How did Palaeolithic hominins behave?
The Palaeolithic is characterised by the use of stone and organic (non-stone) tools and by hunter-gatherer lifestyles. However the lifestyles of Palaeolithic hominins did change from the Lower Palaeolithic to the Upper Palaeolithic, changes which at least partially reflected the evolution of different hominin species over the course of the Palaeolithic:

- During the Lower Palaeolithic there is little evidence for permanent campsites or shelters, although there have been recent claims for the controlled use of fire, including at the site of Beeches Pit in Britain. It is possible that Lower Palaeolithic hominins made temporary shelters from vegetation which left no traces, or they may even have slept in the trees. However these hominins (Homo heidelbergensis) were skilled hunters (using wooden spears to kill their prey). They were reliant upon stone tools, with handaxes being particularly important.
- Like their predecessors in the Lower Palaeolithic, the Neanderthals of the Middle Palaeolithic used stone tools. However the Neanderthals also introduced new techniques of making stone tools (known as the Levallois technique) and used more flake tools and fewer handaxes. The Neanderthals also practiced burial (although grave goods have rarely been found) for the first time in the Palaeolithic (while no Neanderthal burials have yet been found in Britain there are several in southern France and the Near East). Caves and rockshelters also seem to have been used more frequently (in comparison to the Lower Palaeolithic) as living sites during the Middle Palaeolithic period.
- The Upper Palaeolithic period saw the first appearance of modern humans (Homo sapiens) in Britain, and the first art in Britain (at the site of Creswell Crags in Nottinghamshire). More generally the Upper Palaeolithic saw the first appearance of graves with symbolic grave goods, a wider range of tools made from both stone and organic materials (such as bone, wood and antler), new techniques of stone and organic tool making, stone-built hearths, and the first substantial shelters (including tents and mammoth bone houses).

How large were hominin groups?
It is difficult to know how large hominin groups were, especially as there is very little evidence for tents or houses before the Upper Palaeolithic. The evidence that is available from caves and occasional campsites suggests that Lower and Middle Palaeolithic groups may have been fairly small, perhaps fewer than 20 people. Groups may have become larger during the Upper Palaeolithic, where there is evidence for small villages and mammoth bone houses. It is also possible that temporary larger groups were formed throughout the Palaeolithic for communal activities such as hunting and foraging, which required more people.

Evolved Ape or Semi-Modern Humans?
A long-standing problem for archaeologists is how we think about Palaeolithic people: this is relatively straightforward for the Upper Palaeolithic, since the Homo sapiens of that period are modern humans in biological terms and their behaviour (including the production of art, burial of their dead, and the trade and exchange of exotic raw materials) is familiar to us.

The problems start to increase when archaeologists turn to the Neanderthals of the Middle Palaeolithic: some like to see them as almost modern humans (often on the basis of the evidence for burial and care for elderly individuals), while others view them as being rather different to modern humans (such archaeologists often point to the absence of art and symbols in the archaeological record of the Middle Palaeolithic).
The Lower Palaeolithic creates even more problems: although there are well made stone tools and clear evidence for hunting, the apparent lack of campsites and the limited range of stone tools (which persist with little change for a very long time) are seen by some archaeologists as indicating a very different kind of hominin to modern humans, perhaps one with a more limited set of behaviours.

**Terminology:**
- *Beeches Pit:* a key site, roughly 400,000 years old, which has produced some of the first convincing evidence for hearths in the British Lower Palaeolithic.
- *Hunter-gatherer:* a human who relies upon the hunting of wild animals and the gathering (collection) of wild plants (including fruits and nuts) to provide themselves with food.
- *Mammoth bone houses:* the first Palaeolithic houses in northern Europe were constructed from mammoth bones (and are up to 20 feet in diameter), and are found in the Ukraine, Poland, and the Czech Republic, dating to between 10,000 and 20,000 years ago.
- *Symbolic grave goods:* these are items such as stone tools and clothing that were placed in the graves of dead hominins, and are thought to indicate ritualistic burial.
- *Stone-built hearths:* first found towards the end of the Middle Palaeolithic, the significance of stone-built hearths is that they suggest a permanent settlement, rather than a temporary stopover site where a fire might be made (if at all) in a natural hollow in the ground. Some archaeologists have also seen the hearth as a focus for conversation: they are sometimes taken as indirect evidence for complex spoken language.

**Quiz Questions:**
1. What are the principal differences in hominin behaviour between the Lower and the Middle Palaeolithic?
2. Which aspects of the Upper Palaeolithic had not been seen in the earlier periods of the Palaeolithic (the Lower and Middle Palaeolithic)?
3. What would be the advantages and disadvantages of living in small, as opposed to large, groups?

**Further Resources:**

**Images** (all image copyrights: Dr Rob Hosfield, University of Reading. Reproduced with permission):
- A basic shelter structure, of a type possibly used during the Palaeolithic
- A covered shelter, of a type possibly used during the Upper Palaeolithic