



St John Fisher RC Primary School

Year 5 Knowledge Organiser – Spring One – Materials

What we will be learning

I know:

Lesson 1

- How to find out if a material is magnetic
- How to find out if a rock is a hard or soft rock
- Understand that transparent materials allow light to pass through
- How to test a selection of materials for electrical conductivity such as plastic, wood, paper, graphite and different types of metal

Lesson 2

- How to plan an investigation to test three different insulation materials such as aluminium foil, felt and bubble wrap to find out which is the best insulator

Lesson 3

- How to carry out an investigation to test three different insulation materials such as aluminium foil, felt and bubble wrap to find out which is the best insulator

Lesson 4

- How to evaluate an investigation to test three different insulation materials such as aluminium foil, felt and bubble wrap to find out which is the best insulator

Lesson 5

- The uses of everyday materials, eg. wood, metal and plastic

Key Facts to Remember

- Materials can be transparent, translucent or opaque.
- A harder material will scratch a softer material.
- A soluble substance can dissolve in a liquid.
- An insoluble substance cannot dissolve in a liquid.
- Sieving can be used to separate a mixture of different-sized solids.
- Filtering can be used to separate an insoluble solid from a liquid.
- A liquid will pass through filter paper, but an insoluble solid will not.
- Filtering cannot be used to separate a soluble solid from a liquid.

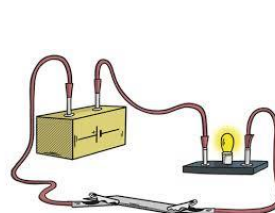
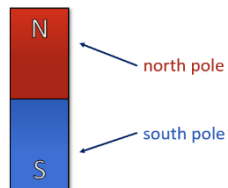
Key Vocabulary and Glossary

Transparent	An object or material that allows all light to pass through it.
Translucent	An object or material that allows some light to pass through it.
Opaque	An object or material that does not allow any light to pass through it.
Magnetism	A non-contact force created by a magnet.
Dissolve	When a solution is made from a liquid and one other substance.
Soluble	Can dissolve in a liquid.
Insoluble	Cannot dissolve in a liquid.
Filtering	A method of separating insoluble solids from a liquid.
Sieve	Equipment used to separate solids of different sizes.

Key Knowledge:

Most metals are non-magnetic. Only a few metals are magnetic, such as iron and steel.

Increasing the temperature of the liquid increases the rate of dissolving and stirring the liquid increases the rate of dissolving.



sand



rice



sugar



salt



filter paper



beaker



funnel



beaker with sand and water

