

## YEAR 8 LEARNING JOURNEY INFORMATION

# SCIENCE

**Biodiversity**  
**Chemical reactions**  
**Digestive System**



Autumn Term 1

### Knowledge

I will learn about interdependence of organisms in food webs and the varying life on earth. I will learn about chemical reactions including combustion, oxidation and decomposition and how these are displayed in formulae. I will learn about how food is digested in humans including the roles of different organs.

### Skill

I will learn to write word and symbol equations for chemical reactions.

**Reproduction in Plants**  
**Earth's Resources**  
**Breathing and Respiration**



Spring Term 2

### Knowledge

I will learn how plants reproduce and the importance of pollination for food security. I will learn about the structure of the earth, the different types of rocks and how they are cycled. I will learn about how we breathe, gas exchange and respiration.

### Skill

I will learn how to analyse data from a practical investigation on seed dispersal.

**Moving by Force**  
**Diet and Exercise**  
**Making Images**  
**Species and Classification**



Autumn Term 2

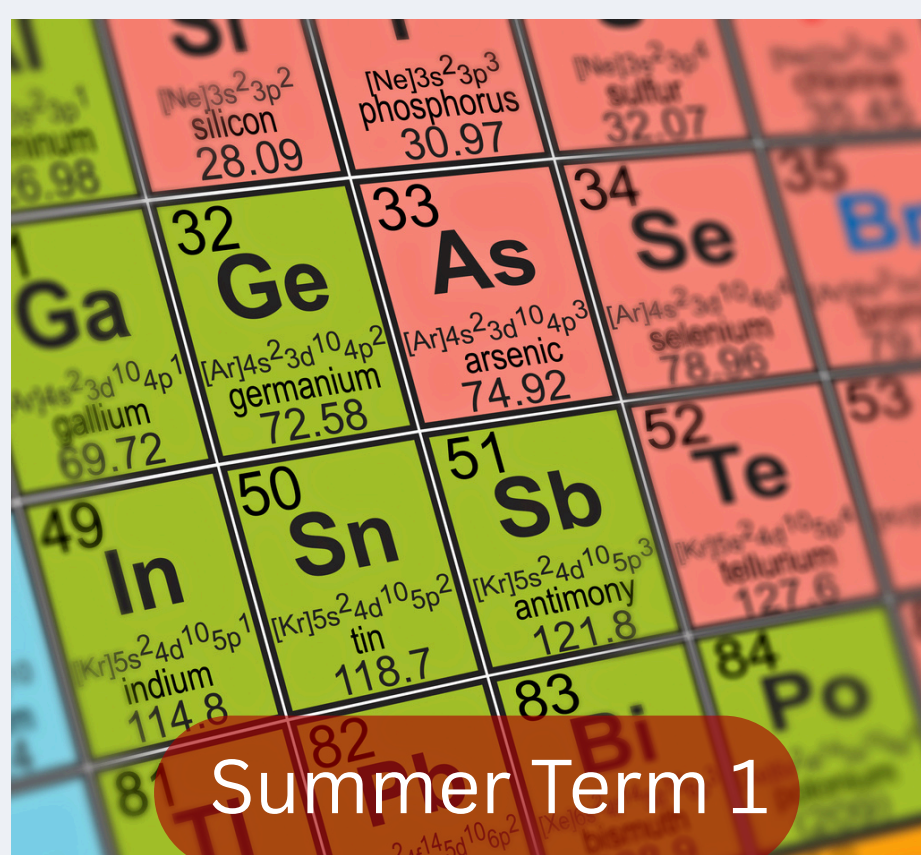
### Knowledge

I will learn how forces affect the movement and speed of an object and link this to parachutes and streamlining. I will learn the component of a balanced diet and why diet and exercise are important. I will learn how images are formed from waves of different coloured light and how simple cameras work. I will learn what a species is and how different organisms are classified.

### Skill

I will learn how to use ray boxes and how to make a pinhole camera.

**Magnets and Electromagnets**  
**Disease and Drugs**  
**Patterns in the Periodic Table**



Summer Term 1

### Knowledge

I will learn about magnetic fields and how magnets interact. I will learn about pathogens, lifestyle diseases and how drugs can affect the human body. I will learn about the arrangement of the periodic table and the properties of the different groups.

### Skill

I will learn how to build an electromagnet.

**Fuels and Energetics**  
**Variation**  
**Waves**



Spring Term 1

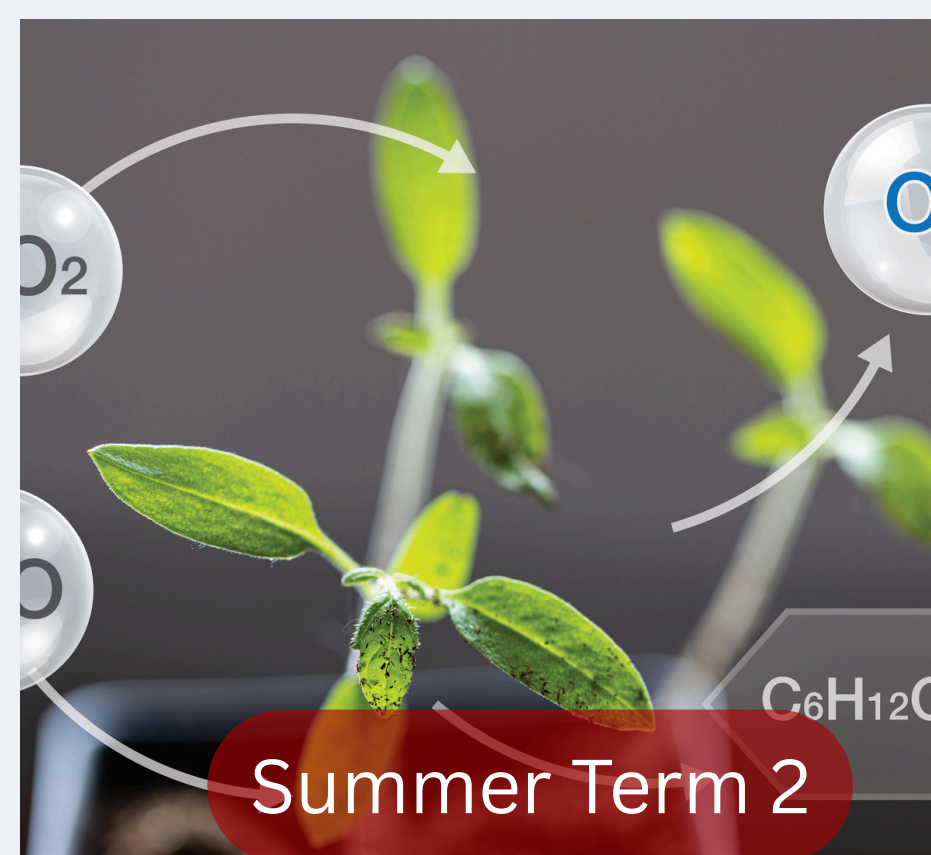
### Knowledge

I will learn about heating and cooling during chemical reactions and how these reactions are used in fuels and power stations. I will learn about variation in living things and how this is passed from parents to offspring. I will learn about sound; how sound waves travel and human hearing.

### Skill

I will learn how to collect and display continuous and discontinuous data.

**Plant Nutrition and Photosynthesis**  
**Acids and Bases**  
**Climate Change and Greenhouse Gases**



Summer Term 2

### Knowledge

I will learn about how plants produce their own food during photosynthesis and how this provides energy for other organisms. I will learn about reactions of acids and bases. I will learn about how greenhouse gases lead to climate change and the involvement of humans in this.

### Skill

I will learn how to safely use corrosive chemicals in neutralisation reactions.