

11–14 years

Organising elements

1. Explore the properties of common elements, commenting on similarities and differences.
2. Consider how common elements might be grouped, based on their properties.
3. Use given information to construct a simple table of elements.
4. Reflect on the arrangement of the periodic table and how this supports chemists to make predictions about elements.

A**Type:** non-metal**Colour:** reddish-brown**State (at room temperature):** liquid**Information:** can be used as a flame retardant**B****Type:** metal**Colour:** silvery-white**State (at room temperature):** solid**Information:** sinks in water and burns with a bright white light**C****Type:** non-metal**Colour:** yellowish-green**State (at room temperature):** gas**Information:** kills bacteria – used to treat drinking water**D****Type:** metal**Colour:** silvery-white**State (at room temperature):** soft solid**Information:** tarnishes rapidly in air, more dense than water, reacts with water**E****Type:** metal**Colour:** silvery**State (at room temperature):** soft solid**Information:** tarnishes rapidly in air, floats on water, reacts vigorously with water**F****Type:** metal**Colour:** silvery**State (at room temperature):** soft solid**Information:** burns in air, sinks in water, reacts with water**G****Type:** metal**Colour:** silvery**State (at room temperature):** soft solid**Information:** tarnishes rapidly in air, floats on water, reacts vigorously with water - igniting with a lilac flame**H****Type:** non-metal**Colour:** silvery-grey**State (at room temperature):** solid**Information:** used in dyes and photographic chemicals**I****Type:** metal**Colour:** silvery**State (at room temperature):** soft solid**Information:** ignites in air, floats on water, reacts violently with water



Element	Identity
A	Bromine
B	Magnesium
C	Chlorine
D	Calcium
E	Sodium
F	Strontium
G	Potassium
H	Iodine
I	Rubidium