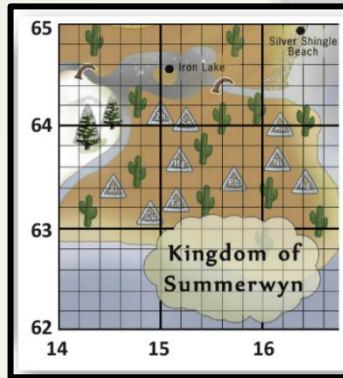




It's time to suspend your disbelief and open your mind. We're going on a magical journey to Alchemy Island. Can you find the gold hidden deep within the island's mysterious landscape? The only way is to study the map, unravel the riddle and begin your adventure. On the way, you must do all you can to learn about gold and master the ancient art of alchemy. Be creative and try to impress the island's team of ace alchemists. Will they praise your scientific expertise? What if there were a video game version of Alchemy Island? You've got your map, coordinates and everything else you need to make your way across Alchemy Island. Don't forget to pack your imagination. Got your suitcase ready? Then let the journey begin.

Alchemy

Alchemy is an ancient study of how to turn basic metals into gold. Alchemists used metals, salts, acids and many other chemicals in their attempts to make gold. This was in a time before people understood science as well as they do today.



Metals

A metal is a solid material that conducts heat and electricity, and that is often strong, hard and shiny. The properties of a metal determines 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 jewelry.

Help your child prepare for their topic!

Start your mysterious journey to Alchemy Island at home! Why not investigate foods together that change state when they are heated or cooled? You could also visit the library to find a book to read together which is set in a fantasy world. Alternatively, create a map of your own fantasy island – what landmarks will you include?

Maps and Coordinates

Maps have been used for thousands of years to help people find their way around unusual areas. Coordinates are used to pinpoint a specific location on a map and are usually written in brackets. The first three numbers of coordinates refer to the position along the x-axis of the map, and the second gives the location along the y-axis. Maps have a key that lists the symbols and what each of them represents.

Did you know!

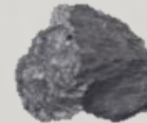
Gold is very stretchy! 28g of gold can be stretched into a gold thread that is five miles long!



Gold (Au)



Silver (Ag)



Iron (Fe)



Copper (Cu)

Science	Materials can be grouped according to their basic physical properties. Properties include hardness, solubility, transparency, conductivity (electrical and thermal) and magnetism.
	Some mixtures can be separated by filtering, sieving and evaporating. Sieving can be used to separate large solids from liquids and some solids from other solids. Filtering can be used to separate small solids from liquids. Evaporating can be used to separate dissolved solids from liquids.
	Reversible changes include heating, cooling, melting, dissolving and evaporating. Irreversible changes include burning, rusting, decaying and chemical reactions.
	An observation involves looking closely at objects, materials and living things. Accurate observations can be made repeatedly or at regular intervals to identify changes over time.
	The results are information, such as measurements or observations, that have been collected during an investigation. A conclusion is an explanation of what has been discovered using evidence collected.
	Some materials (solutes) will dissolve in liquid (solvents) to form a solution. The solute can be recovered by evaporating off the solvent by heating.
	A method is a set of clear instructions for how to carry out a scientific investigation. A prediction is a statement about what might happen in an investigation based on some prior knowledge or understanding.
Geog	Compass points can be used to describe the relationship of features to each other, or to describe the direction of travel. Accurate grid references identify the position of key physical and human features.
PE	Dynamic Dance: Movement from other cultures.
DT	Electrical circuits can be controlled by a simple on/off switch, or by a variable resistor that can adjust the size of the current in the circuit. Real-life examples are a dimmer switch for lights or volume control on a stereo.
IT	Digital Musician: Audio. Sound Effects and Layering Sounds.
MFL	Written descriptions of bedrooms.
	Places in town.
PSHE	Protecting the environment; compassion towards others.
	How information is targeted; different media types.
	Identifying job interests and aspirations.