

### Cells and Respiration

1

What are the two main types of cells? What is respiration? What is photosynthesis?

#### **Forces**

What are forces? How can we represent them? What is the difference between mass and weight?

### Chemical Reactions

How can we represent chemical reactions? What are the key signs of a chemical change?

### Specialised Cells and Reproduction

Are all our cells the same? How are they specialised? What are sex cells and why are they so important?

### Motion and Mechanics

How can we measure and describe motion? How do forces affect the motion of objects?

KS3

Year 7 and 8



# Particles and Physical Changes

What is diffusion? What does it mean to change state? What is the difference between a physical and a chemical change?

### Ecology and Evolution

All organisms in an ecosystem are dependent on each other. But how? Why? How have organisms evolved over time?

### Energy and Electricity

What are the laws of energy transformations? Which energy resources should we use to generate electricity? Why?

### Elements and the Periodic Table

All molecules can be ordered into elements, compounds and mixtures. How do we arrange our elements? What can we tell about an element from its *group* and *period*.

## Interdependence and the environment

How do scientists study the environment? Why is it so important? What can we do with our findings? How have humans impacted biodiversity on earth?