## **SCIENCE**

Year	Subject	AP	Band A	Band B	Band C
7	Science	AP1	Students can: Demonstrate accurate and relevant knowledge and understanding, for example when explaining antagonistic muscles. Apply knowledge and understanding mostly correctly to both familiar and unfamiliar contexts using accurate scientific terminology, for example when evaluating the impact of balanced and unbalanced forces. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining the functions of cell organelles. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining energy transfers.	Students can: Demonstrate some accurate and appropriate knowledge and understanding, for example by describing how muscles move the skeleton. Apply knowledge and understanding to some familiar and unfamiliar contexts, using some accurate scientific terminology, for example by identifying when forces are balanced or unbalanced. Develop some logical descriptions, which include some accurate and relevant detail, for example describing the types of organelles in cells. Interpret qualitative and quantitative data and draw conclusions supported by some evidence, for example when describing energy transfers.	Students can: Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology, using prompts and scaffolding when needed, for example knowing the particle model for solids, liquids and gases. Descriptions can be partial and lacking relevant detail, for example knowing the difference between elements and compounds. More likely to address familiar contexts than unfamiliar contexts Draw simple conclusions from qualitative or quantitative data, but supporting evidence may not be clear or present, for example when measuring the size of a force.
7	Science	AP2	Students can:	Students can:	Students can:
			Demonstrate accurate and relevant knowledge and understanding, for example when describing aerobic respiration.	Demonstrate some accurate and appropriate knowledge and	Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology, using

			Apply knowledge and understanding mostly correctly to both familiar and unfamiliar contexts using accurate scientific terminology, for example when evaluating the impact of changes to a food web. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining the pattern of current in circuits Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining differences in solubility	understanding, for example by knowing the equation for aerobic respiration. Apply knowledge and understanding to some familiar and unfamiliar contexts, using some accurate scientific terminology, for example by identifying the effect of a change to a food web. Develop some logical descriptions, which include some accurate and relevant detail, for example describing the flow of current in circuits. Interpret qualitative and quantitative data and draw conclusions supported by some evidence, for example when deciding on the solubility of a substance.	prompts and scaffolding when needed, for example knowing the reactants cells use to transfer energy. Descriptions can be partial and lacking relevant detail, for example knowing that current flows around a circuit. More likely to address familiar contexts than unfamiliar contexts. Draw simple conclusions from qualitative or quantitative data, but supporting evidence may not be clear or present, for example how light reflects off a surface.
8	Science	AP1	Students can: Demonstrate accurate and relevant knowledge and understanding, for example when making links between the structure and function of digestive organs. Apply knowledge and understanding mostly correctly to both familiar and unfamiliar contexts using accurate scientific terminology, for example when writing	Students can: Demonstrate some accurate and appropriate knowledge and understanding, for example by describing the process of neutralisation. Apply knowledge and understanding to some familiar and unfamiliar contexts, using some accurate scientific terminology, for example by describing	Students can: Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology, using prompts and scaffolding when needed, for example knowing the names of organs in the digestive system. Descriptions can be partial and lacking relevant detail, for example knowing

			chemical equations about the reactions of acids. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining the factors that affect electromagnetism. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining differences in efficiency. Make strong links to past content, such as the link between cell organelles, their functions and their role in specialised cells.	the roles of organs in the digestive system. Develop some logical descriptions, which include some accurate and relevant detail, for example describing how the flow of current in circuits affects magnetism. Interpret qualitative and quantitative data and draw conclusions supported by some evidence, for example when calculating the efficiency of an energy transfer. Make some links to past content, such as the link between the digestive system and the hierarchy of organisation in an organism.	that current flows around a circuit. More likely to address familiar contexts than unfamiliar contexts Draw simple conclusions from qualitative or quantitative data, but supporting evidence may not be clear or present, for example the link between weight, mass and gravity. Make tentative links to past content, such as the link between weight and gravitational force or neutralisation and pH.
8	Science	AP2	Students can: Demonstrate accurate and relevant knowledge and understanding, for example when describing the events of the menstrual cycle. Apply knowledge and understanding mostly correctly to both familiar and unfamiliar contexts using accurate scientific	Students can: Demonstrate some accurate and appropriate knowledge and understanding, for example by knowing when ovulation and menstruation happen during the menstrual cycle. Apply knowledge and understanding to some familiar and unfamiliar contexts, using some accurate scientific	Students can: Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology, using prompts and scaffolding when needed, for example knowing what the menstrual cycle is. Descriptions can be partial and lacking relevant detail, for example knowing

			terminology, for example when explaining how unknown rocks are formed, based on their classification. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining how named features help a plant to photosynthesise. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining how resistance affects current. Use a range of mathematical skills to perform multi-step scientific calculations, for example when performing calculations about density and pressure.	terminology, for example by explaining the formation of different rock types. Develop some logical descriptions, which include some accurate and relevant detail, for example describing how a leaf is adapted for photosynthesis. Interpret qualitative and quantitative data and draw conclusions supported by some evidence, for example when deciding how resistance affects the flow of current. Use appropriate mathematical skills to perform calculations, for example when performing calculations about density and pressure.	<ul> <li>that there are three main classifications of rock.</li> <li>More likely to address familiar contexts than unfamiliar contexts.</li> <li>Draw simple conclusions from qualitative or quantitative data, but supporting evidence may not be clear or present, for example showing what resistance is.</li> <li>Perform some basic calculations, using scaffolding when needed, for example when performing calculations about density and pressure.</li> </ul>
9	Science	AP1	Students can: Demonstrate accurate and relevant knowledge and understanding, for example when making links between the structure and function of respiratory organs. Apply knowledge and understanding mostly correctly to both familiar and unfamiliar	Students can: Demonstrate some accurate and appropriate knowledge and understanding, for example by describing how genetic information is inherited. Apply knowledge and understanding to some familiar and unfamiliar contexts,	Students can: Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology, using prompts and scaffolding when needed, for example knowing the names of organs in the respiratory system.

	contexts using accurate scientific terminology, for example when writing chemical equations about different chemical processes. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining the movement of thermal energy. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining the concept of moments. Make strong links to past content, such as the link between moments and balanced and unbalanced forces.	using some accurate scientific terminology, for example by describing the roles of organs in the respiratory system. Develop some logical descriptions, which include some accurate and relevant detail, for example describing how one element can displace another. Interpret qualitative and quantitative data and draw conclusions supported by some evidence, for example when interpreting distance graphs. Make some links to past content, such as the link between force and motion and cell specialisation and embryo development.	Descriptions can be partial and lacking relevant detail, for example knowing that thermal energy can move. More likely to address familiar contexts than unfamiliar contexts. Draw simple conclusions from qualitative or quantitative data, but supporting evidence may not be clear or present, for example the link between distance graphs and speed. Make tentative links to past content, such as the link between chemical processes and writing chemical equations.
ce AP2	Students can: Demonstrate accurate and relevant knowledge and understanding, for example when explaining the patterns of reactivity in the periodic table. Apply knowledge and understanding mostly	Students can: Demonstrate some accurate and appropriate knowledge and understanding, for example by knowing the pattern of reactivity in groups 1 and 7 of the periodic table.	Students can: Demonstrate some relevant scientific knowledge and understanding using limited scientific terminology, using prompts and scaffolding when needed, for example knowing the names and simple properties of group 1 and 7 in the pariodic table.
	xe AP2	contexts using accurate scientific terminology, for example when writing chemical equations about different chemical processes. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining the movement of thermal energy. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining the concept of moments. Make strong links to past content, such as the link between moments and balanced and unbalanced forces.ceAP2Students can: Demonstrate accurate and relevant knowledge and understanding, for example when explaining the patterns of reactivity in the periodic table. Apply knowledge and understanding mostly	contexts using accurate scientific terminology, for example when writing chemical equations about different chemical processes. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining the movement of thermal energy. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when explaining the concept of moments. Make strong links to past content, such as the link between moments and balanced and unbalanced forces.using some accurate scientific terminology, for example by describing the roles of organs in the respiratory system. Develop some logical descriptions, which include some accurate and relevant data and draw conclusions supported by some evidence, for example when explaining the concept of moments and balanced and unbalanced forces.using some accurate scientific terminology, for example by describing the roles of organs in the respiratory system. Develop some logical descriptions, which include some accurate and relevant detail, for example describing how one element can displace another. Interpreting distance graphs. Make some links to past content, such as the link between force and motion and cell specialisation and embryo development.ceAP2Students can: Demonstrate accurate and relevant knowledge and understanding, for example when explaining the patterns of reactivity in the periodic table.Students can: Demonstrate some accurate and appropriate knowledge and understanding, for example by knowing the pattern of reactivity in groups 1 and 7 of the periodic table.

	contexts using accurate scientific terminology, for example when explaining how substances move by diffusion, osmosis and active transport. Develop accurate, logical and detailed descriptions and straightforward explanations, for example when explaining how cells follow the cell cycle. Analyse qualitative and quantitative data and draw logical conclusions, supported by evidence, for example when analysing the subatomic particles within an atom. Use a range of mathematical skills to perform multi-step scientific calculations, for example when performing calculations about energy transfer.	using some accurate scientific terminology, for example when explaining how substances move by diffusion, osmosis and active transport. Develop some logical descriptions, which include some accurate and relevant detail, for example describing the stages of the cell cycle. Interpret qualitative and quantitative data and draw conclusions supported by some evidence, for example when deciding how many protons, neutrons and electrons an atom has. Use appropriate mathematical skills to perform calculations, for example when performing calculations about energy transfer.	Descriptions can be partial and lacking relevant detail, for example knowing definition of diffusion, osmosis and active transport. More likely to address familiar contexts than unfamiliar contexts. Draw simple conclusions from qualitative or quantitative data, but supporting evidence may not be clear or present, for example showing how many protons and electrons an atom has. Perform some basic calculations, using scaffolding when needed, for example when performing calculations about energy transfer.
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