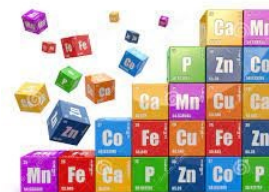


**1. Matter 5 - Periodic table** Continuing previous work on atoms and elements we now study the **Periodic table** and how **elements** are arranged in it. We revisit subatomic particles found in atoms and explain how **electrons** are arranged. We look at the properties of different substances within the Periodic table and consider how the arrangement can tell us about properties. We then study groups 1, 7 and 0 in more detail **explaining** their properties and **reactivity** linking this to atomic structure.



**SUMMATIVE ASSESSMENT 1**  
(Organisms 5, matter 5, forces 3) week 9

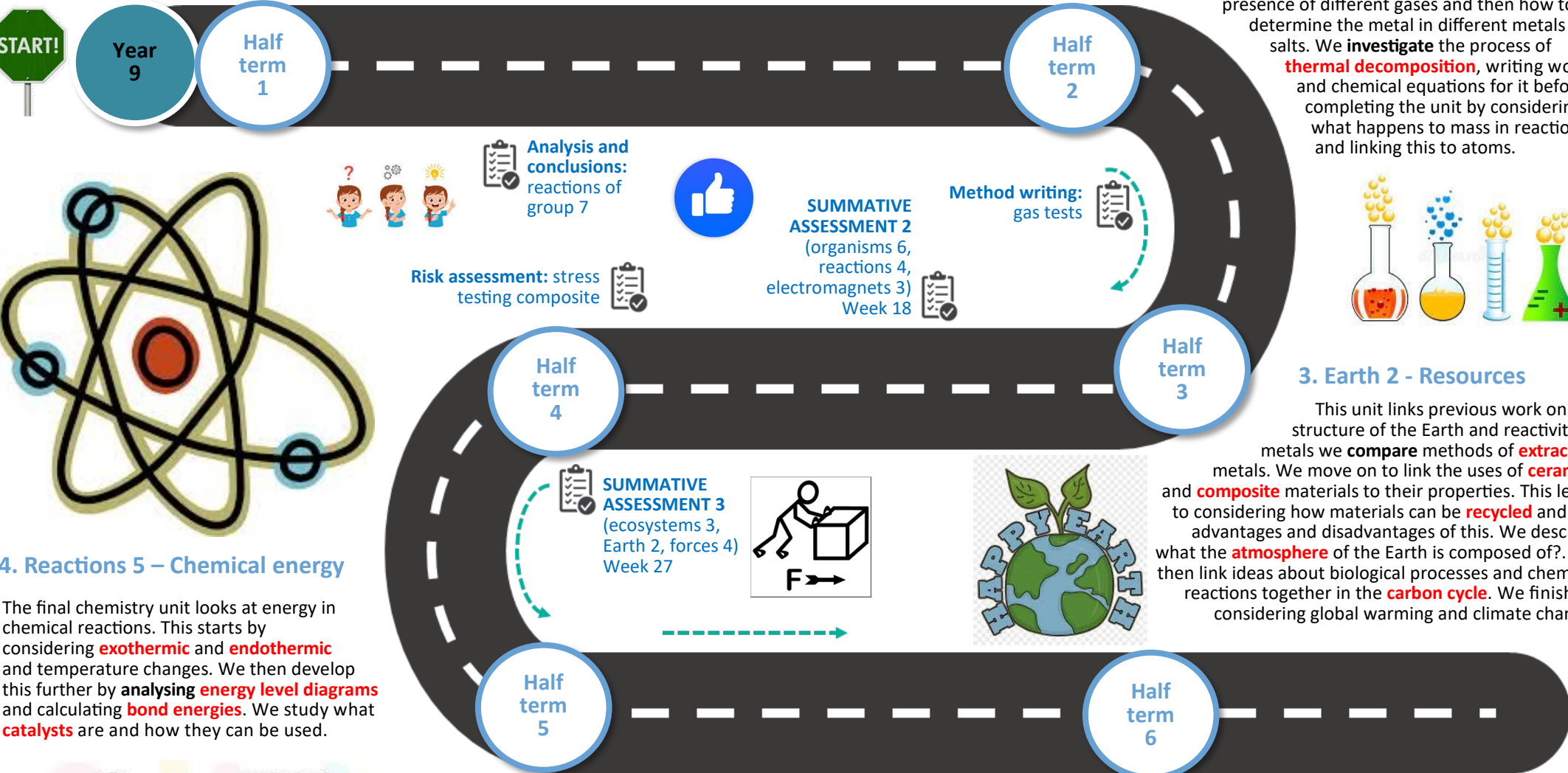
## 2. Reactions 4: further reactions

Continuing the work from Year 7 and Year 8 we look at chemical reactions in more detail. We start by looking at how to test for the presence of different gases and then how to determine the metal in different metals salts. We **investigate** the process of **thermal decomposition**, writing word and chemical equations for it before completing the unit by considering what happens to mass in reactions and linking this to atoms.



## 3. Earth 2 - Resources

This unit links previous work on the structure of the Earth and reactivity of metals we **compare** methods of **extracting** metals. We move on to link the uses of **ceramics** and **composite** materials to their properties. This leads to considering how materials can be **recycled** and the advantages and disadvantages of this. We describe what the **atmosphere** of the Earth is composed of?. We then link ideas about biological processes and chemical reactions together in the **carbon cycle**. We finish by considering global warming and climate change.



## 4. Reactions 5 – Chemical energy

The final chemistry unit looks at energy in chemical reactions. This starts by considering **exothermic** and **endothermic** and temperature changes. We then develop this further by **analysing energy level diagrams** and calculating **bond energies**. We study what **catalysts** are and how they can be used.

