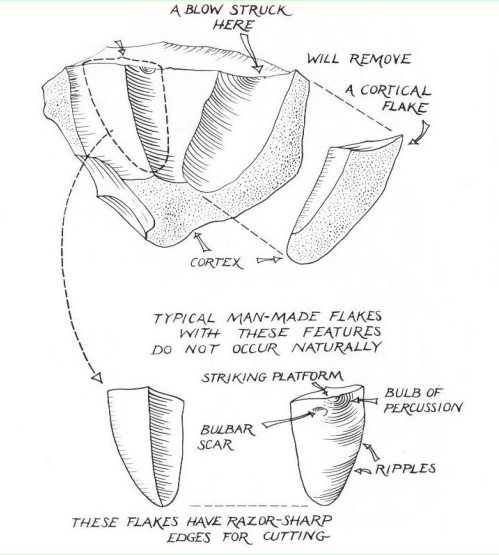
Flint Flakes

Flint flakes may be the waste product left by people making core tools, or the flakes themselves may have been worked to make a flint tool. It is possible to tell a worked flake struck from a core from a flake which might have occurred naturally (shaped, chipped or broken by weathering for example) by looking for a few small distinguishing features.



1 Bulb of percussion - a swelling created immediately below the point of impact (striking platform)

2 Bulbar scar - a small chip of flint missing just below the bulb of percussion

3 Ripples - concentric waves radiating from the point of percussion to the bottom of the flake

The flake should be slightly s-shaped in side view. A flake with 3 of these features was probably made by prehistoric people.

N.B. Plough flakes made by agricultural machinery are hard to distinguish from prehistoric flakes.

About our work

The Lithics working group is involved in a project to log and record as much information as we have on the various collections of Lithics, held at Guildford Museum, and in private collections in the county.

This resource, in the form of a spreadsheet, is available to those studying such forms and will hopefully lead them to suitable research material.

Please contact the Museum or Surrey Archaeological Society if you are interested in a copy.

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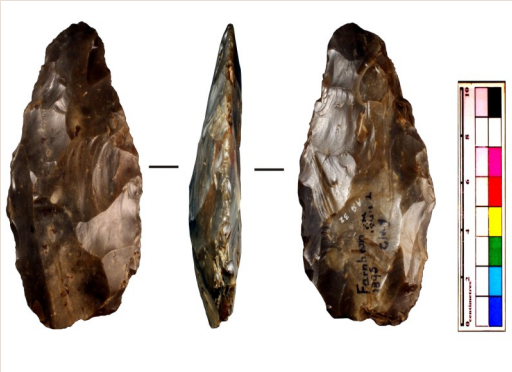
Flint Fact Sheet



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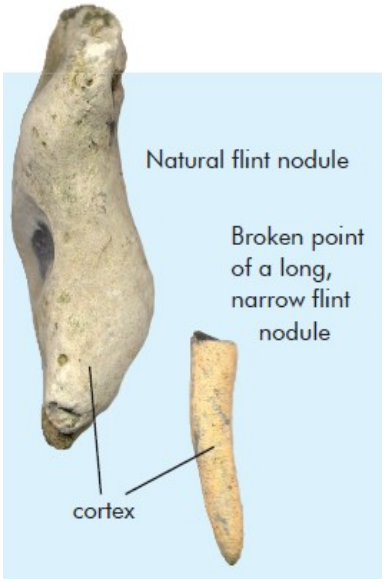
Identifying prehistoric flint tools

What are flint nodules?

Flint occurs naturally in the chalk of Southern England, in thin layers or nodules. These nodules were formed 100-70 million years ago as the silica from sponges on the ancient sea bed was re-deposited as mineral growths in the chalk.

Flint nodules often have fantastic shapes resembling heads and feet, some long and hollow resemble animal bones when broken, some sharp resemble spears or arrowheads.

The outer whitish skin is known as the cortex.



Burnt flint has a finely cracked, angular surface with sharp edges, and a bluish tinge. It is often mistaken as evidence of prehistoric occupation

Palaeolithic axe
About 400,000 BC

Flint core tools

Prehistoric people sometimes made core tools created by taking a flint nodule and striking small flakes off it until the desired shape was achieved.

Neolithic axe
About 4500-2300 BC

It is possible to find examples in Surrey from the different periods of the Stone Age. Handaxes could easily dismember carcasses of animals as large as a mammoth.

By the Mesolithic period axes were being attached to wooden or bone handles, making it possible to hit objects with a greater force.

Mesolithic axe
About 8500-4500 BC

Flint flake tools

A variety of flake tools were produced, especially in the Neolithic period and early Bronze Age. There should be signs of secondary working of the edges, knapping, of the flake to produce scrapers, borers,

Natural forms

The action of wind, rain winter frost and summer sun can cause thermal fractures, not to be mistaken as worked flakes.