



What I should already know:

Materials are grouped according to whether they are solids, liquids or gases.

Changes of state take place when materials are heated or cooled

By the end of this unit I will:

Make comparisons between different materials describing their properties.

Identify, classify and group different materials.

Describe how the hardness of solids differ and sequence liquids according to how viscous they are.

Explain that particular metals are used for specific purposes because of their properties and how the number of plastics used might be reduced and the importance of recycling and reusing plastics.

Identify different materials within buildings and describe how buildings can be insulated.

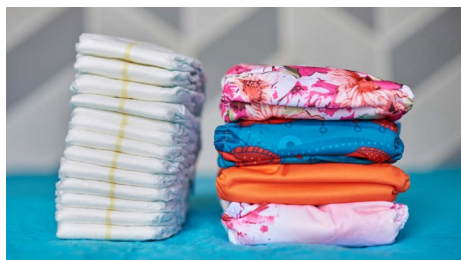
Investigate the properties of plastic carrier bags and how insulation keeps hot things hot and cool things cool.

Investigation:

Which is the best carrier bag to carry shopping?



Which nappies are the most effective?

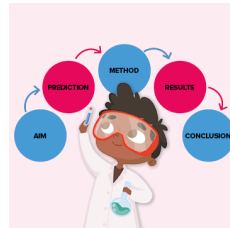


YEAR 5: Get Sorted!
Everyday Materials
Science: Physics & Chemistry



Working Scientifically

Recording data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, and bar and line graphs



Planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary

Identifying scientific evidence that has been used to support or refute ideas

Reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations

Using test results to make predictions to set up further comparative and fair tests

Taking measurements, using a wide range of scientific equipment, with increasing accuracy and precision, and taking repeat readings when appropriate.



Vocabulary

Biodegradable	Capable of being decomposed by bacteria or other living organisms and thereby avoiding pollution
Durability	The ability to withstand wear, pressure or damage
Environmentally friendly	Not harmful to the environment
Flexibility	The quality of bending easily without breaking
Hardness	The quality or condition of being hard
Impermeable	Not allowing fluid to pass through
Insoluble	Incapable of being dissolved
Insulator	A substance which does not readily allow the passage of heat or sound
Opaque	Not able to be seen through; not transparent
Permeable	Allowing liquids or gases to pass through
Plastic	A synthetic material made from a wide range of organic polymers such as polyethylene, PVC or nylon, that can be moulded into shape while soft and then set into a rigid or slightly elastic form
Soluble	Able to be dissolved, especially in water
Strength	The capacity of an object or substance to withstand great force or pressure
Thermal insulator	Material that doesn't allow the transmission of heat
Transparent	See through
Viscous	Having a thick, sticky consistency between solid and liquid
Waterproof	doesn't allow water to pass through
Weakness	The state or condition of being weak

