

Palaeolithic Archaeology Teaching Resource Box

Palaeolithic Stone Tools: Basic

Stone Tools: When & What?

Palaeolithic (Old Stone Age) *stone tools* were almost certainly the most common type of tool used by Palaeolithic people. Stone tools are first found in Britain around 700,000 years ago and were made right up until the end of the Palaeolithic period, roughly 10,000 years ago. Although the stone tools only changed slowly during this period, over time the tools generally became smaller and more and more different types were made.

One of the most common types of stone tool is the Lower and Middle Palaeolithic handaxe (pictured overleaf): when handaxes were first found archaeologists thought that their shapes resembled modern axe blades and that they were held in the hand: hence the name (hand-axe). Archaeologists still think that handaxes were held in the hand, although it is not thought that they were used in the same way as modern axes: rather that the sharp edges were used for cutting and that the handaxe was used as a type of knife.

Other types of stone tools include scraping tools (known as scrapers), spear tips (known as points or projectile points), wood-working tools (notches and denticulates), and specialist knives. The scraping tools and wood-working tools are made from the earliest part of the Palaeolithic (the Lower Palaeolithic) onwards, while other tools are not made until later, such as the points (first appearing in the Middle Palaeolithic) and the knives (the Middle and Upper Palaeolithic).

Beyond Stone:

It is important to remember that not all Palaeolithic tools were made from stone: there is occasionally evidence for bone, antler, and wooden tools, such as needles (bone) for sewing clothing, and harpoons (antler) and spears (wood) for hunting. Animal skins were probably used to make clothing, tents, and maybe also bags for carrying things. However, because these materials all decay (bone, antler, wood and skins all come from living things) over the long time-spans of the Palaeolithic, the items made from them (known as *organic tools* or non-stone tools) are often under-represented in the archaeological record, unlike the stone tools.

Although the poor preservation of organic tools makes it difficult for archaeologists to be sure, it is likely that an increasingly wide range of types of non-stone tools were made as the Palaeolithic progressed (as with the stone tools): this is supported by some of the stone tools from the Upper Palaeolithic (known as burins) which seem to have been used to make and prepare bone and antler tools (in other words, burins were tools for making other tools). However there is also occasional evidence for wooden spears as far back as the Lower Palaeolithic.

Making Stone Tools:

Stone tools are made by shaping suitable stones such as *flint* and *chert*. The stones are shaped by a method known as *flaking*. The internal properties of stones such as flint and chert are highly uniform, allowing the stones to be broken or flaked in whatever direction the tool-maker wishes, enabling the stones to be shaped into a range of different tools.

Using Tools:

Archaeologists think that Palaeolithic stone tools had four main uses: killing animals (points), cutting up animals (handaxes and knives), scraping and cleaning the skins of dead animals (scrapers), and working wood and making organic tools (notches, denticulates and burins). Archaeologists think that handaxes were used for cutting up animals because these stone

tools are sometimes found lying next to the bones of dead animals on archaeological sites. However some of our other ideas about the uses of stone tools during the Palaeolithic are based upon modern experiments using replica tools.

Terminology:

Chert: similar to *flint*, chert was often used to make stone tools in the south-west of England, especially around what is now the modern border between Devon and Dorset. A sample of chert is included in the teaching box.

Flaking: this method is used to shape stone into tools, and is also commonly referred to as knapping. Flaking relies on striking the stones, often with a rounded cobble known as a hammerstone.

Flint: a common source of stone tools. Flint is most commonly found in south-east England. A sample of flint is included in the teaching box.

Organics tools: any tool made from the remains of a living creature, such as wood (trees), and bone, antler, and skins/furs (animals).

Stone tool: any tool made from stone. During the Palaeolithic period stone tools are made by flaking large blocks of stone such as flint and chert, both of which can be broken (flaked) in predictable ways, and produce sharp edges. Replica examples of Palaeolithic stone tools (in resin) are included in the teaching box.

Quiz Questions:

1. What are the main advantages of using stone to make tools?
2. What are the advantages of the other, non-stone, raw materials that Palaeolithic peoples used to make tools?
3. Why would Palaeolithic people want to clean the skins of dead animals?

Further Resources:

http://www.creswell-crags.org.uk/virtuallytheiceage/Exploring_objects/index.html [A range of Palaeolithic tools and other items from the Creswell Crags site]

<http://www.flintknapping.co.uk/> [John Lord's flintknapping website, including details of training courses, workshops and events]

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A Lower Palaeolithic handaxe



Flint raw materials for stone tool making



Early stages of flintknapping (stone tool making), using a hard hammerstone