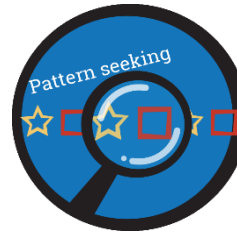


Working Scientifically Skills



WHO?

Stephanie Kwolek



Year 1 and 2
Materials

Chemistry



Vocabulary

materials	The substance that something is made out of e.g. wood, plastic and metal.	magnetic	Objects are attracted to metals,
conductor	A conductor is a material that heat or electricity can easily travel through. Most metals are both thermal conductors (they conduct heat) and electrical conductors (they conduct electricity).	permeable	Will allow liquids and gases to pass through it.
insulator	An insulator is a material that does not let heat or electricity travel through them. Wood and plastic are both thermal and electrical insulators.	absorbent	Able to soak liquids easily.

WHAT?

Any **substance** that is used to make something is a **material**.

Natural materials: stone, wood and cotton.

Synthetic/man-made: plastics and polyester.

Absorbency: the ability of the material to soak up water.

Malleability: the ability to bend and shape the material.



1

3



The **properties** of a **material** must be considered when creating a **shelter**.

An **absorbent** material will **soak up** liquid easily.

Solubility is the ability to **dissolve**. The **hardness** of a **material** must be considered when deciding its **purpose**.

2



Plug heads have **metal rods** which are used to **conduct electricity**.

A **whiteboard** is made of **plastic** and **metal** so whiteboard pen can be **erased** easily.

The **legs** on a **chair** are made of **metal** because it is **sturdy** and **not flexible**.

A **sponge** is **absorbent** so that water can be absorbed.

A **thermal conductor** lets **heat** pass through easily
A **thermal insulator** is a **poor conductor** of heat.
Fleece is a **good conductor** of heat.



Foil is a **good insulator**.



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