




















Year 7 Science 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

<https://www.pensbyhighschool.org/students/year-7-revision-materials/science/>



Topic	R	A	G	QR code	Facts I Need to Know	
Cells				 Animal and plant cells	 Specialised cells	Can you identify different types of cells? Can you label plant and animal cells? Can you describe the function of specialised cells?
Animal Reproduction					Can you identify the sex cells and state where they are produced? Do you know what the terms menstruation, ovulation and implantation mean? Do you know how and where a foetus develops inside a female? Can you describe the role of the placenta and umbilical cord?	
Muscles and Skeletons					Can you describe what can muscles do? Can you explain how an antagonistic muscle pair work? Can you describe how muscles help you breath?	
Ecosystems					Can you identify adaptations of organisms? Can you describe how the adaptations help organisms to survive? Can you use key terms? e.g. predator, prey Can you use food chains to describe the effect of population changes on organisms?	
Mixtures					How can an insoluble solid be separated from a mixture? In seawater, what is the solute and what is the solvent? How can a solute be separated from a solvent? What does chromatography do? How is distillation used to separate a solvent from a solution?	
Acids and Alkalis				 pH scale	 Neutralisation reactions	Can you use the pH scale to identify acids / alkalis or neutral substances? Do you know the colour of acids / alkali and neutral substances on the pH scale? What happens when you add an acid to an alkali?
Solids/Liquids/Gases				 Solids, liquids & Gases	 Gas Pressure	Can you draw particle diagrams for solids / liquids and gases? Can you describe the movement of particles in different states? Can you describe the effect of increasing pressure inside a container?
Atoms and Elements				 elements	 metals	What are elements? What are the symbols for common elements eg oxygen, hydrogen, carbon, copper, chlorine? What are the properties of metals?
Energy				 Energy stores	 Energy resources	Do you know the fossil fuels? Can you identify the energy transferred to generate electricity? Can you describe the difference between renewable and non-renewable energy resources? Can you name renewable and non-renewable energy resources?
Current Electricity				 Circuit symbols	 Plug section only	Can you identify circuit symbols? Do you know the difference between circuits in series and parallel? Can you calculate current in a series circuit? What does each part of a plug do?
Forces				 Effect of Forces	 Solid Pressure	Can you name examples of forces? Do you know the effect of unbalanced forces on an object? Do you know the effect of balanced forces on an object? How do you calculate pressure from solids?
Sound					Why does sound travel through air but not through a vacuum? Draw the waveform of a high pitch sound and label the wavelength Draw the waveform of a loud sound and label the amplitude Name a material that: reflects sound? absorbs sound?	