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| Subject: Science Year 9 Curriculum Map 2024-2025 |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
| Half term 5 | **BOM10 – Atoms and the Periodic Table****AQA Chemistry Specification points**  * 4.1.1.3 Development of the atomic model
* 4.1.1.1 Atoms, Elements and Compounds
* 4.1.1.4 Relative electrical charges of subatomic particles
* 4.1.1.5 Size and mass of atoms
* 4.1.1.6 Relative atomic mass
* 4.1.1.7 Electronic Structure
* 4.1.2.1 The periodic table
* 4.1.2.3 Metals and Non-metals
* 4.1.2.2 Development of the periodic table
* 4.1.1.2 Mixtures
* 4.1.2.5 Group 1
* 4.1.2.6 Group 7
* 4.1.2.4 Group 0

 **AQA Physics Specification points** * 4.4.1.3 The development of the model of the atom
* 4.4.1.1 The structure of the atom
* 4.4.1.2 Mass number, atomic number and isotopes
 | [Chemical engineer | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/chemical-engineer)[Chemist | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/chemist) | [Atoms and the Periodic Table Knowledge Organiser.pdf](https://ormistonacademiestrust.sharepoint.com/%3Ab%3A/r/sites/OMaA_Science/Shared%20Documents/Science%20drive/2024-2025%20-%20COMING%20SOON%21%21/CURRICULUM/KS3/NEW%20Curriculum/Year%209/02.%20BOM10%20-%20Atoms%20and%20the%20Periodic%20Table/Atoms%20and%20the%20Periodic%20Table%20Knowledge%20Organiser.pdf?csf=1&web=1&e=DcRq4R) |
|  | **BOM11– Energy and the Particle Model** **Chemistry** * 4.2.2.2 State symbols (chem)
* 4.2.2.1 The three states of matter (chem)

 **Physics** * 4.3.1.2 Changes of state
* 4.3.1.1 Density of Materials
* Physics RP 5 Density
* 4.3.2.1 Internal Energy
* 4.3.2.2 Temperature changes in a system and specific heat capacity
* 4.3.2.3 Changes of state and specific latent heat
* 4.3.3.1 Particle motion in gases
 | [Research scientist | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/research-scientist)[Chemical plant process operator | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/chemical-plant-process-operator) | [BOM11 KO.pdf](https://ormistonacademiestrust.sharepoint.com/%3Ab%3A/r/sites/OMaA_Science/Shared%20Documents/Science%20drive/2024-2025%20-%20COMING%20SOON%21%21/CURRICULUM/KS3/NEW%20Curriculum/Year%209/03.%20BOM11%20-%20Energy%20and%20the%20Particle%20Model/BOM11%20KO.pdf?csf=1&web=1&e=12O6hO) |
| Half term 6 | **UOEOO11 Defining Forces*** **4.5.1.1** Scalar and Vector Quantities
* **4.5.1.2** Contact and non-contact forces
* **4.5.1.3** Gravity
* **4.5.1.4** Resultant Forces
* **4.5.6.1.1** Distance and Displacement
* **4.5.2** Work done and energy transfer
* **4.5.3** Forces and Elasticity
* **4.1.2** Changes in Energy (GPE only)
 | [Marine engineer | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/marine-engineer)[Mechanical engineer | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/mechanical-engineer) | [OEO7 Forces KO.pdf](https://ormistonacademiestrust.sharepoint.com/%3Ab%3A/r/sites/OMaA_Science/Shared%20Documents/Science%20drive/2024-2025%20-%20COMING%20SOON%21%21/CURRICULUM/KS3/NEW%20Curriculum/Year%209/04%20OEOO11%20Defining%20force/OEO7%20Forces%20KO.pdf?csf=1&web=1&e=vNttg9) |
|  | **CR6 – Chromatography and Analysis*** 4.1.1.2 Mixtures
* 4.8.1.1 Pure Substances
* 4.8.1.2 Formulations
* 4.8.1.3 Chromatography
* 4.8.2.1 Test for Hydrogen
* 4.8.2.2 Test for Oxygen
* 4.8.2.3 Test for Carbon Dioxide
* 4.8.2.4 Test for Chlorine
 | [Chemist | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/chemist)[Consumer scientist | Explore Careers | National Careers Service](https://nationalcareers.service.gov.uk/job-profiles/consumer-scientist) | [CR6 KO.pdf](https://ormistonacademiestrust.sharepoint.com/%3Ab%3A/r/sites/OMaA_Science/Shared%20Documents/Science%20drive/2024-2025%20-%20COMING%20SOON%21%21/CURRICULUM/KS3/NEW%20Curriculum/Year%209/05%20CR6%20-%20Chromatography%20and%20Analysis/CR6%20KO.pdf?csf=1&web=1&e=kWrFU7) |