Handsworth Grange
Community Sports College

YEAR 7 SCIENCE LEARNING JOURNEY

Y7

Engaging in Science Practicals / KS2 Review
L1 - Introduction to Lab safety
L2 - Bunsen burner safety use
L3 - Using equipment
L4 - Review of KS2 - intro to learning journey
Revision lesson & Catch up
Baseline Test - digital in IT room

Topic 1 Particle Model
L1 - Properties of states of matter
L2 - Changes of state
L3 - Melting and freezing
L4 - Condensation and evaporation
L5 - Physical and chemical changes

Topic 2 Cells
L1 - What is the body made up of?
L2 - The World of cells through the microscope
L3 - Looking through our own cells
L4 - The inside of cells
L5 - All sorts of cells
L6 - Unicellular organisms
L7 - Diffusion in cells

Topic 3 What do Forces do?
L1 - What is a Force?
L2 - Measuring Speed
L3 - Resultant Forces
L4 - Forces Acting on a Parachutist
L5 and L6 - Harnessing the Air - Egg Drop Challenge

Topic 4 - Structure & History of the Atom
L1 - The atom
L2 - Model of the atom
L3 - Sub-atomic particles
L4 - Development of the atom Part 1
L5 - Development of the atom Part 2

Topic 5 Organ Systems
L1 - Organs in the human body
L2 - Cellular respiration
L3 - Respiratory system
L4 - Circulatory system
L5 - Healthy Diet (Nutrients)
L6 - Digestive system + role of bacteria in digestion
L7 - Skeletal system

Topic 6 Our Solar System
L1 - What is the Universe Made Up Of?
L2 - The Solar System
L3 - Weight
L4 - Day and Night and The Seasons
L5 and L6 - Planets in Our Solar System

Topic 7 - Elements, Compounds & Mixtures
L1 Elements, compounds, mixtures
L2 Chemical symbols
L3 Pure substances
L4 Solutions
L5 Separating mixtures

Topic 8 - Pandemic STEM Project (Beyond NC)
L1 Infectious diseases - The big picture
L2 Slowing diseases - aseptic techniques
L3 Slowing diseases - use of face masks vs visor (STEM project)
L4 Slowing diseases - use of face masks vs visor (STEM project)
L5 Vaccines - Evaluating the benefits of vaccines

Topic 9 States of Matter
L1 - States of Matter
L2 - Change of State
L3 - Chemical and Physical Changes
L4 - Diffusion

Topic 10 The Periodic Table
L1- Classify substances
L2- Metals and non-metals
L3- Periodic table
L4- Predictions using the periodic table

Topic 11 Photosynthesis
L1 Organisation in plants
L2 Photosynthesis
L3 Testing a leaf for starch

Assessment Week
Assessment
Feedback
Reteach

Science STEM Week
STEM Project 1
STEM Project 1
Science STEM Trip

Topic 11 Photosynthesis
L4 Effect of light on cress seedlings (Part 1)
L5 Effect of light on cress seedlings (Part 2)
L6 Greenhouse project (Part 1)
L7 Greenhouse project (Part 2)

Topic 12 Energy Transfer
L1 - Types of Energy

Topic 12 Energy
L3 - Energy Transfer Through Solids
L4 - Effiency
L5 and L6 Efficiency Investigation
L5 and L6 Efficiency Investigation

Topic 13 Conservation of Mass
L1 - Understanding chemical formula
L2- The law of conservation of mass
L3- Balancing equations
L4- What happened to the mass-Part 1
L5- What happened to the mass-Part 2

Catch Up Week

Topic 14 Light and Sound
L1 - Wave Fundamentals
L2 - Reflection
L3 - Refraction
L4 - The Ear
L5 - Sound and Concentration
L6 - Report

Topic 15 Forensic Science
L1- How does science help to solve crime
L2- Filtration & evaporation
L3- Chromatography
L4 Chemical analysis
L5 Flame tests
L6 Presenting data to an audience

Y7 Assessment Week

Topic 16 Electricity
L1 - Circuit Symbols and Complete Circuits
L2 - Potential Difference, Current and Resistance
L3 - Series and Parallel Circuits
L4 - Static Electricity

Feedback & Reteach
Feedback
Reteach

Y8

Topic 17 Health
L1 Types of drugs
L2 Alcohol and its effects on health
L3 Smoking and its effects on health
L4 Unhealthy diet and obesity
L5 Lifestyle and cardiovascular disease
L6 Unhealthy diet and malnutrition