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| Subject: Science Year 11 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 1&Half term 2 | **Unit BE1*** Photosynthesis
* Uses of glucose from photosynthesis
* Factors affecting photosynthesis.
* RP Photosynthesis
* Protist diseases & Viral & fungal diseases
* Stem cells
* Selective breeding
* Genetic engineering
* Antibiotics & painkillers Resistant bacteria
* Discovery & development of drugs
* Vaccination
* Metabolism & Homeostasis
* Human endocrine system & control of blood glucose
* (HT) Negative feedback
* Menstrual cycle & hormones in reproduction
* (HT) Hormones for infertility

**Unit CE1*** Reversible reactions
* Equilibrium & Changing conditions & Equilibrium
* Effects of changing concentration on equilibrium
* Effect of changing temperature & pressure on equilibrium
* Conservation of mass & balancing equations
* Mass changes when a gas is involved
* Moles (HT)
* Using moles to balance equations (HT)
* Amount of substances in equations
* Concentrations of solutions
* Limiting reactants (HT)
* Development of the periodic table

**Unit PE1*** Distance time relationship
* Velocity time graphs
* Falling objects & F=MA
* (HT) Momentum & (HT) Conservation of momentum
* RP Hooke’s law
* Gravity & Changes in energy calculations
* Work done & energy transfer.
* Factors affecting breaking distance.
* RP Reaction time
* (HT) Electric motors
* Particle motion in gases
* Change of state & specific latent heat
* Density of materials
* RP Density
 | [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/) | [Levels of organisation - Animal organisation - gaseous exchange systems - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/zpxv6yc/revision/1)[Molecules of life - Animal organisation - digestion - AQA - GCSE Combined Science Revision - AQA Trilogy - BBC Bitesize](https://www.bbc.co.uk/bitesize/guides/z89mk2p/revision/1) |