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| **Consolidation checklist (Lessons 1–12)** | | | | | | | |
| Look at the points in each topic. Decide if you fully understand () partly understand (), or do not understand () each point and tick (✓) the relevant column. This will show you the areas that you need to work on after this lesson. | | | | | | | |
| **Topic** | **Specification reference** | |  |  |  | **Lesson number** | **Student Book pages** |
| **Characteristics of living organisms** | **A** | Understand how living organisms share the following characteristics:   they require nutrition   they respire   they excrete their waste   they respond to their  surroundings   they move   they control their internal  conditions   they reproduce   they grow and develop |  |  |  | 1 | 2–4 |
| **B** | Know the similarities and differences in the structure of plant and animal cells |  |  |  | 2 | 4–6 |
| **C** | Describe the common features shown by eukaryotic organisms: plants, animals, fungi and protoctists |  |  |  | 3 | 25–28 |
| **D** | Describe the common features shown by prokaryotic organisms such as bacteria |  |  |  | 4 | 28–29 |
| **E** | Understand the term pathogen and know that pathogens may include fungi, bacteria, protoctists or viruses |  |  |  | 5 | 29–30 |

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| Problems with **Characteristics of living organisms**? Learn the processes, listed in your **Student Book** on page 4 using the acronym Mrs H Gren. | | | | | | | |
| **Cell structure** | **A** | Describe cell structures, including the nucleus, cytoplasm, cell membrane, cell wall, mitochondria, chloroplasts, ribosomes and vacuole |  |  |  | 2 | 4–6 |
| **B** | Describe the functions of the nucleus, cytoplasm, cell membrane, cell wall, mitochondria, chloroplasts, ribosomes and vacuole |  |  |  | 2 | 4–6 |
| **C** | Know the similarities and differences in the structure of plant and animal cells |  |  |  | 2 | 4–6 |
| Problems with **Cell structure**? Try questions 1–3, 5 and 6 on p. 23 of the **Student Book**. | | | | | | | |
| **Levels of organisation** | **A** | Describe the levels of organisation in organisms: organelles, cells, tissues, organs and systems |  |  |  | 6 | 19–20 |
| **B** | Explain the importance of cell differentiation in the development of specialised cells |  |  |  | 6 | 18–20 |
| **C** | Understand the advantages and disadvantages of using stem cells in medicine |  |  |  | 6 | 21 |

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| Problems with **Levels of organisation**? Try questions 4 and 10 on p. 23 and 24 of the **Student Book**. | | | | | | | |
| **Biological molecules 1** | **A** | Identify the chemical elements present in carbohydrates, proteins and lipids (fats and oils) |  |  |  | 7 and 8 | 53–55 |
| **B** | Describe the structure of carbohydrates, proteins and lipids as large molecules made up from smaller basic units: starch and glycogen from simple sugars, protein from amino acids, and lipid from fatty acids and glycerol |  |  |  | 7 and 8 | 53–55 |
| **C** | *Practical: investigate food samples for the presence of glucose, starch, protein and fat* |  |  |  | 7 and 8 | 58  **Lab Book** 2–5 |
| Problems with **Biological molecules 1**? Try questions 1 and 2 on p. 67 of the **Student Book**. | | | | | | | |
| **Biological molecules 2** | **A** | Understand the role of enzymes as biological catalysts in metabolic reactions |  |  |  | 9 | 6–7 |
| **B** | Understand how temperature changes can affect enzyme function, including changes to the shape of the active site |  |  |  | 9 and 10 | 6–8  **Lab Book** 6–9 |
| **C** | *Practical: investigate how enzyme activity can be affected by changes in temperature* |  |  |  | 10 | 6–10  **Lab Book**  6-9 |
| Problems with **Biological molecules 2**? Try question 5 on p. 67 of the **Student Book**. | | | | | | | |
| **Biological molecules 3** | **A** | Understand how enzyme function can be affected by changes in pH altering the active site |  |  |  | 11 | 8 and 11–12  **Lab Book** 10–12 |
| **B** | *Practical: Investigate how enzyme activity can be affected by changes in pH* |  |  |  | 12 | **Lab Book**  10–12 |
| Problems with **Biological molecules 3**? Try questions 6 and 7 on p. 68 of **the Student Book**. | | | | | | | |

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| **NEXT STEPS?** |
| Which areas do you feel confident about? |
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| Write down any specific areas that you need to improve and what you might do. |
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