



Subject: Science

Physics: Forces

This unit enables students to understand how forces interact and affect objects. They will learn that forces can be pushes, pulls or twists. They will identify balanced and unbalanced forces.

Key Performance Indicators

Students will be assessed to see if they:

- Can effectively use mathematical formulae
- Can draw and label key Physics diagrams
- Are able to explain the effects of balanced and unbalanced forces
- Can identify and describe energy transfers
- Can apply knowledge in context

Suggested Resources

Kerboodle: www.kerboodle.com – students have their own log in for this. They will need to select Activate 1 – Physics – Forces.

BBC Bitesize: <https://www.bbc.co.uk/education/guides/zttfyrd/revision>



Subject: Science

Chemistry: Elements, Atoms and Compounds

Here students are introduced to the Periodic table. They will be able to identify and describe the differences between an element, an atom and a compound.

Key Performance Indicators

Students will be assessed to see if they:

- Understand the physical changes in the particle model
- Can explain the role of diffusion within a given context
- Understand scientific notation such as symbols, scales and tables
- Can identify standard reactions and apply their knowledge to unfamiliar contexts
- Can apply knowledge in context

Suggested Resources

Kerboodle: www.kerboodle.com – students have their own log in for this. They will need to select Activate 1 – Chemistry – Elements – Atoms and compounds

BBC Bitesize: <https://www.bbc.co.uk/education/guides/zt2hqv4/revision>



Subject: Science

Chemistry: Reactions

This unit gives students a basic understanding of chemical reactions. Students will learn what happens when chemicals are reacted together and how to spot the signs of a chemical reaction. They will be able to write word and symbol equations for the reactions they have carried out and the tests for the products produced.

Key Performance Indicators

Students will be assessed to see if they:

- Understand the physical changes in the particle model
- Understanding scientific notation such as symbols, scales and tables
- Are able to explain chemical processes
- Can identify standard reactions and apply their knowledge to unfamiliar contexts
- Understand and apply the terms endothermic and exothermic
- Can apply knowledge in context

Suggested Resources

Kerboodle: www.kerboodle.com – students have their own log in for this. They will need to select Activate 1 – Chemistry – Reactions

BBC Bitesize: <https://www.bbc.co.uk/education/guides/zqd2mp3/revision>



Subject: Science

Biology: Health and Lifestyle

In this unit, students learn the importance of a balanced diet and the food groups that contribute towards this. They also focus on learning the organs associated with the digestive system and the effects of drugs, alcohol and smoking on the body.

Key Performance Indicators

Students will be assessed to see if they can:

- Identify and describe the functions of the digestive system and the gas exchange system.
- Describe the importance and components of a Healthy Balanced Diet
- Describe and compare the interdependence of organisms.

Suggested Resources

Kerboodle: www.kerboodle.com – students have their own log in for this. They will need to select Activate 2 – Biology – Health and Lifestyle

BBC Bitesize: <https://www.bbc.co.uk/education/guides/zyjx6sg/revision>

<https://www.bbc.co.uk/education/guides/zy2hvp4/revision>



Subject: Science

Physics: Energy

This unit focuses on the different forms of energy and how energy is transformed from one form into another. They will also spend some time looking at energy calculations and efficiencies.

Key Performance Indicators

Students will be assessed to see if they can:

- Use the particle model to explain energy transfers. To include; conduction, convection and radiation.
- Explain the terms Work, Energy and Power. Apply them appropriately.

Suggested Resources

Kerboodle: www.kerboodle.com – students have their own log in for this. They will need to select Activate 2 – Physics - Energy

BBC Bitesize: <https://www.bbc.co.uk/education/guides/zyfgr82/revision>