

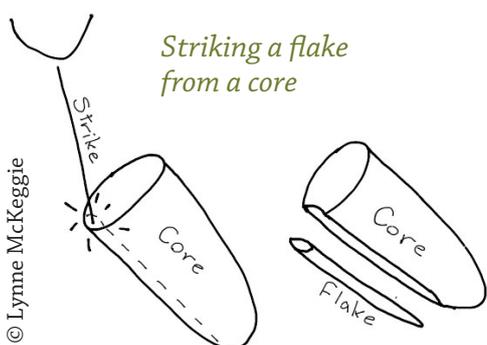
Flint Knapping

Knapping is a process of striking a stone with another piece of stone, antler, bone or wood to knock off flakes until you have the pieces of the size and shape you desire. It works best with stones that have a close crystalline structure, like flint, chert, and quartz. These stones can carry sharp, thin edges.

Flint and chert are fairly common in Europe and produce good blades, so most knapped artefacts in Europe are made of these stones. However, there are few flint sources in Scotland. Some flint may have been traded from England and Wales. Quartz is very common, but does not flake so well. It can be very difficult to tell whether quartz has been knapped but there is growing evidence that it was frequently used in the Highlands, probably due to the lack of flint.



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When knapping, the main piece of stone is called the 'core' and the pieces that are struck off are called 'flakes'. When the core is struck a wave of force travels through the stone, creating a split. The skill in flint knapping is being able to predict and control where the split goes by striking in just the right place with the right angle and force.

The flakes often have a swollen area at the top, known as the 'bulb of percussion' and ripples further down the flake. Some of the flakes are useful enough blades to be used as tools. For more complex tools the edges are shaped and sharpened by knapping away small flakes in a process called 'retouching'. The leftover flakes are known as 'debitage'. Occasionally a scatter ofdebitage may be found in a semi-circle indicating where the knapper sat and worked thousands of years before.

It is impossible to date stone artefacts so we rely on dating material in the soil around stone objects. We can then recognise which flint-knapping techniques and artefacts belong to different eras.

One blow to the flint core resulted in a number of usable blades



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See also:

Box 1 object sheets: Microlith, Stone Axes, Leaf-shaped Arrowhead, Scrapers, Barbed and Tanged Arrowheads, Flint Blades

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