

# Science Knowledge Organiser

Y1 T4 Materials  
The Big Question:

? Are all roofs made from man-made materials?



## Key

## Chemistry

## Working Scientifically Knowledge

plastic	rock	wood	water	glass	metal
	materials	properties	man made	natural	
bendy	smooth	rough	rigid	soft	hard
squashy	absorbent	waterproof	transparent	opaque	brittle

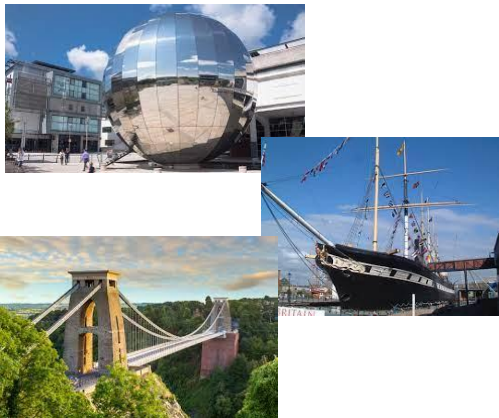
### Research Using Secondary Sources



Looking at information on the internet and in books to answer questions and find out facts.

What will we learn?

## Where could you go?



## Who could you be?



An architect



A research scientist

- Lesson 1 - Compare and group together a variety of materials
- Lesson 2 - Identify the materials which objects are made from.
- Lesson 3 - Know that materials can be man-made
- Lesson 4 - Know that materials can be natural
- Lesson 5 and 6 - Gather and record data and use it answer questions.

## Knowledge Organiser

The Big Question: Are all roofs made from man-made materials?



### Key Vocabulary

Materials, properties, wood, metal, glass, water, rock, sink, float, hard, soft, brittle, rigid, bendy, absorbent, waterproof, smooth, rough, transparent, opaque, stiff, translucent

### Domain Knowledge

(references all facts children will need to access learning)

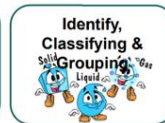
-Recognise and name every day materials. Describe the simple physical properties and textures of a material. Recognise that some materials are waterproof.

### Where can this take you in the future?

Architect  
Research Scientist  
Design Engineer

### Conceptual Science Knowledge - Materials

- Identify and name a variety of different every day materials and their physical properties.
- Compare and group together a variety of different materials on the basis of their properties.
- Distinguish between an object and the material from which it is made.
- Identify and understand the difference between man-made and natural materials.



Chemistry



### Working Scientifically Knowledge - Research using Secondary Sources

Gather and record data through research about different materials and their properties in order to answer questions and statements such as

Is a bigger or solid material always heavier?

### Questions for experts

Research Zaha Hadid.

Is a hard material always strong?












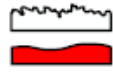
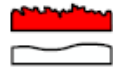
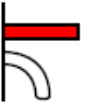








### Enhancements

Check out the BBC Bitesize web page.

Read 'Iggy Peck Architect' by Andrea Beaty and David Roberts

### STEM links to try at home

Visit We the Curious, the SS Great Britain or the Clifton Suspension Bridge

 <p>plastic</p>	 <p>rock</p>	 <p>wood</p>	 <p>water</p>	 <p>glass</p>	 <p>metal</p>
	 <p>materials</p>	 <p>properties</p>	 <p>man made</p>	 <p>natural</p>	
 <p>bendy</p>	 <p>smooth</p>	 <p>rough</p>	 <p>rigid</p>	 <p>soft</p>	 <p>hard</p>
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