

Week 1

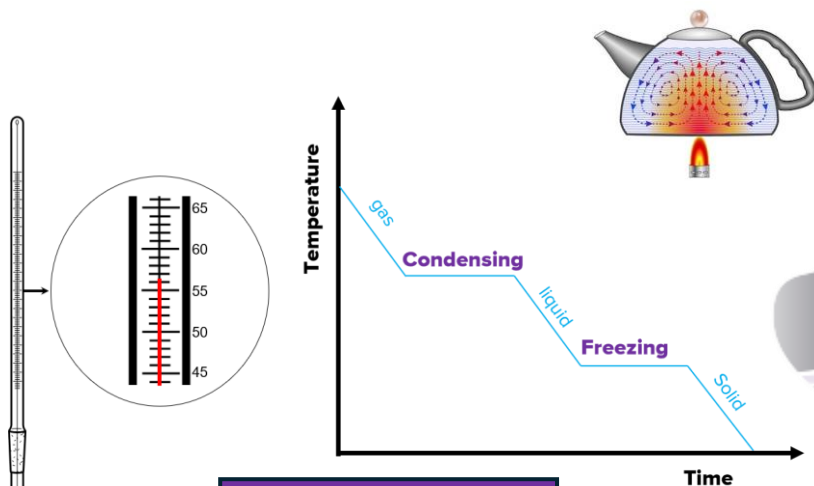
Questions	Answers
What is reliability?	Being able to repeat the same method and get the same results
What is uncertainty?	That there are a range of possible values are
Define resolution	It is the ability to see detail
How do you make your results more certain?	You take a range of readings

Week 2

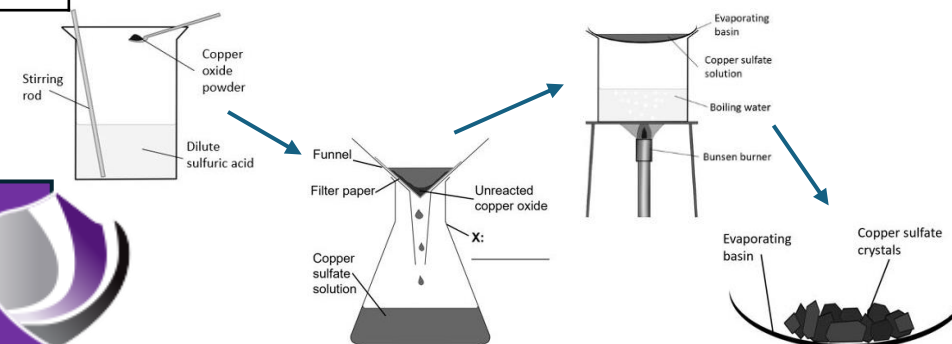
Questions	Answers
How does a high concentration affect a chemical reaction	The rate of reaction will increase?
Why did you give the above answer	There are more particles to collide so a higher reaction rate.
Define concentration	It's the number of particles in a given volume.
Define the word dilute	This is when there are few particles in a given volume
Why don't we use concentrated acids	They are dangerous and can cause injuries

Week 3

Questions	Answers
How are salts formed?	Salts are formed when an acid and a base react
What does carbonates produce when reacted	Carbon Dioxide, water and a salt
What is the pH of a salt?	7
Lithium + Sulfuric acid →	Lithium Sulfate + Hydrogen Gas
Lithium Carbonate + Hydrochloric Acid	Lithium Chloride + Carbon Dioxide + Water



Year 9 Science: Term 3 Introduction to Quantitative Chemistry and Heating



Week 4

Questions	Answers
State the unit of temperature and the unit of energy	Temperature = degree Celsius (°C) Energy = Joules (J)
State 3 things that affect the energy required to increase the temperature of a material	The mass of the material What the material is made of The temperature rise you want
What is happening in terms of energy when the temperature of an object is increasing	Energy is transferred to the particles giving them more kinetic energy
How could you stop a beaker of water cooling?	Add a layer of insulating material, add a lid, put it in a warm place

Week 5

Questions	Answers
What is an insulator?	A material which does not easily transfer energy
What is a conductor?	A material which allows energy to transfer through it quickly
What 3 pathways can transfer thermal energy?	Conduction, convection and radiation
Why is woolly clothing effective at keeping people warm in winter?	The woolly fibres trap a layer of air next to the skin, which acts as a good insulator
Why does an electric iron have a metal base and plastic handle?	Metal is a good conductor to transfer the heat energy to the ironed clothes, plastic is a good insulator

Key words:

Melting Point - The temperature at which a substance changes from solid to liquid (melts). It is also the temperature at which a substance changes from liquid to solid (freezes).

Relative Atomic Mass - The relative atomic mass of an element is the relative mass of its atoms compared to the mass of a carbon-12 atom. The relative atomic masses for each element are given in the Periodic Table.

Solvent - A substance in which a solute can dissolve
Insulation - Any material that reduces thermal transfer.

Kinetic Energy - A store of energy that any object or particle has when moving.

Radiation - Thermal transfer as a wave, by infrared radiation.