

Science Curriculum Programme 2017 - 2018

Key Stage 3 – Red House Academy will follow the AQA Key Stage 3 Science syllabus. This is a new syllabus as there has been a new science specification that all children are expected to follow. Red House science teachers want to make the most of KS3 which will prepare our students for the step up to KS4 and GCSE.

The course is organised in the following way:

Year 7

First Half Term	Second Half Term
Transition Skills Unit	Organisms
Forces	Light
Chemical Reactions	
Third Half term	Fourth Half Term
Electricity	Reproduction
Energy	Inheritance
Particles	
Fifth Half Term	Sixth Half Term
Space	Ecology
Earth Structure	Plant Reproduction

Year 8

First Half Term	Second Half Term
Forces	Breathing
Periodic Table	Digestion
Third Half term	Fourth Half Term
Electricity	Respiration
Wave Properties	Photosynthesis
Fifth Half Term	Sixth Half Term
Reactions	Evolution
Heating and Cooling	Earth Resources

Year 9

By year 9 we expect our students to have established the foundations of excellent scientific study. We begin to further develop the skills and knowledge that students will need for GCSE. Our introductory topic has been especially chosen to introduce a higher level of scientific thinking and includes 'bang up to date' scientific concepts. The year 9 course is part of GCSE study.

First Term
Biomimicry
Cells
Atomic Structure
Energy
Second Term
Organisation
Bonding
Electricity
Third Term
Infection
Quantitative
Forces

At Key Stage 4

There are two 'routes' through science.

Route 1 AQA Trilogy course which is a double award equivalent to two GCSEs. Within this course there is required practical work that builds on the skills from year 7 -9 Science.

Year 10

First Term	
Bioenergetics Homeostasis Quantitative Particle Model	
Second Term	
Evolution Energy Changes Forces	
Third Term Half Term One	Half Term Two
Ecology Using Resources Waves	Revision and extension of Year 10 topics.

Year 11

First Half Term	Second Half Term
Complete and revise Year 10 work Homeostasis and Response The Atmosphere/using resources Atomic Structure	Inheritance Energy Change/Range/Extent Magnetism
Third Half Term	Fourth Half Term
Inheritance Organic Chemistry and Chemical Analysis Space	Ecology Organic Chemistry and Chemical analysis
Fifth Half Term	
Revision	

Route 2 AQA Trilogy Separate Sciences. Three GCSEs ; Chemistry, Biology and Physics. The required practical work builds on the skills from years 7-9 Science.

Year 10 Separate Sciences

First Half Term	Second Half Term
Bioenergetics	Bioenergetics
Organic Chemistry/Chemical Analysis	Chemical Change/Energy Change
Atomic Structure	Atomic Structure
Third Half Term	Forth Half Term
Homeostasis	Homeostasis
Rate and extent of Chemical Change	The Atmosphere
Magnetism/Electromagnetism	Particle Model/Space
Fifth Half Term	Sixth Half Term
Ecology	Revision
Using Resources	
Waves	

Year 11 Separate Sciences

First Half Term	Second Half Term
Homeostasis and Response The Atmosphere/Using Resources Atomic Structure	Inheritance Energy Change, Range and Extent Mkagnetism/Electromagnetism
Third Half Term	Forth Half Term
Inheritance Organic Chemistry and Chemical analysis Space	Ecology Organic Chemistry and Chemical analysis
Fifth Half Term	
Revision	