

**YR7**

**Y7 UNIT 1**  
**Particles**

What is an atom?  
How can the particle model show substances in different states?



**Y7 UNIT 2**

**Energy resources**

What are some examples of renewable and non-renewable energy sources?  
How does energy transfer?



**Y7 UNIT 3**

**Chemical reactions**

What are chemical reactions?  
What is combustion and why is it useful?



**Y7 UNIT 7**

**Light**

What is reflection?  
How does the human eye work?



**Y7 UNIT 6**

**Elements and compounds**

What is the difference between an element and a compound?  
How are all known elements displayed?

**Y7 UNIT 5**

**Space**

What objects are in our Solar System?  
How does a Solar eclipse happen?

**Y7 UNIT 4**  
**Motion**

What happens when forces are unbalanced?  
How is speed calculated?

**Y7 UNIT 8**

**Acids and alkalis**

What is a difference between acids and alkalis?  
How can you measure whether a substance is acidic or alkaline?

**Y7 UNIT 9**

**Circuits**

What is the main difference between series and parallel circuits?  
How does static electricity build up?



**Y7 UNIT 10**

**Earth structure**

What is the structure of the Earth?  
How do sedimentary rocks form?

**YR8**

**Y8 UNIT 1**

**Contact forces**

What is friction?  
How can you measure the stretching of a spring?



**Y8 UNIT 2**

**Separating mixtures**

What is a mixture?  
How does filtering separate solids from liquids?



**Y8 UNIT 3**

**Climate**

What gases are in the atmosphere?  
How are humans contributing to global warming?

**Y8 UNIT 5**

**Metals and non-metals**

What are properties of metals?  
How can you create a reactivity series?

**Y8 UNIT 4**

**Transferring energy**

What is meant by conduction?  
How can a house be insulated to prevent energy loss?

**Y8 UNIT 6**

**Sound**

What are the differences between transverse and longitudinal waves?  
How does the human body detect sound?

**Y8 UNIT 7**

**The Periodic table**

What is the periodic table?  
How does the pattern of reactivity change in group 1?

**Y8 UNIT 8**

**Resources**

Where do we get metal from?  
What can be recycled and why is it important?



**Y8 UNIT 9**

**Magnetism**

What are electromagnets?  
How can electromagnets be used?



**YR9**

**Y9 UNIT 1**

**Working scientifically**

What are variables?  
How do I plan an investigation?  
How do I present data?  
How do I analyse data?

**Y9 UNIT 2**

**Using the atom**

How are particles arranged in an atom?  
How are Rf values calculated in chromatography?



**Y9 UNIT 4**

**Bonding and structure**

How do ionic and covalent bonds form?  
How do the structures of ionic lattices and simple molecules differ?

**Y9 UNIT 3**

**Changes of state**

What is specific heat capacity?  
How does an increase in temperature affect pressure of a gas?

**Y9 UNIT 5**

**Monitoring motion**

What is the difference between speed and velocity?  
How can you measure acceleration?



**KS4**