

# Science- Everyday Materials

# Innovation

#### Prior Knowledge

In EYFS the children learnt objects are made from different materials including wood, plastic, metal and that different materials are used for different purposes. They have explored the natural world around them and described what they see, hear and feel whilst outside.

In Year 1 the children identified and named a variety of everyday materials e.g. wood, plastic, glass, metal, water and rock. They compared and grouped together a variety of everyday materials on the basis of their properties and described the simple physical properties of a variety of everyday materials. They can distinguish between an object and the material that it is made from.

# What makes a material waterproof?





## My Component Knowledge:

Lesson 1: I can I can identify what materials objects are made from and think about how they are similar and different.

Lesson 2: I can consider the most suitable materials for fixing a torn umbrella, according to their properties.

Lesson 3: I can understand, through exploration and investigation, that some materials are more suitable than others for mending an umbrella because of their physical properties.

Lesson 4: I can consider and investigate the hypothesis "Hard materials cannot absorb water" and make predictions about different materials before testing them.

Lesson 5: I can understand what it means for an object to be absorbent.

Lesson 6: I can investigate the absorbency of fabrics and the effect of adding a layer of wax crayon.

Lesson 7: I can find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching by changing the shape of objects.

#### My Composite Knowledge:

I know there are different types of materials and these are used to make everyday objects. I can identify a range of everyday materials including wood, plastic, glass and metal. I can investigate a range of everyday and identify how they can be used.

### My Powerful Knowledge:

I can use my observations to identify materials and their uses in the world around me. I can investigate how I can <u>innovate</u> materials in different ways. I can select and apply key vocabulary in my written and verbal explanations.

#### Key Vocabulary

Tier 1: Rough, smooth, flat, bumpy, sharp, blunt, hard, soft, stretchy, stiff, shiny, dull, bendy, not bendy, wood, metal, plastic, glass, rock, water

**Tier 2:** Materials, properties, sorting, grouping, fabric, same, different

Tier 3: Waterproof, not waterproof, absorbent, not absorbent, opaque, transparent, physical properties, magnetic, non-magnetic

Could you
mend an
umbrella?
What materials
would you use?



# Can we change the shape of all materials?









