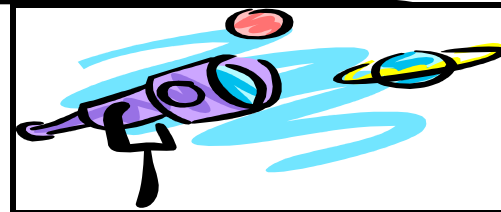


SCIENCE - YEAR 9



Subject content

GCSE Core Science

Keeping Healthy
Diet and Exercise
How our bodies defend themselves against disease
Nerves and Hormones
Control in the human body
Control in plants
The use and abuse of drugs
Drugs
Atoms
The periodic table
Chemical reactions
Limestone and building materials
Calcium carbonate
Metals and their uses
Alloys
Properties and uses of metals
Crude oil and fuels
Infrared radiation
Kinetic theory
Energy transfer by heating
Heating and insulating buildings
Energy and efficiency
Energy transfers and efficiency
The uses of electrical appliances
Transferring electrical energy

Assessment arrangements

- Regular homework marked to school marking policy
- Five APP tasks per module marked to NC levels
- Scientific enquiry skills through investigations

National Curriculum aspects

Inheritance and selection
Plants and photosynthesis
Plants for food

Reactions of metals and their compounds
Using Chemistry

Energy and electricity
Gravity and space
Forces
Pressure and moments

How Science works.

Scientific enquiry
Pupils develop skills in the areas of Ideas and evidence; Planning; Obtaining and presenting evidence; Considering evidence and evaluating

Extra-curricular activities

- At least one timetabled activity for the whole year group, e.g.
- Carbon Road Show through BP

Special requirements for the subject

- Laboratory overall
- Dictionary
- Geometry set
- Glue
- Scientific Calculator
- General writing implements including pencil, ruler.

Useful Internet websites and other resources

- www.bbc.co.uk/schools/KS3bitesize/science
- www.sciencepages.co.uk
- www.physics.org
- www.scienceyear.com
- www.bqfl.org

Skills that will be developed through the course of the year

The ability to:

- Describe predictions based on scientific theories and give examples of evidence collected to test these predictions
- Identify key factors to be considered
- Make predictions based on scientific knowledge
- Measure a variety of quantities with precision
- Represent data in graphs using lines of best fit
- Draw conclusions consistent with evidence and explain these using scientific knowledge
- Identify and explain anomalous observations
- Make reasoned suggestions about how working methods could be improved
- Spell and use appropriately scientific vocabulary and language
- To organise report writing in logical and coherent forms
- To use formulae as appropriate
- To develop relevant ICT skills
- To develop thinking skills including information-processing, reasoning, enquiry, creative thinking and evaluation

Provision for Gifted and Talented

External competitions and events, e.g. The Salters' Chemistry Competition, STEM competitions
GCSE Astronomy
Exceptional Performance tasks