



Knowledge Summary

Year 7 Term 4 2023/24

Science Chemistry Module Reactions



Essential Questions/Knowledge

- What are the possible hazards in a demonstration?
- How is combustion a reaction with oxygen?
- How can chemical changes be described by a model in which atoms in reactants rearrange to make products?
- How can thermal decomposition be described as a reaction?
- How can a chemical change be described?
- What is an exothermic reaction?

How students will be assessed on their knowledge

- Daily retrieval
- In-class tasks
- Extended writing questions
- End of unit assessments

Questions/Knowledge to deepen understanding

- What happens to the particles in chemical reactions such as those between a metal and oxygen?
- Compare the pros and cons of fuels in terms of their products of combustion.
- Devise a general rule for how a set of compounds thermally decomposes.
- What happens to the particles in chemical reactions such as those between a metal and oxygen?
- What are exothermic and endothermic reactions?
- Why does the temperature of the system decrease at first for an endothermic process?

Key Concepts

- Atoms in Chemical Reactions
- Combustion
- Thermal Decomposition
- Conservation of Mass
- Exothermic and Endothermic
- Energy Level Diagrams
- Bond Energies

Tier 2 and 3 vocabulary linked to the unit

- Atoms
- Molecules
- Particles
- Reactants
- Chemical Nomenclature
- Combustion
- Thermal Decomposition