



Content - Big ideas

C1.1 Particles

Big Question: What are materials like and inside and why do they behave as they do?

Learning Outcome:

- Looking at how materials behave looking at the states of matter.
- Know about how and when materials change state.

C1.2 Elements & Compounds

Big Question: What are atoms and elements?

Learning Outcome:

- Atoms make up everything on earth and looking how chemical reactions can make new materials.
- How atoms join chemically to make compounds.

C2.1 Periodic Table

Big Question:

How does the periodic table help us predict element properties?

Learning Outcome:

- Find out the patterns in chemicals in the periodic table.
- Learn about how to use the periodic table to predict the properties of elements.

Prior learning

- QE2 introduction to science module & Working Scientifically
- Different materials behave differently.
- Identification solid, liquids and gas's
- Properties of metals and non-metals

Global/IOM/Subject Links

Global & IOM links:

- Climate change, chemical industry and pollution.
- **Subject:**
Elements, atoms and Compounds – Math's
- Particles – D&T and geography
- States of Matter – Food technology

Subject specific skills development

Practical skills:

- Heating and cooling of substances.
- Using a thermometer
- Observing and recording chemical reactions making links between elements and compounds properties.
- Observing and making prediction of reactivity of elements in the same group on the periodic table.