

Roundwood Park School Curriculum Map – Science (YR9)

A curriculum that stimulates curiosity, values diversity and offers challenge.

We help every student to love learning for life, to follow their passions and to reach their full potential.

Year 9	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Unit of Work	B3 - Infection and response C1 - Atomic structure and the periodic table	P1 - Energy	B1 - Cell biology	P3 - Particle model of matter C9 - Chemistry of the atmosphere B5 - Homeostasis and response	B5 - Homeostasis and response (continued) C1 - Atomic structure and the periodic table (continued)	B4 - Bioenergetics
Key Knowledge Concepts & Practical Skills	Communicable diseases Viral diseases Bacterial diseases Fungal diseases Protist diseases Human defence systems Vaccination Antibiotics and painkillers Discovery and development of drugs Atoms, elements and compounds Mixtures Development of model of the atom Subatomic particles Size and mass of atoms Relative atomic mass Electronic structure	Energy stores and systems Changes in energy Energy changes in systems Power Energy transfers Efficiency National and global energy resources	Cell structure Eukaryotes and prokaryotes Animal and plant cells Cell specialisation Cell differentiation Microscopy Cell division Chromosomes Mitosis and the cell cycle Stem cells Diffusion Osmosis Active Transport	Density Changes of state Internal energy Specific heat capacity Specific latent heat Particle motion in gases. The proportions of different gases in the atmosphere and earth's early atmosphere How oxygen increased and carbon dioxide decreased Green house gases, carbon footprints and global climate change Homeostasis Human nervous system Endocrine system Blood glucose control	Human reproductive hormones Contraception Treating infertility Negative feedback Development of the periodic table Groups in the periodic table	Photosynthesis Rate of photosynthesis Uses of glucose Aerobic respiration Anaerobic respiration Response to exercise Metabolism
Key Vocabulary	Year 9 students should all take a look at their Year 9 Science topic checklist for the key terms for each unit of work					
ASPIRE Habits	The ASPIRE Habits we focus on in Year 9 are: Making links, thinking logically and focus					
Reading Opportunities	Students are encouraged to read for interest in science! Our school library has a range of excellent books you can take a look at. See our super-curriculum reading journeys that are up in all science labs for some suggested books for Year 9 students.					

