

## Year 2 - Autumn Knowledge Organiser

### Materials

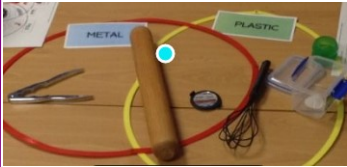


Heathfield Schools' Partnership

This Science unit follows on from previous studies of Materials in Year 1. The unit will deepen the children's understanding and confidence when using terms 'materials', 'properties' and 'objects'. They will learn how the property of a material affects how it is used and so the objects it can make. Through simple comparative tests the children will also explore and compare the suitability of materials for different uses.

### Key knowledge

Using real objects children will sort them according to their material.



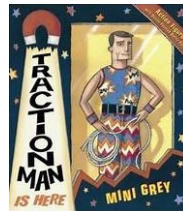
Children to be able to explain that a material is what the object is made from.



Having found a classroom object children will name both the object and any properties it s material has.

Children to be able to explain that a property describes a material.

Children will be introduced to 'Traction Man'. Through this story there will be activities to investigate the properties of different materials, starting with plastic.



Consolidating their learning the children will be asked to design a new outfit for traction man if he were to go to a different destination. What would be the best materials to use?



### Key Vocabulary

**Rigid**— The material won't bend or change

**Flexible**— The material can bend easily

**Waterproof**— The material does not let water in

**Absorbent**— The material does let water soak in

**Transparent**— The material is see-through

**Opaque**— The material is not see-through

**Property**— Describes what a material is like

### Key Questions

What are the properties of wood and what are they used for?

What are the properties of plastic and what are they used for?

What are the properties of fabric and what are they used for?

If it was raining would it be a good idea to wear a coat made from plastic? Why or why not?

What is an example of a solid that can be squashed, bent, twisted or stretched?

What is an example of a solid that can not be squashed, twisted or stretched?

If it was a hot day, would it be suitable to wear a woolly jumper? Why or why not?

Having learned what paper is and where it comes from the children will Investigate the properties of paper.



Children will be exploring the uses and properties of fabric. They will be investigating what fabrics are good for and whether all fabrics have the same uses.