

Science Learning Journey Year 7



Temperance Term

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8		
Topic	P1.1 Forces and C1.1 Particles and their Behaviour.									
Challenge Objective and Content (for all learners)	Describe how a range of forces act on given examples. Describe pairs of forces acting on an object. Describe the effects of gravitational forces on Earth and in Space Use particle model to explain properties of substances and the three states of matter. Use particle model to explain change of state, melting and freezing, boiling and melting points, diffusion and pressure.									
Inspire Opportunities	Apply Hooke's Law to make quantitative predictions with unfamiliar materials. Explain why heat may not cause a temperature change								H	
Assessment Opportunities		End of Topic Tests								

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6			
Торіс	B1.1 Cells and C1.2 Elements, Atoms and Compounds.								
Challenge Objective and Content (for all learners)	Describe the structure and function of organelles in plant and animal cells. Link structure and function of specialist cells. Calculate magnification and use a microscope. Describe unicellular organisms. Use properties to determine use and explain the difference between elements and compound. Use particles diagrams to explain why compounds have different properties than original elements.								
Inspire Opportunities	Explain and describe the similarities and differences of plant and animal cells. Compare properties of compounds to their structure.								
Assessment Opportunities	End of Topic Tests and Temperance Term Assessment								



Science Learning Journey Year 7



Justice Term

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6				
Topic	P1.2 Sound and B1.2 Structure and Function of Body Systems									
Challenge Objective and Content (for all learners)	Explain how we hear. Compare the properties of waves and their features. Describe sound as the transfer of energy through vibrations and explain why sound cannot travel through a vacuum. Explain how parts of the ear transfer vibrations. Describe and explain the role of human body systems. Explain in detail the hierarchy of organisation in a multicellular organism. Describe and explain inhaling and exhaling, measure lung volume and interpret data.									
Inspire Opportunities	Compare and contrast waves of different frequency using a diagram Analyse the usefulness of the structure and function of skeleton tissue and joints against their function.									
Assessment Opportunities	End of Topic Tests									

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
Topic	C1.3 Reactions and B1.3 Reproduction							
Challenge Objective and Content (for all learners)	Experiment and discover the properties of substances. State the difference between chemical and physical changes and give examples Describe and explain the role of the reproductive systems. Explain fertilisation and the role of pollination in plants. Describe the role of individual organs within the reproductive system.							
Inspire Opportunities	Compare and contrast the differences between physical and chemical changes, with examples as evidence. Explain the function of male and female reproductive organs within the reproductive system as a functioning system							
Assessment Opportunities	End of Topic Tests and Justice Term Assessment							



Science Learning Journey Year 7



Courage Term

	Week 1	Week 2	Week 3	Week 4	Week 5	
Торіс			5			
Challenge Objective and Content (for all learners)	Explain how we see Compare a simple ca Predict how coloured Predict the path of ligi Apply the concept of s	of Year	HALF TERM			
Inspire Opportunities	Explain why humans	can see different coloured	light through lenses and	l filters	End Asse	H
Assessment Opportunities		End of To	opic Tests			

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6			
Topic	C1.4 Acids and Alkalis and P1.4 Space								
Challenge Objective and Content (for all learners)	Experiment and identify pH values. Use the pH scale to measure acidity and alkalinity and describe how indicators are used to identify acidic or alkaline solutions. Describe the structure of the universe. Describe the structure of the Universe in detail, in order of size and of distance away from the Earth. Explain how the properties and features of planets are linked to their place in the Solar System. Predict the effect of the Earth's tilt on temperature and day-length								
Inspire Opportunities	Analyses the difference in accuracy between two techniques used to measure pH. Explain why it is possible to see an eclipse on some of the planets in the Solar System but not others								
Assessment Opportunities	End of Topic Tests								