

Every day materials



Find objects around the house and classify them by material and then by property.

*Year 1
Ages 5-6*

For parents

Thank you for supporting your child's learning in science.

Before the session:

- There are 4 main activities. They do not have to be done on the same day. In fact, to support your child's attention levels, each activity has been broken down into 20-30 minute chunks so could be used over 4 days.
- Please read the slides to know which activity to do, what your child is learning and what you need to get ready.
- The activities are hands on. Take photographs so that learning can be shared and discussed.'

During the session:

- Share the learning intentions on slide 2.
- There are optional extension and review tasks
- Slide 10 has a glossary of key terms.

Reviewing with your child:

- Slides 4, 5, 7 and 8 give examples of what your child may produce.



Every day materials

What are objects in the home made of?

(can the children group materials into certain groups based on their properties)

Key Learning

- 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.

I can...

- Identify the material an object is made of.
- Describe the properties of different materials.

Activities: (Slides 3-7) approx 2 hours

Activity 1- Children start by creating groups of objects from around the house.

Activity 2- After, ask them to sort the objects into more specific groups (plastic, metal, rock, glass, wood, water, paper, fabric etc).

Activity 3- Understand the properties of materials.

Activity 4- Group the objects into different properties.

Go further- Find objects with more than one material **or** create your own Venn diagrams to show how objects can have more than one property.

Practical investigation

You will need:

plastic, metal, rock, glass, wood, water, paper, fabric, camera, scrap paper, **properties of materials word mat (slide 6)**.



Explore, think, talk....

What do the children already know about materials? (20 minutes)

Instructions for Activity 1:

Ask your child to find 10 objects of their choice but explain that they must try to collect items that are different from one another.

Vocabulary to listen out for (but not share, yet):

Plastic, rock, metal, glass, wood, water, clay, hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through

Note:

The children may have their own unique way of describing the object. This is GREAT! We want to encourage all language to begin with- based on what the gaps are, you can tailor the language. (See page 4)

Learning outcome: I can explain why I have grouped materials in certain ways. (At this point, try not to be specific about materials, you want to see what your child already knows.)

When they have collected 10 items, ask them to sort them in different ways. (You can model an example if your child is unsure- see page 4)



Instructions for Activity 1:

Simple descriptions like:

“They are both red” and
“They are used in the kitchen”
have a place in early grouping
of items.

“They are hard” and “They
have bumpy bits” show an
understanding of texture
(rough) and feel
(hard/strong). This is a good
starting point and tells you
what vocabulary to focus on.

Note:

From this information, I can see **that the
child has not identified materials**
(plastic, rock, metal etc.)

Learning outcome: I can reason why I have grouped materials in certain ways. (At this point, try not to be specific about materials, you want to see what your child already knows.)

“They are both red”



“They are hard”



“They are used in the kitchen”



“They have bumpy bits”



Review, think, talk....

Can the children identify materials? (20 minutes)

Instructions for Activity 2:

Look back at the 10 items and ask them what they think they are made of.

Vocabulary:

plastic, rock, metal, glass, wood, water, fabric.

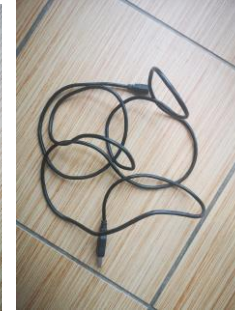
I can identify materials.

Together, identify the objects based on their materials and group them

Glass



Plastic



Fabric



Wood



Metal



Big question:
'How do you know the spoon is made of metal?'.
Move onto activity 3

You may have some objects that you're unsure about. That's ok- you can research together.
(e.g. wax candle and wicker basket)

Activity 3- Look at these key words and explain what they mean. (10 minutes)



materials



stretchy



waterproof



absorbent



wood



rock



not bendy



stiff



not absorbent



fabric



glass



water



bendy



rough



smooth



not see through



rubber



plastic



hard



soft



shiny



dull



see through



metal



Review, think, talk....

Identify properties of materials (20 minutes)

Instructions for Activity 4:

Look back at your objects and ask your child to group by a certain property. Take a photo of each grouping, with a title indicating the property.

Vocab:

hard, soft, stretchy, stiff, bendy, floppy, waterproof, absorbent, breaks/tears, rough, smooth, shiny, dull, see-through, not see-through



not bendy



bendy



You can use scrap paper to write the title of the groupings.



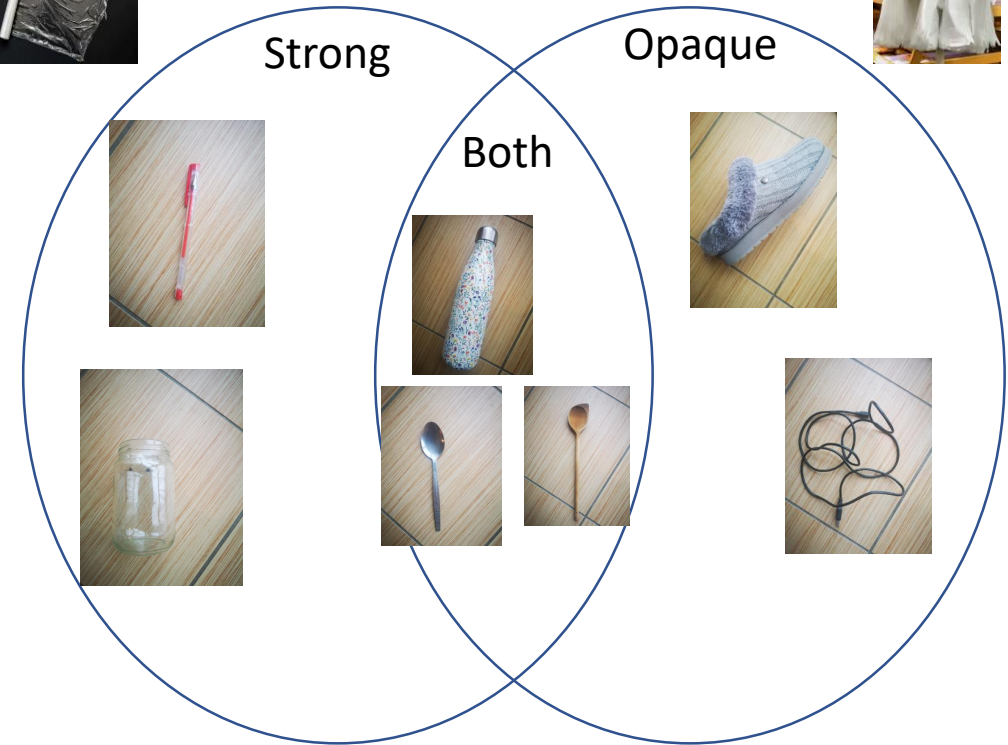
Explore, talk, extend

*What objects around the house have more than one material?
(20 minutes)*



- I found a mason jar in my kitchen
- What materials is it made from?
- Why do you think it is made of these different materials?
- Your child can explore their surroundings to find an object with more than more material.

Alternatively, your child can go further by sorting their objects using two properties. An item can be both strong and opaque. Equally, some may be neither (e.g. cling film.)





Big Question

What if....(Discussion point)
(5-10 minutes)

Start by asking:

- What do they know about glass?
- What objects are already made from it and which ones aren't?
- Point to an item in the room and ask them the practicalities of it being made of glass.
- Listen out for the properties of glass vocabulary and the explanations of why this may not suit all objects.
- Repeat this Big Question with other materials or ask your child to create one for you and have a debate.

BIG QUESTION

What would life be like if everything was made of glass?



Glossary of terms

Materials: Objects are made from one or more **materials**. Examples of materials include wood, glass, metal, rubber, plastic and fabric.

Properties: A **property** of an object or material is a feature that makes it suitable for a particular use.

Absorbent: An **absorbent** material is able to soak up liquid easily.

Not see through: Light cannot pass through- you cannot see through it.

See through: Light can pass through - you can see through it.

Stiff: A **stiff** object cannot be easily bent out of shape.

Group: Objects can be **grouped** together based on a common feature or their similarities.

Venn diagram: A **Venn diagram** is an illustration of the relationships between and among sets or groups of objects that share something in common.