Subject: Science – The Uses of Everyday Materials	Year group: 1 Autumn 1
Key Concepts: Materials can be described and grouped according to their properties. These properties make them suitable for different uses.	

National Curriculum Objectives	BIG Question:	Scientific skill:	Enhancements:
• Distinguish between an object and the material from which it is made. • Identify and name a variety of everyday materials, including wood, plastic, glass, metal, water, and rock. • Describe the simple physical properties of a variety of everyday materials. • Compare and group together a variety of everyday materials on the basis of their simple physical properties.	What is the most suitable material for a chair?	Performing simple tests	Parents in to test materials

EYFS prior learning/Prior learning:	Future Learning
Children know about similarities and differences in relation to places, objects, materials and living things. They talk about the features of their own immediate environment and how environments might vary from one another. They make observations of animals and plants and explain why some things occur and talk about changes. **(Early Learning Goal)**	Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses. **(Y2 - Uses of everyday materials)** Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching. **(Y2 - Uses of everyday materials)**

WHAT PUPILS NEED TO KNOW OR DO TO BE SECURE

Show understanding of a concept using key vocabulary correctly

By the end of this unit, the children will know:	By the end of this unit, most children will:	Vocabulary explicitly taught (and definitions):
• An object is a thing that can be used. For example a door, chair, car, table are all objects. • All objects are made of one or more materials. • Some objects can be made from different materials e.g. plastic, metal or wooden spoons. • Materials can be described by their properties e.g. shiny, stretchy, rough etc. • Some materials (e.g. plastic) can be in different forms with very different properties.	• Distinguish between an object and the material it is made from. • Make a prediction and perform simple tests. • Use their observations to answer simple questions. • Sort objects 3 ways.	Object: A thing that can be used. For example a door, chair, car, table are all objects. Material: Materials are what an object is made from. e.g. wood, plastic, glass, metal Hard: Not easily broken or bent. Soft: If something is soft, it is easy to cut, fold or change the shape of. Stretchy: Can be pulled to make it longer or wider without breaking. Bendy: Bendy things can be bent easily into a curved or folded shape Waterproof: If something is waterproof, it keeps water out. It keeps things dry. Absorbent: If something is absorbent, it soaks liquid up. Rough: If something is rough, it feels and looks uneven or bumpy. Smooth: Smooth objects have no lumps or bumps. Shiny: Reflects light easily. Dull: Doesn't reflect light. Doesn't look bright or shiny. Transparent: Transparent objects can be seen through. Opaque: Opaque objects can't be seen through.

Assessment: (How will we know they've 'got' it? This could be a cold/hot task)

Cold task – Observing

Observe objects and the materials they are made from. Search the classroom/canopy for different materials. Collect evidence of what the children find/see/talk about.

Hot task – Describing

Describe the properties of materials and their suitability for different objects.

See Year 1 Everyday materials from PLAN activity 1 – Children given one object that can be made of different materials and asked to talk about them with their partner/Teacher. (Spoons/Cups) Children asked which materials these objects can be made of and which they think is best. Teacher record what the children say.

Common Misconceptions

Some children may think:

- only fabrics are materials
- only building materials are materials
- only writing materials are materials
- the word 'rock' describes an object rather than a material
- 'Solid' is another word for hard.

Suggested activities

Classify objects made of one material in different ways e.g. a group of object made of metal.
Classify in different ways one type of object made from a range of materials e.g. a collection of spoons made of different materials.
Classify materials based on their properties.
Test the properties of objects e.g. absorbency of cloths, strength of party hats made of different papers, stiffness