ARCHAEOLOGY SCOTLAND

Flint Core, Fitting Blades and Flint working debris (Replica)

Period: Mesolithic/Neolithic/Bronze Age

Date: 7000 – 2000BC

Material: Flint

Use: Tool Making

Site: N/A

- This is a modern example of a flint core. A hammer stone was used to make a flat "platform" at the top. Flakes of flint have been struck from the side of the core
- The three flakes will fit back onto the core in the reverse order to which they were struck
- The bags contain the mess left over after flint knapping, called debris
- Each of the three flakes which have been struck off the core have the potential to become tools, like the other artefacts in the box

Fantastic Fact!

Archaeologists can re-fit the flakes removed from knapping to make the original core. This can help them understand the techniques used to make tools, like a difficult jigsaw puzzle! Depending on where the debris has fallen, archaeologists can also tell whether the flint knapper was right or left handed!

Activity Idea!

Look at the flint blade then have a think about how it could be turned into a useful tool. What job could your tool be used for? Will it have a handle? What other material is needed to complete the tool? Now draw your new tool.

ARCHAEOLOGY SCOTLAND

Hammerstone

Period: Neolithic
Date: 4500 – 2000BC
Material: Sandstone
Use: Hammering/Tool making
Site: North Uist (Western Isles)

- This stone was used just like a hammer and you can see the marks on both ends which have been created by hammering
- Stones like these were used for breaking flakes off pebbles of flint

Fantastic Fact!

The flint mine at Den of Boddam in Aberdeenshire contained anvil stones used in flint knapping. Many had round grooves made in them. The grooves were there to hold flint pebbles in place before they were struck with a hammerstone.

Activity Idea!

Archaeologists can tell the kinds of things that a hammerstone was used to hit by examining the marks on the stone. Find a stone about the same size of the hammerstone in the kit and **ask an adult to (carefully!) do the following tasks**:

- Hit the stone off another rock
- Break hazlenuts or walnuts
- Hammer in a tent peg

Then have a look at the marks on the stone and see whether each task has made a different mark. This is exactly what archaeologists look for!

ARCHAEOLOGY SCOTLAND

Antler tools and deerskin pad (replica)

Period: Mesolithic/Neolithic/Bronze Age
Date: 8000 – 2500BC
Material: Antler and deerskin
Use: Tool making
Site n/a

- These are replicas of tools used during flint knapping. Flint knapping is the name given to the process of making tools out of flint.
- The deerskin pad would have been used to protect the flint knapper from sharp pieces of flint which fly off as the flint core has flakes struck from it
- The antler punch has been cut and sharpened at one end and was used to break off tiny flakes of flint to make a sharp edge on a flint tool.
- The antler tool with no end to it is called a "soft hammer". This is because antler is a soft material compared to a hard hammerstone. These hammers could also be used to strike blades from a flint core.

Fantastic Fact!

Antler is a very useful material that could be used to make all sorts of tools. These tools were used for hitting and hammering and even for more delicate jobs, such as sewing. Some of the earliest antler tools which have been found are harpoon heads for catching fish.

Activity Idea!

Find a photo of a whole deer antler. It should have many points, called "tines" on it. How many different tools do you think you could make from one antler? Remember, people used to make small tools from antler, such as needles, as well as flint knapping tools.

ARCHAEOLOGY SCOTLAND

Replica arrow

Period: Neolithic
Date: 4500 – 2000BC
Material: Flint and wood
Use: Hunting
Site: n/a

- This is the type of arrow that would have been used by people from the Neolithic to hunt animals to eat. The Scottish Neolithic is dated to around 4500 – 2000BC and is the period when people began to grow crops and domesticate animals.

- Hunting still provided an important part of people's diets during this period, as bones from wild animals are commonly found on Neolithic sites.

Fantastic Fact!

Wood normally rots away and the flint arrowhead would be the only part to survive from this arrow. However, wood can survive in areas where there is a lot of water and the earliest bow to have been found in Scotland was at Rotten Bottom in Dumfriesshire. It dates from 4000BC and only survived because it was buried in very wet soil.

Activity Idea!

Look at the replica arrow and list all the different materials that have been found. Would you have to work each of the materials to make it into the shape it is in the arrow? Can you put together a drama in a group where everyone contributes to making the arrow? Do you think that there was a lot or a little effort that went into making the arrow? Do you think that Neolithic people would have thought their arrows were precious?

ARCHAEOLOGY SCOTLAND

Composite Sickle (replica)

Period: Neolithic
Date: 4500 – 2000BC
Material: Flint/wood/resin
Use: Harvesting crops and clearing vegetation
Site: N/A

- This is a replica of a flint sickle made from microliths. Microliths are tiny blades of flint (micro=small and lithic/lith=stone or flint) that can be made into different tools.
- To make the sickle blade, the microliths have been stuck to the wooden handle by a natural glue made from pine tree resin

Fantastic Fact!

This kind of tool would have been used to clear areas of vegetation, or to harvest crops. These kinds of tools would have been used right up to the Iron Age, before they were replaced by metal tools.

Activity Idea!

Design and make a model of your own microlith composite tool. You could use paper or plasticene to make your model.

Decide how many microliths you will use, how big the tool will be and what other materials you will need for the handle or shaft and for fixing the microliths to it. What will you use it for?

ARCHAEOLOGY SCOTLAND

Flint blade

Period: Mesolithic/Neolithic
Date: 7000 – 2000BC
Material: Flint
Use: Cutting
Site: Slains (Aberdeenshire)

- This is a flint blade and has been made from a flint flake. It could have been used like a knife and has been sharpened on both sides.
- Many flint blades may have been originally attached to wooden handles using string and natural glue.
- This picture shows a replica of how a flint blade might have looked as part of a knife.

Fantastic Fact!

Flint blades would have been used for lots of things. Before people had the technology to make tools out of metal, flint blades would have been used to cut hair and cut food.

Activity Idea!

Think of all the things we use knives for today. What sort of things would people in the Neolithic have used their blade for? Make a list of ten things you use knives for and then see if you can think of the Neolithic equivalent.

ARCHAEOLOGY SCOTLAND

Scrapers

Period: Neolithic
Date: 4500 – 2000BC
Material: Flint
Use: Hide preparation/ Bone or Wood working
Site: Culbin Sands (Morayshire)

- These flint tools are known as scrapers because they were used to scrape materials. They have been made into a round shape with sharp edges. Different sizes of scrapers were made for different types of work.
- Scrapers have been found on Scottish sites dating from the Mesolithic to the Bronze Age. They would have been used for tasks such as hollowing out wood or bone or for scraping bark off wood.
- They were probably mostly used to prepare animal hides, for example, removing fat from the insides of animal skins, which might then be used for clothing or to make leather.

Fantastic Fact!

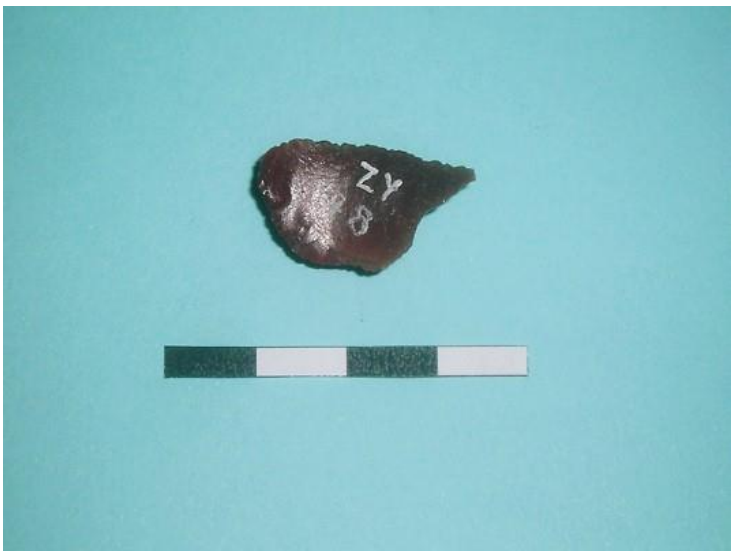
Some small scrapers may have started out larger, but were used and worn away so much that eventually they became too small to use.

Activity Idea!

Design your own set of scrapers, giving them sizes. What special jobs would you use each of them for?

ARCHAEOLOGY SCOTLAND

Flint Piercer



Period: Mesolithic/Neolithic
Date: 7000 – 2000BC
Material: Flint
Use: Piercing/Boring/Drilling
Site: Culbin Sands (Morayshire)

- This flint tool has a sharp point. It would have been used to pierce holes in different materials such as leather, bone or shell

- The tool is very small – it would have taken a lot of skill to create such a small tool from a large piece of flint

Fantastic Fact!

Tools like this piercer would have come in very handy for a number of jobs. For example, holes had to be made in leather for making clothes, to allow string through which would have held the clothes together. A flint tool would be perfect for making the holes needed for sewing. This would have been the same for making jewellery, such as necklaces with beads or seashells that needed holes made in them before being strung.

Activity Idea!

The flint piercer would have been one tool in a Mesolithic or Neolithic toolkit. Design an item that would have needed holes in it. It could be:

- A cloak
- A leather bag
- Some jewellery

What materials do you need and what are the holes used for?

ARCHAEOLOGY SCOTLAND

Barbed and tanged arrowhead (replica)

Period: Bronze Age
Date: 2000 – 500BC
Material: Flint
Use: Hunting
Site: Culbin Sands (Morayshire)

- This arrowhead gets its name from the "barbs" (jagged edges) on both sides and the "tang" in the middle, which was used to fix it to the arrow shaft.
- Barbed and tanged arrowheads began to be used in the Bronze Age. Although metal (bronze) was being used in this period (hence, the Bronze Age), arrowheads were still being made from flint as bronze was very difficult to get hold of.

Fantastic fact!

There were lots of different shapes of arrowheads used by people in prehistoric Scotland. These ones in the picture are called transverse and chisel type because of their shapes. Both have large, wide cutting edges on the right side. These special arrows could cut the leg tendons of larger animals so that they could not run away. This is a technique called "hamstringing"

Activity Idea!

Imagine you are an archaeologist trying to find out about the life of a Bronze Age hunter. Do your own research to find out the answers to the following:

- What animals lived in Scotland in the Bronze Age?
- Where would you hunt these animals?
- What special flint tools would you need for hunting?
- Apart from food, what else could you use from the animals which you hunt? (there are clues in the other artefacts in this kit!)

ARCHAEOLOGY SCOTLAND

Leaf shaped arrowhead

Period: Neolithic
Date: 4500 – 2000BC
Material: Flint
Use: Hunting
Site: Culbin Sands (Morayshire)

- Arrowheads would have been attached to the end of a long wooden shaft and fired from a wooden bow. Hunters would use the arrows for hunting animals like deer and wild cattle. It was important that the hunter recovered the arrowhead and the arrow from the animal so that it could be re-used.
- In order to make the arrowhead, a flake would have been struck from a flint ore and carefully worked into the leaf shape. This example comes from Culbin Sands in Morayshire, where occupation sites have been recorded throughout the Neolithic and Bronze Age.

Fantastic Fact!

Hunters in prehistoric Scotland used different sizes and types of arrowheads for hunting different animals. Some very tiny arrowheads were found at Culbin Sands. Archaeologists think that these might have been used for hunting fish as the site was very close to the sea.

Activity Idea!

Why do you think the arrowhead was leaf shaped? Compare it to the other arrowhead in the kit. What are the differences and which one do you think would have been more effective?

ARCHAEOLOGY SCOTLAND

Flint Platform Core

Period: Mesolithic
Date: 7000 – 4500 BC
Material: Flint
Use: Tool Making
Site: Ballantrae (Ayrshire)

- This artefact was once a flint pebble. It has been hit lots of times to make small flakes of flint.
- The flakes were then made into tools, such as arrowheads or blades of knives. This tiny core is all that is left.

Fantastic Fact!

Archaeologists can find out lots of information from looking at flint cores. They can measure the lines, shapes and patterns and work out what size and shape the flakes were that have been struck off. They can also work out what tools were used to do the striking and what sort of tools would have been made from the flakes of flint.

Activity Idea!

Look at the core. How many flakes do you think have been taken off? What size and shape do you think the flakes were? What tools do you think these flakes were made into?

Can you draw one of them to scale?