

Our Science Learning Journey

Key vocabulary:

Waterproof

Absorbent

Robust

Transparent

Suitability

Non-flammable

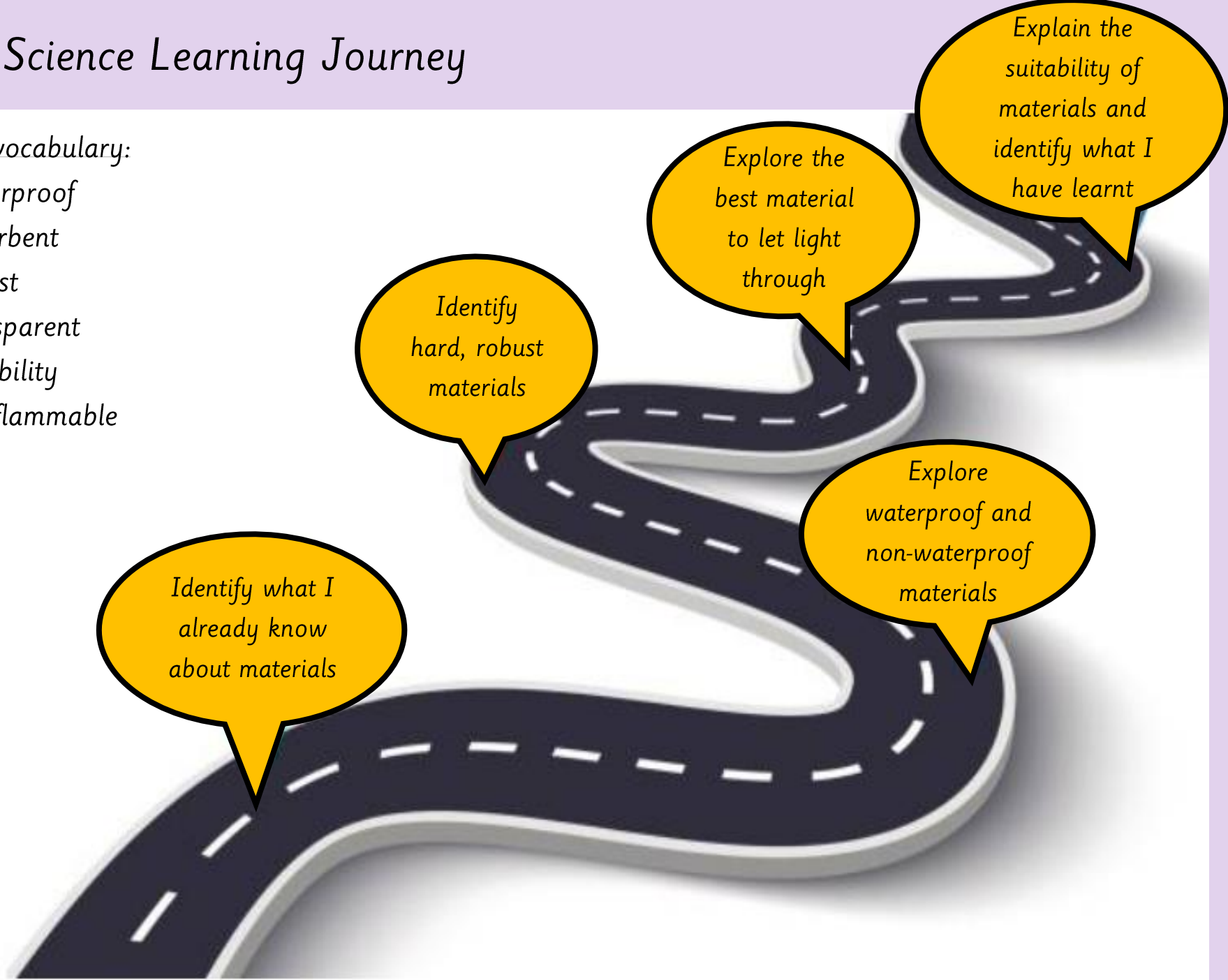
Identify what I
already know
about materials

Identify
hard, robust
materials

Explore the
best material
to let light
through

Explore
waterproof and
non-waterproof
materials

Explain the
suitability of
materials and
identify what I
have learnt



LQ: Can I explain the suitability of materials?

Click on the pic for
link or notes

Starter:

Quiz Time!

Materials - Properties (Investigating)

This quiz addresses the requirements of the National Curriculum KS1 Science for children aged 5 and 6 in years 1 and 2. Specifically this quiz is aimed at the section dealing with investigating simple properties of materials.

You have investigated materials. In your investigations you have done simple experiments and found out different properties. In this quiz you have to choose which you think will be the best material. Each question asks you to choose between four different materials. Each question is about a simple property of materials - hardness, softness, strength, bendiness, and so on. Can you choose the best material? Which has the best property for the job? How many can you get right?



Feathers are a very soft and light material.

TPs: *What properties do for a window?*

Monday 2nd February 2026

LQ: *Can I explain the suitability of materials?*

Steps to Success

All - I know what suitability means.

Most – I can explain what material is/ is not suitable.

Some – I can use scientific language.



★ STAR WORDS ★

properties

PROPERTIES OF MATERIALS
Characteristics that help us differentiate between different materials

- ABSORBENT**
Able to soak up liquid easily
- MALEABLE**
Capable of bending easily without breaking
- BRITTLE**
Hard but easily breakable.
- WATERPROOF**
Keeps water out
- RIGID**
Unable to bend or be forced out of shape
- HEAT RESISTANT**
Hot easily burned or melted

paper
Properties: Absorbent, Flexible, Thin. Comes from: Wood pulp.

wood
Properties: Durable, Strong, Hard. Comes from: Trees.

rubber
Properties: Waterproof, Malleable, Stretchy. Comes from: CIL.

plastic
Properties: Waterproof, Malleable, Strong. Comes from: Chemicals.

metal
Properties: Malleable, Strong, Shiny. Found in: The ground.

stone
Properties: Strong, Heavy, Hard. Comes from: Rocks.

glass
Properties: Transparent, Fragile, Hard. Comes from: Molten sand.

fabric



scientist

suitability

materials

Recap

Last week we investigated which was the most suitable material to make windows.

TP's - What does suitability mean?
Which material did we choose as the most suitable material for windows?

Sentence Starters:

_____ is the best material for a window because...

The most transparent material was _____

_____ is not a suitable material for a window because...



a glass (glass)

a container (plastic)



brick (clay)



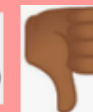
foil (metal)

cupboard (wood)



Self Assessment

Do you understand what transparent means?



Today we are going to pretend to be scientists in a laboratory.

TP – What is a scientist?

What is a laboratory?

What can you see in the picture?

What is the object the scientists are looking in called?



Scientists are people who carry out experiments in a lab.

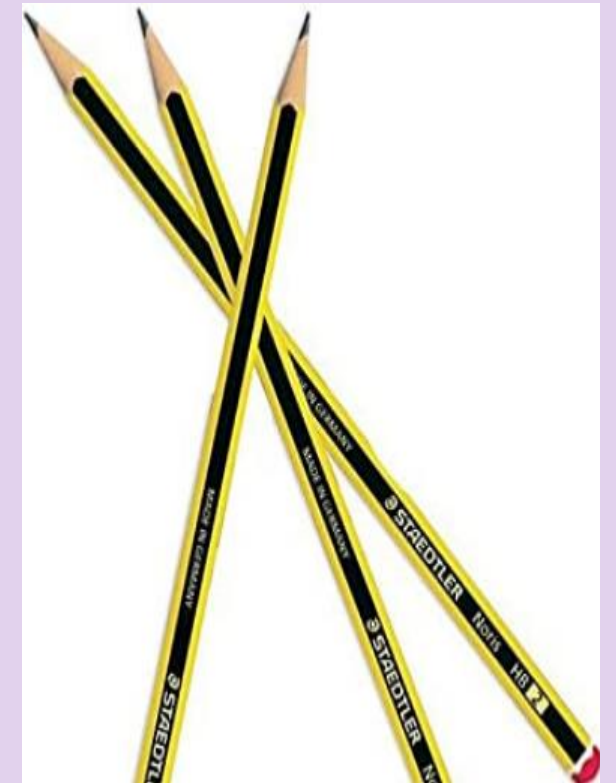
*TPs - Is this material suitable for these objects?
Why / why not?*



Plastic chair



Fabric carpet



Wooden pencil

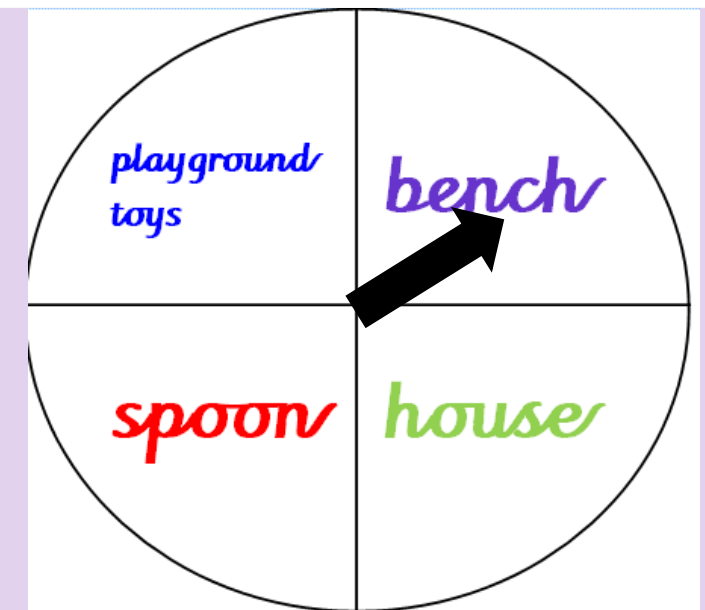
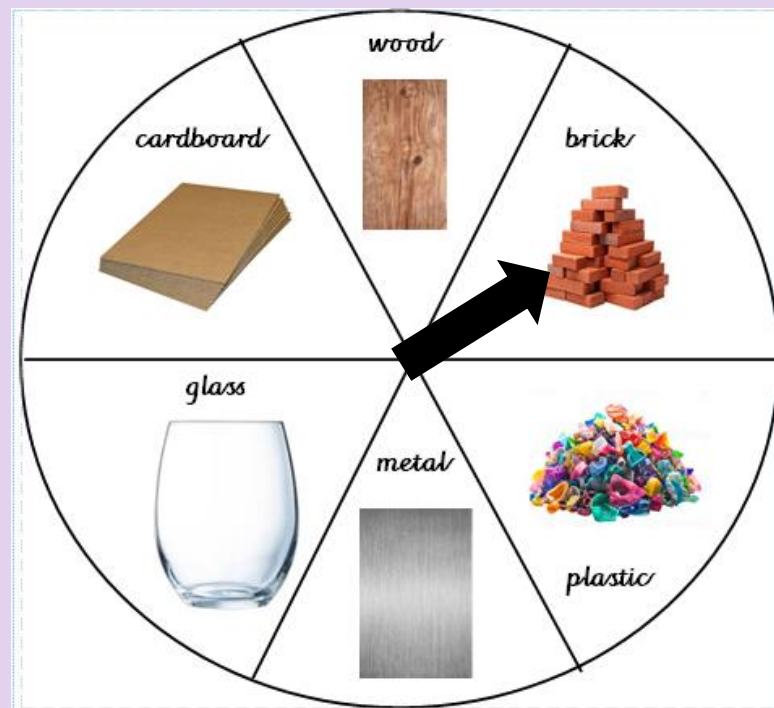
Today we are going to explore the suitability of materials using spinners. We will discuss the suitability of the materials the spinners land on.

For example:

TP's: What material is it made of?

Is it a suitable material?

Why/Why not?



Self Assessment

Do you understand how we will explore the suitability of materials?



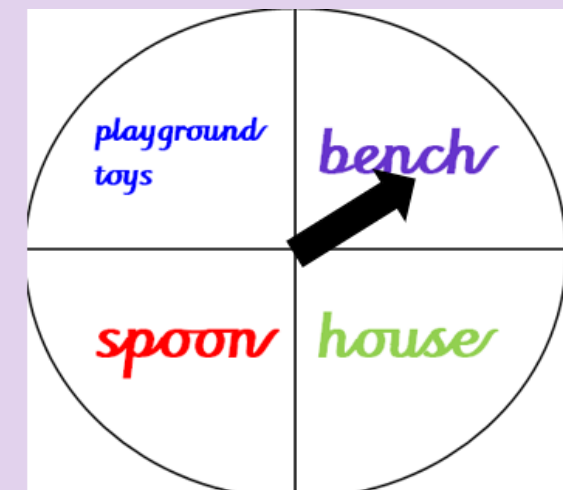
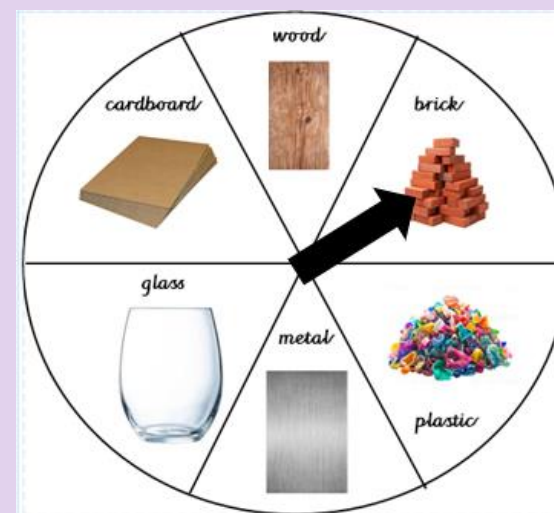
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LQ: Can I explain the suitability of
materials?

Task

Explore the spinners and discuss with your partner whether you think the materials and/or object is suitable or not.

Explain your reasoning to an adult!



Sentence starters:

_____ is suitable for a _____ because...

_____ is not suitable for _____ because...

CT to take photos
and record child's
voice

Self Assessment

Do you understand what to do?



Assessment

- **All: I know that buildings are made with bricks.**
- **Most: I know that the materials for a building should be waterproof, robust and non-flammable.**
- **Some: I can explain why the materials for a building should be waterproof, robust and non-flammable.**

1. What materials are used to make buildings?
2. How can the shapes of objects can be changed?
3. Why is it Important for materials to be waterproof for a building?
4. Which materials are strong and non-flammable to build a bakery?
5. Why do windows need to be transparent?
6. What materials are suitable for building a bakery?