



Year 5 – Autumn 2nd half
Title of topic: Alchemists
Topic Focus: History

This is the knowledge organiser for our topic. It includes all the learning outcomes, key facts and vocabulary. Please share this with your child to help them develop their knowledge and understanding of our topic.

What is alchemy?

Alchemy is an ancient study of how to change basic metals into gold. Alchemists used metals, salts, acids and many other chemicals in their attempts to make gold. They also tried to create potions that would cure all diseases and allow people to live forever.



Gold

Gold is a precious metal that has been valued since ancient times. Gold is a shiny, yellow colour, it doesn't tarnish, it is easily shaped, and it conducts electricity, so it is used to make decorative objects, jewellery, coins and electrical components in computers. Gold is found around the world and is usually mined from the Earth's crust. However, tiny flakes can also be found in rivers and streams and

Metals

A metal is a solid material that conducts heat and electricity and it is often hard, strong and shiny. The properties of a metal determine its uses. Electrical wiring, for example, is made from copper because it is a very good conductor of electricity. Precious metals, such as gold and silver, are expensive and decorative so they are used to make

Properties of materials

The properties of a material refer to its appearance, behaviour and structure, e.g. whether it is hard or soft, rigid or flexible. There are a variety of ways the properties of materials can be tested. A reversible change is when a material that was altered returns to its original state. Irreversible changes are when materials are permanently altered.

Maps & Co-ordinates

Maps have been used for thousands of years to help people find their way around unfamiliar areas. Coordinates are used to pinpoint a specific location on a map and are usually written in brackets. Symbols on the map show particular features of the area. Maps have a key that lists the symbols and what each of them represents.



Biomes

Biomes are areas of our planet with similar climates, landscapes, animals and plants. There are several types of Biomes, including desert, savannah, woodland, grassland and



Key vocabulary:

- alchemy** - The ancient study of how to turn basic materials into gold.
- citadel** - A well-protected castle/fortress.
- coordinates** - Numbers/letters showing location of a point on a graph/ map.
- human features** - Features which have been built by people, e.g. bridges, buildings.
- physical features** - Features which have occurred naturally, e.g. mountains, rivers.
- soluble** - A substance that can dissolve.
- insoluble** - A substance that doesn't dissolve.
- melting** - A solid turning into a liquid.
- freezing** - A liquid turning into a solid.
- burning** - A scientific reaction that causes an irreversible change.
- solid** - A state of matter in which particles are closely packed together in a regular pattern. They vibrate on the spot.
- liquid** - A state of matter in which particles are close together but random. They can move over each other.
- gas** - A state of matter in which particles are spread out and can move about quickly in all directions.
- absorbent** - Is able to soak up liquid easily
- solution** - A liquid into which a solid has been dissolved.
- dissolve** - When a solute (normally a solid) is incorporated into a solvent (normally a liquid) to make a solution.
- filtering** - A process of separating an insoluble solid and a liquid e.g. sand &