



Roundwood Park School Curriculum Map – Science (YR8)

*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 8	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Unit of Work	-Year 8 introduction (bouncing balls investigation) - Inheritance - Heating and cooling - Work done	- Evolution - Types of reaction - Magnets and electromagnets - Chemical energy	-Respiration -Climate and earth resources -Breathing -Light	-Digestion -Photosynthesis	- Rates of reaction	-Universe and gravity - Summer projects
Key Knowledge Concepts & Practical Skills	Plan an investigation Collect data Analyse data Evaluate data and methods Genetic chromosomes Genes DNA Inherited characteristics Chromosomes Gametes Thermal conductor Temperature Conduction Convection Radiation Work done Lever	Natural Selection Extinction Biodiversity Competition Catalysts Endothermic reactions Exothermic reactions Chemical bonds Chemical reactions Physical reactions Magnetic materials Magnetic poles Solenoids Fuels Thermal decomposition	Aerobic respiration Anaerobic respiration Global warming Climate change Carbon Cycle Extracting metals Recycling Lung structure The respiratory system Gaseous exchange Lung disease Reflection Refraction Colour Filters	Balanced diet Digestive system Enzymes BMI Deficiency diseases Starch test Leaf structure Plant nutrients	Factors affecting rate of reaction: Temperature Particle size pH Use of catalysts	Solar system Seasons Moon phases Mass and weight Ethical debates in science Group presentations Science in the media Bad Science Ecology investigation
Key Vocabulary	Year 8 students should all take a look at their Year 8 Science topic checklists for the key terms for each unit of work					
ASPIRE Habits	The ASPIRE Habits we focus on in Year 8 are: thinking creatively, questioning and taking risks					
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 8 students.					