Year 8 revision checklist Dec 2022

Topic	We are learning to:	😃	😐	😢
What is Science?	State the names of the main areas of Science.			
	List some activities which are carried out in Science.			
	Give examples of jobs Scientists do			
Bunsen Burners	Label and correctly spell the parts of a Bunsen burner.			
	Light a Bunsen burner safely.			
	Draw a conclusion from our observations in an experiment.			
Apparatus	Accurately draw the symbols for apparatus used in KS3 Science.			
	Correctly spell the names for this apparatus.			
	Identify and locate the apparatus around the Science laboratory.			
Measurements	Use the correct units when recording measurements.			
	Choose appropriate scientific apparatus to make basic measurements.			
	Use basic measurement apparatus to make accurate measurements.			
Thinking like Scientists	List in order the main processes of the scientific method			
	Plan a simple experiment using the scientific method			
	Discuss the meaning of a *fair test* and plan a fair test experiment			
Scientific Investigation	List the main things to be included in an experiment write up.			
	Identify independent, dependent and controlled variables. (SID, SAM)			
Graph skills	Know when to use a line graph to represent our results			
	Successfully draw a line graph			
	Know when to use a bar graph to represent our results			
	Successfully draw a bar graph			
Safety	State 10 safety rules of a Science lab			
	Identify Hazard symbols			
	Carry out a risk assessment			

Topic	We are learning:	😃	😐	😢
States of matter	Describe the three states of matter, solid, liquid and gas in terms of particle arrangement and movement			
	Draw particle diagrams of solids, liquids and gases			
	Explain why some substances expand when heated and during changes of state			
	Recall the properties of a solid, liquid and gas			
Diffusion	Define and explain diffusion in liquids and gases			
	Recall factors that speed up diffusion eg. lighter particles, particles have more energy, particles in a gas vs liquid			
Physical and chemical changes	Identify and name the changes of state between solids, liquids and gases			
	Recall that changes of state are examples of physical changes			
	Able to draw and interpret a cooling curve			
	Determine the state of matter of a substance if given its melting point and boiling point.			
	Explain differences between physical and chemical changes			
	Identify signs of a chemical change			
	Recall that combustion is an example of a chemical change			
Fire triangle	Recall the fire triangle and use it to explain how a fire may be put out			

Topic	We are learning to:	😃	😐	😢
What is a living thing?	Recognise living things			
	List the seven characteristics of living things			
Cells	Know that all living things are made of cells			
	Label the parts of an animal and a plant cell and describe their functions			
	Identify similarities and differences between plant and animal cells			
	Prepare an onion slide			
	Label a microscope and develop practical skills using microscopes			
What type of cell?	List and describe some specialised animal and plant cells			
	Work out the magnification of a microscope			
Tissues, organs and organ systems	Recognise that similar cells make up tissues, tissues make up structures called organs and they work together in organ systems			
	Identify the main organs of the organ systems and describe their functions			
	Relate the body systems to the characteristics of life.			