

Curriculum. Science

Year 6

Michaelmas Term

Forces

- name forces in operation around us, recognizing there are often several forces working on an object
- use of forces diagrams
- investigations into friction, elastic, magnetic and static forces
- calculating density and upthrust in different liquids
- understanding of balanced and unbalanced forces
- understanding earth's magnetism and the way a compass works
- magnetizing paperclips and investigating electromagnets

Electricity

- revising simple circuits and varying the brightness of a bulb
- use of circuit diagrams
- difference between series and parallel circuits and an understanding of the significance of this
- use of fuses in circuits via a steel wool investigation
- affect of wire length on the brightness of a bulb
- an awareness of how electricity is generated from the burning of fuels
- electrical safety

Lent Term

Physical changes

- practical tasks to revise physical changes (cooling graphs of water, separation of materials via several steps)

Chemical changes

- investigations into burning candles and testing of the products of burning
- calculation of oxygen in air via burning candles
- an appreciation that burning is a chemical reaction with reactants and products
- investigation into the conditions needed for rusting
- other chemical changes (such as bicarbonate of soda and vinegar)

Summer Term

Light

- understanding of the difference between sources of light and reflected light
- investigations into shadows
- line graphs showing the relationship between height of shadow and distance from source
- measuring the angles of incidence and reflection
- comparing plane, concave and convex mirrors
- an awareness that white light can split into the spectrum

Acids and Alkalis

- an introduction to the principle of categorising materials into acids and alkalis
- practical activities into testing the pH of materials
- making indicators using vegetable dyes

Famous scientists

- a research project into the works of a famous scientist/inventor
- power point presentation