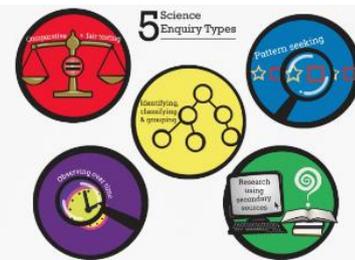


Year 2 Spring Term

Materials



Prior knowledge learned in year 1:

distinguish between an object and the material from which it is made - identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock describe the simple physical properties of a variety of everyday materials - compare and group together a variety of everyday materials on the basis of their simple physical properties

National Curriculum for year 2

identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses - find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

Use of EVERYDAY MATERIALS KNOWLEDGE ORGANISER

What you should already know...

- Materials are the **substances** that things are made from.
- We use lots of different materials every day, e.g. metal, plastic, wood, and glass.
- Different materials have certain properties, e.g. glass is see-through, metal is strong and often shiny, etc.
- Composite** are made from two or more materials together.
- Some materials are used to make many things.

Properties of Materials			
Material	Image	Properties	What could it be used for?
Metal		-Metals are often strong, shiny, hard and long-lasting. -Metals can be hammered into different shapes.	-Metals can be made into things like pots and pans. -Metals can be stretched into wires and rods.
Glass		-Glass can be strong, but thin glass shatters. -Glass is transparent and waterproof. It can be made into different shapes.	-Glass is most often used to make windows and glasses. -It is also used in making mirrors, table-tops and windscreens.
Wood		-Wood is hard and strong. -Wood is long-lasting and is a natural product. -Wood is flammable.	-Wood is often used to build furniture, like benches and desks. -Wood can be used to build houses and cabins.
Plastic		-Plastics can be tough or flexible and can be made into any shape. Plastics can be dyed different colours and can be made transparent.	-Plastics can be used to make packaging, bottles and toys. -Plastics can be moulded into plates, knives and forks.
Rubber		-Rubber is extremely tough, but also very flexible. -Rubber is elastic and also waterproof. Rubber doesn't tear easily.	-Not including food and drinks, water is still used in many, many products. For example, it is used in making paints, toothpastes, shampoos and cement.
Brick		-Bricks are very hard and strong. They are difficult to break. Bricks are thick and store heat well.	-Bricks are normally attached together with mortar and are used to make buildings. -They are also used for paving.
Paper		-Paper is often thin and can be made into lots of different shapes. Paper can be torn. It goes soggy when wet.	-Paper is normally used for writing. Paper is used in diaries, notebooks and for printing on. Paper is used for posters/displays.
Cardboard		-Cardboard is often thin but is firmer and tougher than paper. Cardboard is more difficult to tear. It goes soggy when wet.	-Cardboard is often turned into boxes and is then used for packaging items. It can be used for protection, e.g. protecting floors when painting.

Key vocabulary
Stretchy, Stiff, Shiny, Dull, Waterproof, Absorbent, Opaque, Transparent, Brick, Paper, Fabrics, Squashing, Bending, Twisting, Stretching Elastic, Foil Hard, Soft, Rough, Smooth, Bendy

Suggested texts
Project science – materials

Scientists
Charles Macintosh-Waterproof material
John MacAdam- Tarmac

What material(s) would be suitable for....?

How can you change the shape of a material?

What does waterproof / absorbent mean?

Comparing materials – which is best?

