**AQA GCSE Combined Science: Trilogy – Chemistry topics, Foundation Support workbook**

***No Chemistry only content is included in this workbook; the workbook also excludes the Trilogy Higher tier content***

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| **Section** | **Topic** | **Page No.** | **Trilogy specification reference** |
| **1 Atomic structure and the periodic table** | Atoms, elements and compounds  | 4-5 | 5.1.1.1 (but not the formulae and equation parts) |
| Mixtures | 5-6 | 5.1.1.2 |
| Compounds, formulae and equations | 6-8 | 5.1.1.1 (formulae and equation parts) |
| Scientific models of the atom | 8-9 | 5.1.1.3 |
| Sizes of atoms  | 9-10 | 5.1.1.5, parts on size and scale |
| Relative masses and charges of subatomic particles | 10-11 | 5.1.1.4 and remainder of 5.1.1.5  |
| Isotopes | 12 | 5.1.1.6 |
| Electronic structure | 12-13 | 5.1.1.7 |
| Development of the periodic table | 13-14 | 5.1.2.1, 5.1.2.2 |
| Metals and non-metals | 14-15 | 5.1.2.3 (part) |
| Elements in group 0 | 15-16 | 4.1.2.4 (incl. reactions and atomic structure of metals/non-metals from 5.1.2.3) |
| Elements in group 1 | 17-18 | 5.1.2.5 (incl. reactions and atomic structure of metals/non-metals from 5.1.2.3) |
| Elements in group 7 | 18-19 | 5.1.2.6 (incl. reactions and atomic structure of metals/non-metals from 5.1.2.3) |
| **2 Bonding, structure, and the properties of matter** | The three states of matter  | 20-21 | 5.2.2.1 and 5.2.2.2  |
| Ionic bonding  | 21-22 | 5.2.1.2 (part), 5.2.1.3 plus relevant ideas from 5.2.1.1  |
| Dot and cross diagrams for ionic compounds | 22-23 | 5.2.1.2 (dot and cross diagrams and drawing electron transfer diagrams) |
| Properties of ionic compounds | 23-24 | 5.2.2.3 |
| Covalent bonding in small molecules | 24-25 | 5.2.1.4 (part) plus relevant ideas from 5.2.1.1 |
| Dot and cross diagrams for covalent compounds | 25-26 | 5.2.1.4 (part) |
| Properties of small molecules | 26-27 | 5.2.2.4 |
| Polymers | 27-28 | 5.2.1.4 (part) and 5.2.2.5 |
| Giant covalent structures | 28-29 | 5.2.1.4 (part)  |
| Properties of giant covalent structures | 30 | 5.2.2.6, 5.2.3.1 and 5.2.3.2 |
| Graphene and fullerenes | 31-32 | 5.2.3.3 |
| Metallic bonding | 32 | 5.2.1.5 plus relevant ideas from 5.2.1.1 |
| Properties of metals and alloys | 33 | 5.2.2.7 and 5.2.2.8 |
| **3 Quantitative chemistry** | Writing formulae | 34 | 5.1.1.1 (part on formulae again) |
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| Reactivity series – displacement | 46-47 | 5.4.1.2 (remainder) |
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| Reactions of acids and metals | 48-49 | 5.4.2.1 |
| Neutralisation of acids and making salts | 49-51 | 5.4.2.2 (part) |
| Acids, metal carbonates and making salts | 51-52 | 5.4.2.2 (remainder) |
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| Electrolysis of a solution | 58-59 | 5.4.3.4; Required practical 9 |
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| Effect of surface area | 67-68 | 5.6.1.2 (part), 5.6.1.3 (part) |
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