Caroline Haslett Primary School - Science Topic: Uses of Everyday

Materials Year 2

| What should I already know | ? |
|----------------------------|---|
|----------------------------|---|

- Objects are things that you can touch or see.
- Objects are made from materials.
- Some materials that objects are made from (e.g. glass, wood, plastic)
- Some words to describe materials (e.g. shiny, soft, rough absorbent)
- Materials which are natural and which are man-made.

| • Materials w | • Materials which are natural and which are man-made . | | |
|---|---|--|--|
| What will I know by the end of the unit? | | | |
| What are materials used for? | Materials are used for different purposes based on their properties. For example, wood is used to make furniture and floors. Metal can be used to make coins, cans, cars and cutlery. Glass can used to make windows. | | |
| What properties of materials make them suitable for a particular use? | Glass can used to make windows because it is transparent. Rulers can be made from wood, plastic or rubber because these materials are smooth and can be cut straight. Spoons are made from metal, because it is waterproof and can be cleaned easily. They can also be made from plastic for children because plastic is light and it cannot hurt children's growing teeth. ABOD transparent waterproof opaque stiff waterproof opaque stiff soft shiny rough absorbent bright | | |
| How can you change the shape of materials? | The shape of some materials can be changed when they are stretched, twisted, bent and squashed. Stretch twist bend squash | | |

| absorbent material that soaks up liquid easily bendy an object that bends easily into a curved shape rectangular blocks of baked clay used for building walls, which are usually red or brown dull a colour or light that is not bright elastic rubber material that stretches when you pull it and returns to its original size and shape when you let it go cloth or other material produced by weaving together cotton, wool or other threads. foil sheets of metal as thin as paper glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of trees | Vocabulary | | |
|---|-------------|---|--|
| brick rectangular blocks of baked clay used for building walls, which are usually red or brown dull a colour or light that is not bright elastic a rubber material that stretches when you pull it and returns to its original size and shape when you let it go cloth or other material produced by weaving together cotton, wool or other threads. foil sheets of metal as thin as paper glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it | absorbent | material that soaks up liquid easily | |
| which are usually red or brown dull a colour or light that is not bright elastic a rubber material that stretches when you pull it and returns to its original size and shape when you let it go cloth or other material produced by weaving together cotton, wool or other threads. foil sheets of metal as thin as paper glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people opaque if an object or substance is opaque, you cannot see through it plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it | bendy | an object that bends easily into a curved shape | |
| elastic a rubber material that stretches when you pull it and returns to its original size and shape when you let it go cloth or other material produced by weaving together cotton, wool or other threads. foil sheets of metal as thin as paper glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes oft not rough or hard pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it | brick | | |
| fabrics cloth or other material produced by weaving together cotton, wool or other threads. foil sheets of metal as thin as paper glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it a material which is light in weight and does not break easily a series of actions used to produce something or reach a goal. properties purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or a something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it | dull | a colour or light that is not bright | |
| fabrics foil sheets of metal as thin as paper glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | elastic | | |
| glass a hard transparent material man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | fabrics | cloth or other material produced by weaving together | |
| man-made things are created by people metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque , you cannot see through it a material which is light in weight and does not break easily a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | foil | sheets of metal as thin as paper | |
| metal a hard substance such as iron, steel, gold, or lead natural things that exist in nature and are not made by people if an object or substance is opaque, you cannot see through it a material which is light in weight and does not break easily a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | glass | a hard transparent material | |
| natural things that exist in nature and are not made by people if an object or substance is opaque , you cannot see through it plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent , you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | man-made | things are created by people | |
| opaque if an object or substance is opaque, you cannot see through it plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | metal | a hard substance such as iron, steel, gold, or lead | |
| plastic a material which is light in weight and does not break easily process a series of actions used to produce something or reach a goal. properties the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | natural | things that exist in nature and are not made by people | |
| process a series of actions used to produce something or reach a goal. properties purpose the qualities or features that belong to something and make it recognisable purpose recyclable recyclable rock the hard substance which the Earth is made of of uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | opaque | | |
| properties goal. the qualities or features that belong to something and make it recognisable purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | plastic | | |
| purpose the reason for which it is made or done recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | process | · · · · · · · · · · · · · · · · · · · | |
| recyclable waste or materials which can be processed and used again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | properties | | |
| recyclable again rock the hard substance which the Earth is made of rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | purpose | the reason for which it is made or done | |
| rough uneven and not smooth shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | recyclable | · | |
| shiny things are bright and reflect light smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | rock | the hard substance which the Earth is made of | |
| smooth no roughness, lumps, or holes soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | rough | uneven and not smooth | |
| soft not rough or hard squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | shiny | things are bright and reflect light | |
| squash pressed or crushed with such force that something loses its shape stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | smooth | no roughness, lumps, or holes | |
| stiff firm or does not bend easily stretchy slightly elastic suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | soft | not rough or hard | |
| stretchy slightly elastic something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | squash | | |
| suitable something that is suitable for a particular purpose or occasion is right or acceptable for it transparent If an object is transparent, you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | stiff | firm or does not bend easily | |
| occasion is right or acceptable for it transparent If an object is transparent , you can see through it twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | stretchy | slightly elastic | |
| twist turn something to make a spiral shape Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | suitable | | |
| unsuitable Someone or something that is unsuitable for a particular purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | transparent | If an object is transparent, you can see through it | |
| unsuitable purpose or situation does not have the right properties for it waterproof does not let water pass through it the material which forms the trunks and branches of | twist | turn something to make a spiral shape | |
| wood the material which forms the trunks and branches of | unsuitable | purpose or situation does not have the right properties | |
| wood the material which forms the trunks and branches of | waterproof | does not let water pass through it | |
| | _ | | |

Investigate!

- Compare the uses of everyday materials in and around the school with materials found in other places (at home, the journey to school, on visits, and in stories, rhymes and songs)
- Observe closely the uses of different materials, and record your observations.
- Distinguish between absorbent and waterproof materials. Discuss what happens when water is placed on these materials.
- Consider why some properties of materials make them suitable or unsuitable for different uses.
- Investigate if some items can be made by more than one material (e.g. cutlery) and explain why.
- Investigate if some materials can be used to make more than one thing.
- Discuss which materials are recyclable and why. Follow the recycling process.
- Investigate how some objects can be changed by squashing, bending, twisting and stretching.
- Find out about people who have developed useful new materials, for example John Dunlop, Charles Macintosh or John McAdam