



YEAR 7 SCIENCE

LEARNING JOURNEY

Support. Believe. Achieve.



AUTUMN TERM

START

1



INTRODUCTION TO SCIENCE

- What is science?
- Scientific enquiries
- Safety in the lab
- Science in everyday life

GCSE Link: Nature of Science
Careers Link: All careers in science and technology

2



WORKING SCIENTIFICALLY

- Planning investigations
- Variables
- Collecting data
- Analysing and evaluating

GCSE Link: Working Scientifically
Careers Link: Research Scientist, Laboratory Technician, Forensic Scientist

3



CELLS

- Animal and plant cells
- Specialised cells
- Microscopy
- Cell structures

GCSE Link: Cell Biology
Careers Link: Doctor, Nurse, Biomedical Scientist, Veterinarian

4



PARTICLES AND THEIR BEHAVIOUR

- The particle model
- Changes of state
- Diffusion
- Density

GCSE Link: States of Matter
Careers Link: Chemical Engineer, Materials Scientist, Pharmacist

SPRING TERM

5



STRUCTURE AND FUNCTION OF BODY SYSTEMS

- Digestive system
- Circulatory system
- Respiratory system
- Maintaining health

GCSE Link: Organisation
Careers Link: Doctor, Physiotherapist, Sports Therapist, Paramedic

6



ELEMENTS, ATOMS AND COMPOUNDS

- Elements and symbols
- Atoms and structure
- Compounds
- Mixtures

GCSE Link: Atomic Structure and The Periodic Table
Careers Link: Chemist, Materials Scientist, Research Scientist

7



FORCES

- Contact forces
- Non-contact forces
- Gravity
- Friction

GCSE Link: Forces and Motion
Careers Link: Engineer, Pilot, Sport Scientist

8



LIGHT

- Reflection
- Refraction
- The eye
- Colour

GCSE Link: Waves
Careers Link: Optician, Physicist, Photographer

SUMMER TERM

9



SOUND

- How sound is made
- Pitch and volume
- Speed of sound
- Uses of sound

GCSE Link: Waves
Careers Link: Audiologist, Sound Engineer, Musician

10



REACTIONS

- Chemical reactions
- Word equations
- Exothermic and endothermic reactions
- Reactivity

GCSE Link: Chemical Reactions
Careers Link: Chemist, Pharmacist, Chemical Engineer

11



REPRODUCTION

- Human reproduction
- Fertilisation
- Development
- Puberty

GCSE Link: Reproduction and Genetics
Careers Link: Midwife, Doctor, Health Professional

12



SPACE

- The Solar System
- Stars and galaxies
- Day and night
- Space exploration

GCSE Link: Earth and Space
Careers Link: Astronomer, Astrophysicist, Space Engineer

READY FOR YEAR 8!



CAREERS SPOTLIGHT



ATHLETE

Athletes use science every day to improve performance through training, nutrition, biomechanics and recovery.



FIREFIGHTER

Firefighters use science to understand fire behaviour, use equipment safely and protect people and the environment.

KEY SKILLS DEVELOPED THROUGHOUT YEAR 7



Practical Investigation



Data Analysis



Problem Solving



Scientific Communication



Scientific Literacy



Critical Thinking

LOOKING AHEAD

By the end of Year 7, students will have developed the knowledge and skills needed to explore more complex ideas in Biology, Chemistry and Physics and continue their journey towards GCSE Science.