

Knowledge Mat: Science – Year 8

Key Knowledge for Year 8

Term 1

- Heating and Cooling.
- Light.
- Atoms and Elements.
- Food and Digestion.

Term 2

- Magnetism and Electromagnetism.
- Respiration.
- Microbes and Disease.
- Compounds and Mixtures.

Term 3

- Ecological Relationships.
- Solutions.
- Rocks and Weathering.
- Sound and Hearing.

Wider Experiences / Try To Do...

- Iceland Trip
- Salter's Science Competition
- Radio Club
- Chaplaincy Day Activities

The **big** questions:

- **What** is energy?
- **How** are electricity and magnetism connected?
- **How** are chemicals combined?
- **How** can you stay healthy?
- **How** can chemicals be separated?
- **What** is the Earth made of?
- **What** can fossils tell us?
- **What** lives where, and why?

Vocabulary

Temperature, **Joules**, degrees centigrade, conduction, **conductors**, thermometer, density, **convection**, radiation, **absorb, reflect, emit**, insulators, insulation, radiate, **black, matt, silver, shiny**, metals, **bunsen burner, gauze**.

ELEMENTS, periodic table, *properties*, **MELTING AND BOILING POINT**, compounds, **molecules, chemical formulas, reactants and products, OXIDES**.

Nutrition, *balanced diet*, carbohydrates, **protein**, vitamins, *fibre*, digestion, **enzymes**, arteries, veins, **capillaries**, blood cells, **aerobic, anaerobic**.