

Materials through the ages

The more materials you have to use, the more things you can make. This is why new materials have been invented down the ages.

Anything you use to make things is called a MATERIAL.

Using natural materials

The first people (sometimes called Stone Age people) used only the natural materials that they found around them – materials like stone, clay, wood, animal skins and bones.

But even with these simple materials, they could make many useful and sometimes beautiful things such as axes and ploughs, arrows and bows, clothes, pots and bowls (Pictures 1 and 2).

Using metals

About 3,000 years ago, people discovered how to get new materials from rock. These were metals.

A wooden stick is used as a handle.

Gut from an animal is used as string to tie the axe head to the stick.

▲ (Picture 1) Stone Age tools used only simple, natural materials. This is an axe with a handle. It uses three natural materials. It is easier to use than a hand axe.

As a result, they suddenly had many new materials to work with.

At first people used metals which were soft and easy to shape – gold, silver and copper. Later they learned how to use iron, steel and many other metals.

Each new metal gave them the chance to make many new things (Picture 3). Today, metals are used to build everything from railway lines to spaceships and rockets.

Inventing plastics

Most recently of all, scientists have discovered they could make lots of materials that had never existed in the world before. These materials are made from oil and called plastics. They could be shaped into all kinds of new things.

A flint axe is chipped to give a sharp edge.

Picture 2) This is a home made by bending sticks to make a frame, then covering the frame with tree bark. The bark is held down with more sticks.



More and more choices

As you can see, down the ages people have used more and more types of materials (Picture 4).

So what makes people choose one type of material instead of another type? This is what you will discover as you read the rest of this book.

Summary

- You make things with materials.
- A material can be natural or man-made.
- Each material has its own range of uses.
- Each time we invent a new material we make our world a more varied place.



Picture 3) By the Victorian Age, people were using many kinds of metal, but there were no plastics. As a result, what they sold in their shops looked very different from what we see in shops today. The objects in the shop front are baths made of a material called galvanised iron.

