

## Knowledge Organiser

## Big Question: Are waterproof materials always able to be twisted and squashed?

### Key Vocabulary:

### Conceptual Science Knowledge – Materials

### Questions for experts:



materials



waterproof



flexible



rigid



absorbent



opaque



translucent



transparent



brittle



rough



smooth



properties



Observing over time



Identify, Classifying & Grouping



Pattern Seeking



Research Using Secondary Sources

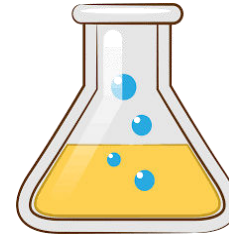


Comparative & Fair Testing

# Materials



## Chemistry



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

### Working Scientifically Knowledge – Research using Secondary Sources

### STEM links to try at home:



Architect



Design engineer

Identify and compare a variety of everyday materials including wood, metal, 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.

Which materials would be the best for sunglasses? Why?

Which materials would be the best for a raincoat? Why?

### Domain Knowledge: (all facts children will need to access learning)

- Identify and name different materials.
- Understand why a material is chosen for a particular use.

- Perform simple tests.
- Gather and record data to help in answering questions.

Can you build a bridge that is rigid and waterproof?

Which materials could you use?