CAMBRIDGE HOUSE GRAMMAR SCHOOL REVISION CHECKLIST

YEAR 8: Science

Winter 2026

Your Winter Examination will assess your knowledge and understanding of the topics listed (below).

Use this checklist to help you with your revision and identify any gaps in your knowledge.

I can:	✓	x
1. Name the three main areas of science (biology, chemistry and physics).		
2. List at least three activities that scientists carry out.		
3. Give at least three examples of jobs that scientists do.		
4. Label the parts of a Bunsen burner and spell them correctly.		
5. Light a Bunsen burner safely.		
6. Explain the difference between the safety flame and the blue flame, and say which one to use for heating.		
7. Draw the symbols for apparatus used in KS3 science accurately.		
8. Identify apparatus from diagrams and spell its name correctly.		
9. Recall the units for length (mm, cm, m), mass (g, kg), volume (cm^3), time (s) and temperature (°C).		
10. Choose the right apparatus for a measurement and use it to take accurate readings.		
11. Read a measuring scale correctly, including the meniscus on a measuring cylinder.		
12. Explain what a fair test is and why it matters.		
13. Identify the independent, dependent and control variables in an investigation.		
14. Draw a results table with headings and units.		
15. Take repeat readings, calculate a mean and spot an anomalous result.		
16. Explain how repeating readings makes results more reliable.		
17. Explain what a fair test is and why it matters.		
18. Explain when to use a line graph (continuous data) and when to use a bar graph (categoric data).		
19. Draw a line graph with labelled axes, units and a line of best fit (cooling curve).		
20. Draw a bar graph with labelled axes and units.		
21. Draw a conclusion from my results and observations.		

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I can:	✗	✓
22. Identify the main hazard symbols and say what each one means.		
23. Carry out a risk assessment for an experiment.		
24. Follow laboratory safety rules (eye protection on, hair tied back, moving safely).		
25. Describe the arrangement of particles in a solid, a liquid and a gas.		
26. Draw particle diagrams of a solid, a liquid and a gas.		
27. Describe the movement of particles in a solid, a liquid and a gas.		
28. Describe diffusion and explain what factors speed it up (size of particle, heat).		
29. Recall the physical properties of solids, liquids and gases (shape, volume, whether they flow or can be compressed).		
30. Name the changes of state: melting, freezing, boiling, evaporating ,condensing and sublimation.		
31. Explain what melting point and boiling point mean.		
32. Interpret the cooling curve of a substance such as stearic acid, and use it to identify the melting point of the substance.		
33. Recall that changes of state are physical changes and can be reversed.		
34. Explain the differences between physical and chemical changes.		
35. Give examples of physical changes and chemical changes.		
36. Identify the signs of a chemical change (colour change, gas given off, temperature change, new substance formed).		
37. Explain the difference between reversible and irreversible changes, with examples.		
38. Recall that combustion is an example of a chemical change.		
39. Name the three things needed for a fire to burn (heat, fuel and oxygen).		
40. Use the fire triangle to explain how fires are put out.		