

Year 9 Science Topic Overview

9A Genetics and Evolution
9Aa Checklist (Topic Opener-Monster and Myth)
9Aa Environmental Variation
9Ab Inherited variation
9Ac DNA
9Ad Genes and Extinction
9Ae Natural Selection
9Ae Literacy -Convincing arguments, 9Ab Numeracy -Probability
9Ae Recreating Animals- Extension
9A Test
9A Marking, Discussion and DIRT time.
9C1 Project 1 Animal smuggling- Extension

9B Plant Growth
9Ba Checklist (On a Farm)
9Ba Reaction in plants
9Bb Plant adaptations
9Bc Plant Products
9Bc Literacy- Clarity and Emphasis, 9Be HSW- Bias and validity
9Bd Growing Crops
9Be Farming problems
9Be Organic Farming- Extension
9B Test
Marking, Discussion and DIRT time.
9C2 Project 2 Enzyme investigation- Extension

9E Making Materials
9Ea Checklist (Materials of the future)
9Ea About Ceramics
9Eb Polymers
9Ec Composite Materials
9Ed Problems with Materials
9Ed Literacy Biased Language 9Eb HSW Peer review
9Ee Recycling Materials
9Ee Material Failures- Extension
9E Test
9E Marking, Discussion and DIRT time.
9G1 Project 1 Carbon Capture- Extension

9F Reactivity
9Fa Checklist (Demolition)
9Fa Types of explosion
9Fa Literacy -Active and passive
9Fc HSW percentage loss or gain
9Fb Reactivity
9Fc Energy and reactions
9Fd Displacement
9Fe Extracting metals
9Fe Alfred Nobel- Extension
9F Test
Marking, Discussion and DIRT time.
9G2 Project 2 Electrolysis Investigation- Extension

9I Forces and motion
9Ia Checklist (Moving Things)
9Ia Forces and Movements
9Ib Energy for Movement
9Ib Literacy Purpose and audience
9Ic Numeracy- Equations and Graph
9Ic Speed.
9Id Turning forces
9Ie More machines
9Ie Supplying the Energy- Extension
9I Test
Marking, Discussion and DIRT time.
9K3 Project 3 Speed limits- Extension

9J Force fields and Electromagnets
9Ja Checklist (Mission to Mars)
9Ja Force fields
9Jb Static Electricity
9Jc Current Electricity
9Jd Resistance
9Jd Numeracy Rounding numbers
9Ja Literacy Cohesion in writing
9Je Electromagnets
9Je Human in Space- Extension
9J Test
9J Marking, Discussion and DIRT time.
9K1 Project 1 Ears and Eyes- Extension

9L Physics transition to GCSE
9L1 Vectors and scalars
9L2 Distance time graph
9L3 Acceleration
9L4 Velocity time graphs
9L5 Resultant forces
9L6 Newton's First law
9L7 Mass and weight
9L8 Newton's Second Law
9L9 Newton's Third Law
9L10 Momentum
9L11 Stopping distances
9L12 Crash hazards
9L13 Test
Marking, Discussion and DIRT time.

9D Biology transition to GCSE
9D1 Microscopes
9D2 Plant and animal cells
9D3 Specialised cells
9D4 Inside bacteria
9D5 Enzymes and nutrition
9D6 Enzyme action
9D7 Enzyme activity
9D8 Transporting substances
9D9 Transporting substances Investigations
9D10 Mitosis
9D11 Growth and differentiation
9D12 Growth in plants
9D13 Stem cells
9D14 The nervous system
9D15 Reaction times
9D16 Test
Marking, Discussion and DIRT time.

9H Chemistry transition to GCSE
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9H1 States of matter

9H2 Mixtures

9H3 Filtration and crystallisation

9H4 Paper chromatography

9H5 Distillation

9H6 Drinking water

9H7 Structure of the atom

9H8 Atomic mass

9H9 Isotopes

9H10 Mendeleev's table

9H11 The modern periodic table

9H12 Electronic configurations

9H13 Test

Marking, Discussion and DIRT time.
