Long Term Plan Year 7 2020-21

Temperance Term

W/C	7th September	14th September	21th September	28th September	5th October	12th October	19th October	
Topic	**Investigating Science**			**Cells (B1.1)**				HALF TERM
	Introduction to science: Understand Health and Safety and risk assessment. Graph drawing and conclusions			Link structure and function of specialist cells. Calculate magnification and use a microscope. Describe unicellular organisms.				
Challenge	Interpret data and analysing results.			Explain and describe the similarities and differences of plant and animal cells.				
Assessment	End of Unit exams			End of Unit exams				
W/C	2nd November	9th November	16th November	23rd November	30th November	7th December		CHRISTMAS
Topic	**Forces and Space (P1.1 and P1.4)**							
	Describe pairs of forces acting on an object. Explain how the effect of gravity changes moving away from Earth and why the speed or direction of motion of objects can change using force arrows. Use the speed of light to describe distances between astronomical objects. 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							
Challenge	Apply Hooke's Law to make quantitative predictions with unfamiliar materials. Explain why it is possible to see an eclipse on some of the planets in the Solar System but not others.							
Assessment	End of Unit exams							

Long Term Plan Year 7 2020-21

Justice Term

W/C	4th January	11th January	18st January	25th January	1st February	8th February	
Topic	**Body Systems and Reproduction (B1.2 and B1.3)**						HALF TERM
	Explain in detail the hierarchy of organisation in a multicellular organism, describe and explain inhaling/exhaling, measure lung volume and interpret data. Explain fertilisation and the role of pollination in plants. Describe the role of individual organs within the reproductive system.						
Challenge	Analyse the usefulness of the structure and function of skeleton tissue and joints against their function. Explain the function of male and female reproductive organs within the reproductive system as a functioning system.						
Assessment	End of unit exams						
W/C	22nd February	1st March	8th March	15th March	22nd March	29th March	EASTER
Topic	**Particles and Elements (C1.1 and C1.2)**						
	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. Use properties to determine use, explain the difference between elements/compound. Use particles diagrams to explain why compounds have different properties than original elements.						
Challenge	Explain why heat may not cause a temperature change Compare properties of compounds to their structure.						
Assessment	End of unit exams						

Long Term Plan Year 7 2020-21

Chichester Free School
Nurture • Challenge • Inspire

Courage Term

W/C	19th April	26th April	3rd May	10th May	17th May	24th May	HALF TERM
Topic	**Chemical Reactions (C1.3 and C1.4)**						
	State the difference between chemical and physical changes and give examples						
Challenge	Compare and contrast the differences between physical and chemical changes, with examples as evidence						
Assessment	End of unit exams						
W/C	7th June	14th June	21st June	28th June	5th July	12th July	SUMMER
Topic	**Light and Sound (P1.3 and P1.2)**						
	KS3 Exams		Compare a simple camera with the eye. Predict how coloured objects will appear given different coloured lights and filters. Predict the path of light using a model of light refraction. apply the concept of specular reflection and diffuse scattering to models and other examples. 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,				
Challenge			Explain why humans can see different coloured light through lenses and filters Compare and contrast waves of different frequency using a diagram				
Assessment			End of unit exams				