culver Street, Brook Street, and St Mary’s Hospital.

Neolithic

By the Neolithic period around 4000 BC, the movement of early humans from mainland Europe brought with them a change in lifestyle from mobile hunter-gatherers to settled farming communities. The introduction of farming was a revolution in the way people lived and associated with each other. As people developed skills in managing and manipulating crops, they could grow more than was required to simply feed themselves. This meant that communities could settle in one place throughout all seasons of the year. They were no longer required to move in order to find food. These people kept domesticated sheep, goats, cows and pigs and grew wheat and barley for food. Flint and other stone was still being used to make tools, however the requirement to clear forests for farming resulted in the production of axes there were stronger and polished. Many of these tools required skilled workers and may have taken months to complete. As such they were highly valued and traded and may have been associated with early religion. Settled farming communities also resulted in the in the first use of pottery in Britain. Pots were used for the storage of grain, cooking and ceremonial activities connected to belief systems. This type of early pottery is called ‘grooved ware’ after the decoration around the top and can be found in Neolithic sites throughout Britain.

View of British Landscape during an interglacial period.
NEOLITHIC SITES (Essex, Suffolk, and Norfolk)

Colchester
By the late Neolithic, a small community of farmers had settled around what is now the Culver Street area. Rubbish pits containing Neolithic pots and flints are the earliest evidence of settlement in Colchester town centre. The pit is believed to have been a ritual deposit. Other similar pits have been found in Gosbecks, Stanway and Layer de la Haye.

Orsett, Thurrock
A Neolithic causewayed enclosure is evident from aerial photographs as three doted circular lines.

Mount Bures
Near the river Stour at Mount Bures is an open ended enclosure that would have been used as a burial mound or monument to a significant individual.

Feering
A long mortuary enclosure can be seen in aerial photographs that is around 65 metres long.

Springfield, Chelmsford
The Springfield Cursus is a late Neolithic ceremonial site, approximately 7km long. The site would have been in use at the end of the Neolithic, around 2000 BC.

Tendring
A possible Neolithic earthwork (henge) at Tendring, 30 metres in diameter, is visible in aerial photographs. A henge is a circular area surrounded by a bank and ditch.

The Stumble, Blackwater Estuary
This was a Neolithic settlement site that would have originally been on the coast. Due to the rise in sea levels, the site is now in the tidal zone which has caused organic remains such as seeds and plants to be preserved.

Grimes Graves, Norfolk
Grimes Graves in a large Neolithic flint mine located in Norfolk. Open to visitors and schools, managed by English Heritage.
Map showing find locations of Stone Age objects within Essex.

Created using data from the Portable Antiquities Scheme Database, www.finds.org.uk/database
Stone Age Timeline

- **1,800,000 years ago – 11,000 years ago** - Last Ice Age, a period in which most of Northwest Europe was covered in ice sheets (glaciers). There were a number of interglacial periods in which the glaciers receded and temperatures increased allowing human habitation.

- **800,000-200,000 years ago** - Lower Palaeolithic in Britain, development of hand axes

- **300,000–45,000 years ago** - Middle Palaeolithic in Britain, Neanderthals roamed Britain

- **50,000 years ago -10,000 years ago** - Upper Palaeolithic in Britain, modern humans spread across the world and complex stone tools were in use.

- **10,000 years ago (8000 BC) - Around 6,000 years ago (4000 BC)** – Mesolithic in Britain, microlith technologies made hunting and fishing more efficient.

- **10,200 BC - 7000 BC** – Neolithic starts in Middle East, crops and animals start to be domesticated and pottery is produced. Pottery production and farming spread from the Middle East into Europe and Asia reaching Britain by 4000 BC.

- **4000 BC – Around 2000 BC** – Neolithic in Britain, development of farming, permanent settlements, domestication of animals, and monumental burial sites in Britain. Examples of monumental burial sites include Pentre Ifan in Pembrokeshire and St Lythans burial chamber in the Vale of Glamorgan.

- **Around 2500 BC** – Bronze Age begins in Britain and metal tools start to be developed
Stone Age Glossary

⇒ **Flint arrow head:** a piece of worked flint that would have been used as part of an arrow head.

⇒ **Clactonian:** a method of manufacturing stone tools during the early Palaeolithic, which involved the creation of thick flakes from stone cores through striking. Named after artefacts found at Clacton in 1911, which also included the oldest known wooden spear in Britain now housed in the Natural History Museum, London.

⇒ **Cursus:** a Neolithic enclosure, consisting of large parallel banks with ditches. May have been used in ceremonies or as landscape boundaries.

⇒ **Flint knapping:** the shaping of stone tools through striking the stone.

⇒ **Flint spear point:** a piece of worked flint that would have been placed on the end of a long piece of wood to be used as a spear.

⇒ **Hammer:** a tool used to strike a core or flake in the knapping process. A hammer could be made of stone, antler, wood or bone.

⇒ **Hand axe:** a type of multipurpose tool common during the Palaeolithic. These tools were shaped on both sides and fit comfortably into a human hand.

⇒ **Henge:** a type of Neolithic earthwork that consists of a circular space surrounded by a bank and ditch. Some have large pieces of stone or wood erected inside.

⇒ **Hunter-gathers:** humans who survived by hunting wild animals and gathering wild food.

⇒ **Grooved ware pottery:** a type of handmade pottery that was used during the Neolithic. The title ‘grooved ware’ comes from the variety of grooved decoration on the sides of the pots.

⇒ **Interglacial periods:** periods during the Ice Age in which the ice sheet rescinded and the temperature warmed, allowed early humans to cross the land bridge and take advantage of the rich flora and fauna in Britain.

⇒ **Land bridge:** a landmass that connected Britain to mainland Europe during the last Ice Age. By 6,000 BC this had been submerged by rising flood waters.

⇒ **Lithic:** a word that means ‘relating to stone’. Comes from the Ancient Greek word *lithos* meaning stone

⇒ **Mesolithic:** the middle period of the Stone Age, beginning around 10,000 BC in Britain

⇒ **Microlith:** a small bladed tool, most often Mesolithic.

⇒ **Microwear:** the analysis of wear on the bladed edges of stone tools, such as chips and cracks, to determine their use.

⇒ **Neanderthals:** a species of human (*Homo neanderthalensis*) that were closely related to modern humans (*Homo sapiens*). They became extinct between 40,000 BC and 28,000 BC.

⇒ **Neolithic:** the later period of the Stone Age, beginning around 4000 BC in Britain and ending with the development of bronze tools which led to the start of the Bronze Age.

⇒ **Palaeolithic:** the earliest period of the Stone Age, beginning around 800,000 BC in Britain.
Recommended Resources

Online:

**English Heritage Resources:**
www.english-heritage.org.uk/learn/story-of-england/prehistory/

**BBC History Resources:**
www.bbc.co.uk/history/handsonhistory/ancient-britain.shtml
http://www.bbc.co.uk/programmes/p01zfxnh
www.bbc.co.uk/education/topics/z82hsbk

**British Museum Resources:**
www.britishmuseum.org/learning/schools_and_teachers/resources/cultures/prehistoric_britain.aspx

**Teaching History with 100 Objects:**
www.teachinghistory100.org/

**Museum of London Resources:**
www.museumoflondon.org.uk/schools/classroom-homework-resources/prehistoriclondon-resources/

Books:

* Relevant to sites in Essex
+ Prehistoric and Roman Essex by James Kemble (Tempus Publishing, 2001)*
+ Essex from the Air by David Strachan (Essex County Council, 1998)*
+ From Ice Age to Essex: A History of the People and Landscape of East London (Museum of London, 2006)*
+ The Archaeology of South Essex by Nigel Brown and Roger Massey-Ryan (Essex County Council, 2004)*
+ Prehistoric Britain (British Museum Activity Books) by Mike Corbishley (British Museum Press, 1999)
+ The Dawn of History: An Introduction to Pre-Historic Study by C.F Jeary (BiblioBazaar, 2009)
+ The Significance of Monuments: On the Shaping of Human Experience in Neolithic and Bronze Age Europe by Richard Bradley (Routledge, 1998)

Children’s picture books:

+ Stone Age Sentinel – Available from Essex Libraries
+ The Cave Painter of Lascaux
+ Children’s History of Britain
+ Life in the Stone Age, Bronze Age and Iron Age (A Child’s History of Britain)
+ The History Detective Investigates: Stone Age to Iron Age

What to use real and replica objects with your class?
Colchester Museums has a range of object loan boxes to hire. Loan boxes cover historical periods from the **Stone Age to WW2** and include real and replica objects along with a teacher’s resource pack.

For further information please see our [website](#).
Recommend Additional Learning

Below are topics we recommend you and your students have some understanding of before investigating the Stone Age.

**Archaeology – Discovering Evidence**

Use the activities outlined in our [Introduction to Archaeology](#) resource pack

Have a look at the resources posted by the [Young Archaeologists Club](#)

Have a look at the resources developed by [Archaeology Scotland](#)

Make use of the Museum of London resources mentioned above

**Evolution of Human species**

Have a look at the content and resources supplied by the [Natural History Museum in London](#)

Read through detailed article on [BBC Earth](#)

**Process of Knapping**

Watch this short video on Stone Age materials on [BBC Bitesize](#)

Watch this short video on Flint Knapping produced by the [Museum of London](#)

View of British Landscape during an glacial period.
## Stone Age objects in the collections of Colchester and Ipswich Museums

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<th>Object</th>
<th>Details</th>
<th>How this can be used by your class</th>
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| **Palaeolithic**            | **Clactonian Spearpoint**  
This spear point was discovered at Clacton-on-sea in 1911. Dating back 450,000 years this spear point is the oldest wooden spear to have been found in Britain.  
**Discuss with your class why this might be one of the only surviving wooden spear points from the Stone Age.**  
**Ask your class to think about why the Stone Age is called the Stone Age? It is named after the surviving material. If what survives is the stone this is what we imagine being to be the most common type of tool. The organic materials (e.g. wood) can marginalized. Ask your class to reimage the Stone Age taking into account that wood would have been used just as much or even more that stone and flint.** |
| ![Clactonian Spearpoint](image1.jpg) |                                                                                                                                                                                                                                                                     |
| **Late Upper Palaeolithic** | **Shouldered Point**  
A shouldered point is a projectile (throwing) tool with a notch on one side of the base.  
These tools would have been used in hunting and general multipurpose tasks. While no evidence survives a shouldered point could have been attached to a wooden shaft.  
These tools were found on the Dovercourt foreshore, Harwich, Essex by local collectors Eric and Gordon Hazleton between 1973 and 1993. These tools would have been made by humans surviving in Britain during the Ice Age.  
The two shouldered-points pictured have been dated to the Late Upper Palaeolithic.  
**Ask your class to investigate what these tools could have been used for? They are only 4cm long with a sharp edge. Would this size indicate they were held in a hand or used in some other way?** |
<p>| <img src="image2.jpg" alt="Shouldered Point" /> |                                                                                                                                                                                                                                                                     |</p>
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<th>Hand Axe</th>
<th>Using this guide can your class figure out if this flint has worked by humans into a tool?</th>
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<td>A hand axe was type of multipurpose tool common during the Palaeolithic. These tools were shaped on both sides and fit comfortably into a human hand.</td>
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<td>The example show here is a Palaeolithic Acheulian hand axe, dating from between 500,000 to 40,000 BC and found in a gravel pit in Marks Tey in 1929.</td>
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<table>
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<th>Stone flakes</th>
<th>Using this guide can your class figure out if this flint has worked by humans into a tool?</th>
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<td>These flakes were common throughout the Palaeolithic and were created through flint knapping.</td>
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<tr>
<td>Flint knapping is a process by which cores were struck at precise points to create a cutting tool. It is possible to understand how a flake was struck from a core by examining the percussion points, known as blub scars. These tools would have been made when needed, such as when butchering an animal, and would have been discarded after use, indicating that there was a large resource supply available.</td>
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<tr>
<td>Through microwear analysis of flakes we are able to tell what individual flakes were used for or if they were just waste material. This analysis has shown that these objects were used for wood cutting, wood sawing and butchering.</td>
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### Microliths

The development of small microliths, such as spear points and arrowheads, shows the advance from Palaeolithic stone tools to more delicate, refined implements.

The development of spears and also of bows and arrows would have made hunting more efficient, allowing Mesolithic people to in woodland environments. This particular example was found at Harwich in 2009 by local collectors Eric and Gordon Hazleton between 1973 and 1993.

Microliths were commonly attached to sticks used like harpoons, see image below.

| These tools are between 2-3cms long. Ask your class why humans might develop smaller tools to hunt animals in woodland environments? |
| Weight of throwing implement, effecting speed to hit running animals |
| Ability to attach multiple points to one Projectile |
| This tool is evidence of humans reacting to their environment and developing new ways to survive. |

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### Neolithic Pottery

The Neolithic marks the first use of pottery in Britain. Pots were used for the storage of grain, cooking and ceremonial activities connected to belief systems.

This type of early pottery is called 'grooved ware' after the decoration around the top and can be found in Neolithic sites throughout Britain. This example is a Neolithic 'grooved ware' pot fragment; decorated with grooved horizontal wavy lines. It was found partially buried in the London clay at Dovercourt and found by local collectors Eric and Gordon Hazleton between 1973 and 1993.

<p>| Your class could make their own pots out of clay and copy some of the Neolithic grooved ware decoration. |
| This type of pottery was handmade (not wheel made). The creation of their own pots would help the class identify some of the characteristics of handmade pots. |</p>
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<tr>
<td>Neolithic Polished Axe</td>
<td>The requirement to clear forests for farming resulted in the production of axes there were stronger, polished and attached to wooden handles. Many of these tools required skilled workers and may have taken months to complete. As such they were highly valued, traded and may have been associated with early religion. Polished axe heads have been found in graves unused, this suggests that they were valued possessions made to show wealth and status rather than to be used as tools. The example pictured was found in Stanford-le-Hope, Essex in 1913.</td>
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<td>Neolithic Sickle</td>
<td>This flint sickle dates from the late Neolithic, around 2000 BC. Flint sickles are an uncommon find. Tools such as these demonstrate the specialisation of stone tools that contributed to the development of farming. The curved blade helps us to identify it as a sickle, similar to ones used in farming until relatively recently. This example was found in Dovercourt, Essex in 1987.</td>
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<tr>
<td>Domesticated Animal Bones, Flint Tools and Grooved ware pottery</td>
<td>These animal bones, flint tools and pottery were found buried together at the site of a circular ditch in Lawford, Essex. The pottery found consists of eleven fragments of grooved ware pots, a common type of pottery found throughout Britain during the Neolithic. The deliberate burial of the bones, tools and pottery together suggests this was the location of a ceremonial feast. During the Neolithic, ritualistic behaviour can be seen to increase, with tools being used for ceremonial as well as practical purposes.</td>
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Using this guide can your class figure out if this flint has worked by humans into a tool? Ask your class to investigate why Stone Age people might have started to use polished axe heads instead of the hand axe type above. Can discuss that polished axes were stronger and could deliver a blunt force better, while the hand axe is better for cutting. The need to cut down trees and build permanent settlements changed the way people used tools. 

Ask your class to investigate why sickles start to appear in the Neolithic (a reaction to farming). Compare this to a modern sickle – what has changed? What has stayed the same? 

This set of objects can be used as a detective game. In a field you find; Animal bones, Pottery, Flint tools. What do these objects have in common? What event might they all have been used for? Why were they buried together?
Activity Examples

Below are some activity ideas that incorporate critical thinking with object based active learning.

If you need further information on learning from objects please see our online resource.

Activity Ideas:

✦ Using soap and children’s knifes teach students the process of flint knapping

✦ Borrow one of Colchester Museum’s Stone Age to Iron Age loans boxes which contains a range of historical objects (including replicas) that you can use with your class.

✦ Sort objects into families based on materials or use

✦ Download object investigation worksheets from our website.

✦ Use Pinterest to create a pin board museum. Students can research objects and write text.
  ✦ Example: http://pinterest.com/carolynhowitt/tudors/

✦ Print the images onto card chop them up into pieces and then rebuild as jigsaws. Use as a starting point to talk about archaeology and reconstructing objects from the past.

✦ Object categories. Make theme labels (trade, hunting, and warfare) ask students to match object images with themes creating a mind map. Objects can connect to more than one theme.

✦ Hot seating. Either a teacher or TA in role as the owner of the object. The class prepares questions to ask the owner about the object and how they used it. This could also work with students in pairs or small groups.

✦ Create an advert to try and sell the object. The advert should include: What it is used for? Why a person needs it? Where can you get it from/ how is it made?

✦ Create a documentary about the discovery of the object explaining what it was used for with demonstrations of how it was used.

✦ Act out one of the stories from children’s picture books above focusing on objects and their use and/or manufacture.

✦ A PowerPoint containing object images can be downloaded from our website.