Year 5 Science <u>Properties of materials</u>　　Physics: Chemistry

What we already know:
Identify and compare the suitability of a variety of everyday materials, including wood, metal, plastic, glass, brick, rock, paper and cardboard for particular uses.
Find out how the shapes of solid objects made from some materials can be changed by squashing, bending, twisting and stretching.

What's next?
Different materials were used in WW2 **(Year 6)**
Electricity **(Year 6)**
Create a working circuit (Year 6)

Test materials – magnetism, transparency and hardness	Test materials – electrical conductivity	Insulating heat	Uses of everyday materials – plastic, wood and metal	Vocab
Materials can be transparent, translucent or opaque. A harder material will scratch a softer material.	An electrical conductor is a material that allows electricity to flow through it. An electrical insulator is a material that does not allow electricity to flow through it.	**thermal insulator** – material that does not let heat pass through it quickly/efficiently/easily **thermometer** – a piece of equipment used to measure temperature	Materials have specific uses. Metals are good conductors of electricity and heat.	**Tier One** **Wood** **Metal** **Plastic** **Hard** **Soft**
Most metals are non-magnetic. Only a few metals are magnetic, such as iron and steel.	Metals are good electrical conductors. Plastic, wood and paper are electrical insulators.	**anomalous result** – a result that does not fit in with the pattern of the other results	Plastics are good insulators of electricity.	**Tier Two** **properties** – the qualities and characteristics of a material **electrical insulator** – a material that does not let electricity pass through it. **electrical conductor** – a material that lets electricity pass through it **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. **Tier Three** **controlled variable** **dependent variable** **independent variable**