



CAMBRIDGE HOUSE GRAMMAR SCHOOL REVISION CHECKLIST

YEAR 8: Science

Summer 2026

Your summer 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:	✓	✗
1. State the names of the main areas of Science.		
2. List some activities which are carried out in Science.		
3. Give examples of jobs Scientists do		
4. Label and correctly spell the parts of a Bunsen burner.		
5. Light a Bunsen burner safely.		
6. Draw a conclusion from our observations in an experiment.		
7. Accurately draw the symbols for apparatus used in KS3 Science.		
8. Correctly spell the names for science apparatus.		
9. Identify the apparatus from diagrams.		
10. Recall the units for measurements.		
11. Choose appropriate scientific apparatus to make basic measurements.		
12. Use basic measurement apparatus to make accurate measurements.		
13. Plan a simple experiment using the scientific method		
14. Discuss the meaning of a <i>fair test</i> and plan a fair test experiment		
15. Be able to identify independent, dependent and controlled variables in an investigation		
16. Know when to use a line graph to represent results		
17. Successfully draw a line graph		
18. Know when to use a bar graph to represent results		
19. Successfully draw a bar graph		
20. Identify Hazard symbols		
21. Carry out a risk assessment		
22. Describe the three states of matter, solid, liquid and gas in terms of particle arrangement and movement		
23. Draw particle diagrams of solids, liquids and gases		



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I can:	✓	✗
24. Recall the physical properties of solids, liquids and gases		
25. Explain why some substances expand when heated and during changes of state		
26. Define and explain diffusion in liquids and gases		
27. Identify and name the changes of state between solids, liquids and gases		
28. Recall that changes of state are examples of physical changes		
29. Explain differences between physical and chemical changes		
30. Identify signs of a chemical change		
31. Recall that combustion is an example of a chemical change		
32. The 3 factors needed for a fire to burn		
33. Recognise living things		
34. List the seven characteristics of living things		
35. Know that all living things are made of cells		
36. Label the parts of an animal and a plant cell and describe their functions		
37. Identify similarities and differences between plant and animal cells		
38. Prepare an onion slide		
39. Label a microscope and develop practical skills using microscopes		
40. List and describe some specialised animal and plant cells		
41. Work out the magnification of a microscope		
42. That physics involves observations and measurements		
43. That units are vital for all quantities - be familiar with correct units for mass and weight		
44. That physics ranges from the extremely small to the extremely large		
45. Forces are pushes and pulls		
46. Define what a force is and its units		
47. List different forces and observe their effect		
48. Know the four possible effects of forces on an object		
49. How to measure forces		
50. Investigate the extension of a loaded spring		



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I can:	✓	✗
51. Give a definition for gravity		
52. Know the difference between mass and weight		
53. Know how to calculate weight on different planets		
54. Compare materials using their density		
55. Calculate the density of materials using the Density equation		
56. Explain floating and sinking		
57. Give a definitions for matter, atom and element		
58. Recall an atom is the smallest particle of an element.		
59. Label a drawing of an atom showing the position of the electrons, neutrons, and protons		
60. Recall the names and positions of three subatomic particles		
61. Know that each element has a unique atom structure		
62. Define atomic number		
63. Elements are made up of just one kind of atom		
64. Remember the position of metals in the periodic table		
65. Recall the general properties of a metal		
66. Recall the Periodic Table was first put together by Dimitri Mendeleev		
67. Recall the smallest particle of a compound is called a molecule		
68. Recall that compounds are different than the elements they are made of		
69. Recall the each element has its own characteristics or properties		
70. Recall how to make oxygen in the laboratory		
71. Recall the chemical test used to identify oxygen		
72. Recall compounds are formed when 2 or more elements join together		
73. Recall the word equation for the chemical reaction between magnesium and oxygen		
74. Understand chemical formula show how many of each element are present in a molecule		
75. Recall the symbols for some common elements		
76. Know that a compound is 2 or more elements joined together		
77. Know that a molecule is 2 or more atoms joined together chemically		



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78. Write word equations for the reaction of magnesium with oxygen		
79. Identify the physical changes that happen in puberty		
80. Compare the changes of males and females at puberty		
81. Identify the emotional changes that happen in puberty		
82. Identify the different parts of sperm cells		
83. Identify the different parts of ovum cells		
84. Understand the different functions of the cells' parts		
85. Identify the different parts of the female reproductive system		
86. Identify the different parts of the male reproductive system		
87. Understand the different functions of both reproductive systems		
88. Understand the events that occur that lead to fertilisation		
89. Identify the changes in the uterus during the menstrual cycle		
90. Identify different heritable characteristics		
91. Understand what influences different characteristics		
92. Identify the stages of foetal development		
93. Understand how the foetus survives in the uterus		
94. Identify the three stages of child birth		
95. Identify contraceptive methods and explain how they work		
96. Identify the different structures of a flower		
97. Describe what pollination and fertilisation is		
98. Identify the structure and describe the germination of seeds		