Handsworth Grange
Community Sports College

YEAR 9 SCIENCE LEARNING JOURNEY

Y9

Year 7 Review
L1 - Year 7 Review
L2 - Year 7 Review
L3 - Year 7 Review

Year 8 Review
L1 - Year 8 Review
L2 - Year 8 Review
L3 - Year 8 Review

Topic 1 Chemical Reactions
Atoms in chemical reactions 6.3.1
Combustion 6.3.2
Thermal decomposition 6.3.3
Conservation of mass 6.3.4
Exothermic and endothermic 6.4.1
Energy level diagrams 6.4.2
Bond energies 6.4.3
Recap chemical reactions
Reteach time

Topic 2 - Variation, Evolution and inheritance
Variation 10.1.1
Continous and discontinous 10.1.2
Adapting to change 10.1.3
Natural selection 10.3.1
Charles Darwin 10.3.2
Extinction 10.3.3
Preserving biodiversity 10.3.4
Inheritance 10.4.1
DNA10.4.2

Topic 3 Variation Continued
Genetics 10.4.3
Genetic modification 10.4.4

Topic 4 Energy & Power
L1 - Energy Stores and Systems
L2 - Energy Transfers
L3 - KE and GPE
L4 - Elastic Energy and Power
L5 - Heat Transfer
L6 - Energy Resources
Recap

Assessment Week
Assessment
Feedback
Reteach

Revision Y7-9 Content
Recap Y7 content
Recap Year 8 content
Recap Year 9 content so far

STEM Project
Chemistry STEM Project - Beyond NC
Chemistry STEM Project - Beyond NC
Chemistry STEM Project - Beyond NC

Topic 5 Matter 5.4 and 5.3
Recap on Atoms/Elements (5.3)
Mixtures
Development of the atom
Sub atomic particles
Electron structure
Development of Periodic table
Periodic table 5.4.1
The elements of group 1 (Properties)
The elements of group 7 (Properties)
The elements of Group 0 (properties)
M/F
Additional time

STEM Project
Biology STEM Project - Beyond NC
Yeast and fermentation
Biology STEM Project - Beyond NC
Physics STEM Project - Beyond NC
Physics STEM Project - Beyond NC
Physics STEM Project - Beyond NC
Science STEM Trip

Topic 6 Life Beyond Cells
Animal and plant cells
Light Microscopes
Electron Microscopes
Microscopes Practical part 1
Microscopes Practical part 2
Recap

Science STEM Week
Forensic science project

Topic 7 Cell Specialism
Specialised cells
Specialised for function
Cell transport
Cell transport Animals
Cell transport Plants

Topic 8 Electricity & Magnetism
L1 - Circuit Components
L2 - Current, Potential Difference and Resistance
L3 - Series and Parallel Circuits
L4 - Electrical Power and Energy in Circuits
L5 - Static Electricity
L6 - Magnetism Fundamentals and the Earth's Magnetism
L7 - Investigating Magnetism
L8 - Electromagnets
Recap

Assessment Week
Assessment
Feedback
Reteach

Topic 9 Pushes & Pulls
L1 - Types of Force
L2 - Resultant Forces
L3 - Work Done
Nuclear
Additional Lesson
Recap from Y8

STEM Project
Y9 Masterclass Biology

Topic 10 Photosynthesis & Respiration
Photosynthesis recap Y7/8
Photosynthesis recap Y7/9
Photosynthesis recap Y7/10
Photosynthesis recap Y7/11
Photosynthesis recap Y7/12
Photosynthesis recap Y7/13

Y9 Assessment Week
Exercise
M/F
Additional lesson

Topic 11 Chemi Project
Y9 Masterclass Chemi

Assessment Review & Intervention

Topic 12 Physics Project
Y9 Masterclass Physics

Y10