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| Subject: Science Year 10 Curriculum Map 2024-2025 |
| Terms | **Topics covered** and **core knowledge and skills** | Links to careers | Links to the Knowledge organiser and other additional resources |
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| Half term 5 | **Unit: Chemistry 5** * Endothermic and Exothermic Reactions
* Temperature change during reactions required practical
* Reaction profiles
* Energy change of reactions (HT)
* Bond energies (HT)
* EOUT

**Unit: Physics 3*** Density
* Density Required Practical
* Changes of State
* Internal Energy
* Specific Latent Heat
* EOUT

**Unit: Biology 2 part 3*** Cells in a leaf
* Stomata & Practical
* Cells in plant stems
* Transpiration & Translocation
* Measuring transpiration
* EOUT

**Unit: Chemistry 4 part 1*** Metal oxides
* Reactivity series
* Extraction of metals and reduction
* Oxidation & Reductions of electrons (HT)
* Electrolysis
* Electrolysis of aqueous solutions
* Electrolysis of molten substances
* Electrolysis Required Practical
* Half equations (HT)
* EOUT
 | [Careers in science - BBC Bitesize](https://www.bbc.co.uk/bitesize/articles/zjpc382#z34q7yc)[STEM Careers Support](https://www.stem.org.uk/secondary/careers)[Science careers support (stem.org.uk)](https://www.stem.org.uk/secondary/careers/resources/science)[STEM Careers - Youth Employment UK](https://www.youthemployment.org.uk/careers-hub-sector/stem-careers/) | <https://www.bbc.co.uk/bitesize/topics/z27xxfr><https://www.bbc.co.uk/bitesize/topics/z3ybb82><https://www.bbc.co.uk/bitesize/topics/zwj22nb><https://www.bbc.co.uk/bitesize/topics/zt6ppbk> |
| Half term 6 | **Unit: Physics 4*** Atomic structure & Isotopes
* Decay & nuclear radiation
* Nuclear equations
* Half-life
* Contamination
* EOUT

**Unit: Biology 4*** Photosynthesis
* Uses of glucose
* Factors affecting the rate of photosynthesis
* Interacting factors of photosynthesis (HT)
* Photosynthesis Required Practical
* Testing a leaf for starch Required Practical
* EOUT

**Unit: Chemistry 4 part 2*** pH scale
* Acids & Metals
* Neutralisation
* Soluble salts
* Soluble salt Required Practical
* EOUT

**Unit: Biology 3*** Bacterial diseases
* Viral diseases
* Fungal & Protist diseases
* Non-specific defences
* The immune system
* Vaccinations
* Antibiotics & Painkillers
* Discovery & Development of drugs
* EOUT

**Unit: Chemistry 4 part 2*** Conservation of mass
* Concentration of solutions
* Mass changes of gases
* Moles (HT)
* Amount of substance (HT)
* Moles & Balanced equations (HT)
* Limiting reactants (HT)
* EOUT
 | [Careers in science - BBC Bitesize](https://www.bbc.co.uk/bitesize/articles/zjpc382#z34q7yc)[STEM Careers Support](https://www.stem.org.uk/secondary/careers)[Science careers support (stem.org.uk)](https://www.stem.org.uk/secondary/careers/resources/science)[STEM Careers - Youth Employment UK](https://www.youthemployment.org.uk/careers-hub-sector/stem-careers/) | <https://www.bbc.co.uk/bitesize/topics/zshssrd><https://www.bbc.co.uk/bitesize/topics/zgr997h><https://www.bbc.co.uk/bitesize/topics/zt6ppbk><https://www.bbc.co.uk/bitesize/topics/z9kww6f><https://www.bbc.co.uk/bitesize/topics/zt6ppbk> |