

YEAR 7

TEACHER A

Key Questions:

What is the pH scale?

What is a neutralisation reaction?

What is the difference between elements and compounds?

How can we describe what happens in a chemical reaction?

Acids & Alkali

Key Questions:

What is sound and how does it travel?

How do we detect and analyse sounds?

How can we use sound to measure distance?

How do we hear sounds?

Sound

Key Questions:

What are the scientific names & functions of the main parts of the male & female reproductive system?

What is fertilisation & how does it lead to a baby being born?

Describe changes to the male & female body that occur during puberty?

Reproduction

TEACHER B

Key Questions:

Who is Hooke? What does his law have to do with springs?

Push and pulls – What makes them have a resultant force?

Can you design the ultimate fuel efficient car?

What is wrong with saying summers are hot because we are nearer the sun?

Forces & Space

Key Questions:

What are living things made of?

How do smells travel?

What on earth is a mandible?

Why are some drugs be called 'recreational', and what do they do to the body?

Cell Muscles & Bones

Key Questions:

How does variation keep animals alive?

Food chains and food webs. Are they really different?

What on earth?

What type of rocks can be found on the cliffs of King Edwards Bay?

The World Around Us

Interleaved strands

Biology

Chemistry

Physics

YEAR 8

TEACHER A

Key Questions:

- Why is energy so difficult to define?*
- Why does matter matter?*
- How does heat go from one place to another?*
- What causes pressure?*

Fluids & Energy Transfer

Key Questions:

- Why is a healthy diet important?*
- How does food provide my body with energy?*
- Why is our respiratory system important for our survival?*
- What is the purpose of respiration?*

Nutrition, Breathing & Respiration

Key Questions:

- What causes static electricity & what are the dangers of this?*
- What are the rules for current & potential difference in a series & parallel circuit?*
- Can we test materials to discover if they are an insulator or conductor?*
- What is resistance & can we measure it?*

Electricity

TEACHER B

Key Questions:

- What symptoms does a chemical reaction have?*
- Why is the periodic table the cornerstone of chemistry?*
- What is the metal reactivity series and why is carbon in it?*
- Why do we choose certain materials?*

Periodic Table & Reactivity

Key Questions:

- What is the difference between specular & diffuse reflection?*
- What is refraction & how does it occur?*
- How does light make a rainbow?*
- What do gamma radiation & radio waves have in common?*

Light

Key Questions:

- What is a chemical reaction?*
- Why do we need to make things sustainable?*
- Where does carbon dioxide come from?*
- Why can it be a problem?*
- How do plants grow & reproduce?*

The Environment, Combustion & Ecosystems

Interleaved strands

Biology

Chemistry

Physics