


















Year 8 Exam Preparation

Use this table to help you revise. Use the web pages linked to the QR codes to revise a topic and then answer the questions to the right. There are more questions on Educake and other resources on the school website



Topic	QR code			Facts I Need to Know
	R	A	G	
Food & Diet				 Healthy Diet  Digestion & Absorption What are the 5 nutrient types? How do you test for starch? What is the job of each nutrient? Name some types of malnutrition and what causes it. Recall the main parts of the digestive system Explain the use of enzymes.
Plant reproduction				 Types of reproduction  pollination What are the 5 kingdoms of living things? What is asexual reproduction? How can plants reproduce asexually? What are the male/female parts of a flower? What happens during pollination? What do seeds need to grow? What is photosynthesis?
Cellular Respiration				 Gas exchange system  Respiration Can you identify the gasses humans breathe in and out? Can you write the word equation for respiration? Can you label the parts of the human respiratory system? Can you describe the functions of parts of the human respiratory system? Can you explain why alveoli need a large surface area? Can you explain how exercise affects breathing rate?
Unicellular Organisms				 Bacteria  Diffusion State the difference between unicellular and multicellular organisms Can you create food chains using information on organisms? Why does every organism in a food chain depend on photosynthesis? Explain why anaerobic respiration of bacteria is needed to make cheese Describe how yeast is useful in baking and brewing. Explain how carbon moves through the carbon cycle
Combustion				 Combustion  Greenhouse effect What is the word equation for combustion? Write a word equation for the oxidation of magnesium What pollutants does burning gas cause? How is the greenhouse effect caused?
The Periodic Table				 Periodic Table  Atoms and molecules Can you name common chemical symbols for elements? What is the difference between chemical and physical properties? Can you calculate the number of atoms in a molecule? Can you identify states of matter by their melting points? Can you label regions of the periodic table?
Reactions of metals				 Can you describe the properties of metals and non-metals? Do you know the job of a catalyst? Write the word equation for a metal reacting with water Describe what the reactivity series shows What type of salt is made when hydrochloric acid reacts with sodium? Explain why the properties of alloys are different from the metals they are made from.
Fluids				 Describe what happens to particles during changes in state Describe how gas pressure can be increased. Explain why some things float but others sink Describe what causes drag force
Light				 Can you label a reflected light ray and angles of incidence / reflection? Can you draw a diagram to show refraction? Can you describe the link between angles of incidence and refraction? What are the similarities between cameras and eyes Explain why a blue book appears blue
Energy Transfer				 Explain what happens to particles when water evaporates What material is a good conductor? Where can convection happen? What colour radiates heat best? What does an 'energy efficient' light bulb mean? Why is there a payback time for installing solar panels on your roof?
Forces & Motion				 Describe the motion of a moving car if the forces on it are equal. How would it change if the forwards force was bigger? What is the Law of conservation of energy? How do you calculate speed? Describe the line that shows a steady speed on a d-t graph. How do you calculate the moment (turning effect) of a force?