

Topic Title: Everyday Materials Year Group: 2 Academic Year: 2024-2025

Science Intent:

To observe closely, identifying and classifying the uses of different materials, and recording their observations.

Prior Scientific Learning/Linked Topics: To be able to distinguish between and object and the material from which it is made. To identify and name a variety of everyday materials. To describe the simple physical properties of everyday materials. Compare and group a variety of everyday materials on their simple and physical properties.	
Scientific Knowledge	Working Scientifically
 identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, 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. 	Observing and Measuring over time Use simple measurements and equipment with increasing independence Identifying, classifying and grouping Observe and identify, compare and describe Use simple features to compare objects, materials and, with help,

decide how to sort and group them.

Comparative and fair testing (controlled investigations)

Performing simple tests by predicting results first.



Recording results in a table that has been provided.

To say what happened in an investigation.

Talk about what they have found out and how they found it out.

To say what happened in an investigation.

To say whether I was surprised the results or not.

To say what I would change about my investigation.

Lesson 1: Initial discussion to engage current understanding from Year 1

Content:

Initial assessment to assess children's prior knowledge from Year 1.

After discussion, complete KWL grid.

Lesson 2: Identifying, Grouping and Classifying

The children will use adjective to describe everyday materials in a feely bag. They will independently identify objects around the classroom and describe the materials they are made from.

Lesson 3: Identifying, Grouping and Classifying

Identify and compare materials

Chn to identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses by identifying the uses of different materials. Children to recap on the names and properties of different materials around the classroom and around the school. The children will complete a table identifying the object, material and why it is made out of this material.

Lesson 4: Suitability of materials

Children to identify and compare the suitability of a variety of everyday materials by exploring the purposes of different objects. In their groups, children discuss which material spoons are made from. Children to explain why different materials can be used to make the same object. Suitability: Introduce the word suitability, encouraging them to ask questions and make suggestions. Children in a table, will choose an object, say what material it is made from, its properties of material and why it is a good choice.



Lesson 5: Identifying, Grouping and Classifying

Investigate how materials can be shaped

Children to 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. Children collect different objects from the classroom.

Children to predict which objects they think can be bent, squashed, twisted and stretched.

Children then explore the objects and record which can be bent, squashed, twisted and stretched. Were their predictions correct? Children to explain why they think some materials can be changed in this way and others cannot. Children to record their results on to a table.

Lesson 6: Comparative/ Fair Testing Problem Solving

How the shape of materials can change?

Children to be set a problem e.g. We are visiting the monument in London and we have looked at the weather and the forecast is set for heavy rain. What should I wear?

The children are testing plastic, paper, wood, rubber, fabric etc to see which would be most suitable for their jacket to be made from. The children will make predictions as to which material they will be the most suitable. The children will come up with their own method to test the material considering how to make it a fair and reliable test. They children will write up their results and explain their findings.

Key Vocabulary:

Identify, materials, wood, plastic, glass, metal, rock, brick, paper, cardboard, transparent, opaque, translucent, reflective, non-reflective, flexible, rigid, push pushing, pull, pulling, twist, twisting, squash, squashing, bend, bending, stretch, stretching

Stunning Start/Marvellous Middle/Fabulous Finish:	OAA/Trips/Visits/Visitors:
Fabulous Finish – Testing waterproof materials experiments	