



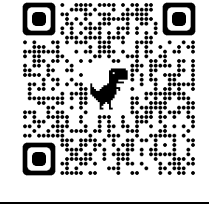



# Year 9 Science Assessment 1 Preparation

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 also summary sheets on the school website for you to use: <https://www.pensbyhighschool.org/students/year-9-revision-learning-materials/>



Topic	R	A	G	QR code	Facts I Need to Know
Genetics and Evolution					<ol style="list-style-type: none"> <li>1. Identify different types of environmental variation and explain the causes.</li> <li>2. Identify different types of inherited variation.</li> <li>3. Describe the relationship between chromosomes, genes, DNA, genetic information and nuclei?</li> <li>4. Explain how organisms become endangered or extinct.</li> <li>5. What is Darwin's theory of evolution?</li> </ol>
Plant Growth					<ol style="list-style-type: none"> <li>1. Explain how the rate of photosynthesis can be affected</li> <li>2. What factors can limit the rate of photosynthesis?</li> <li>3. Explain how substances enter and leave the plant</li> <li>4. Explain how and why plants make different substances</li> <li>5. How do farmers make sure their crops grow well?</li> <li>6. What are the advantages and disadvantages of different farming methods?</li> </ol>
Polymers and Recycling materials					<ol style="list-style-type: none"> <li>1. Give an example and use of 3 different types of ceramics</li> <li>2. Give 3 properties of polymers and link each to a use</li> <li>3. What is a composite material?</li> <li>4. State the 3 methods of disposing of polymers</li> </ol>
Reactivity					<ol style="list-style-type: none"> <li>1. What is the difference between a physical change and a chemical reaction?</li> <li>2. What is the reactivity series and how can we use it to predict reactions?</li> <li>3. Would sodium displace copper? Why?</li> <li>4. How are iron and aluminium extracted from their ores? Why is the same method not used?</li> </ol>
Earth and Space					<ol style="list-style-type: none"> <li>1. Why do we have different seasons?</li> <li>2. Draw the magnetic field around the Earth.</li> <li>3. What are the differences between mass and weight?</li> <li>4. What are artificial satellites used for?</li> <li>5. What are the differences between comets and asteroids?</li> </ol>
Forces Fields and Electromagnets					<ol style="list-style-type: none"> <li>1. What does the gravitational field around the Earth look like?</li> <li>2. What is happening inside a wire when an electric current flows?</li> <li>3. What is the effect of increasing resistance on the current?</li> <li>4. What do you need to measure to calculate the resistance of a piece of wire?</li> <li>5. How do you build an electromagnet?</li> <li>6. Where are electric motors used?</li> </ol>