



#### **Temperance Term**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	
Topic	P0 Int	roduction	to GCSE Ele	ctricity an	d Introduct	ion to GCS	E B0 Infect	ion and	
				Res	ponse				Σ
Challenge Objective and Content (for all learners)	-Calculate resistance and a -RP – Resistance of a wire. B0 – Explain how diseases	nalyse the effect of increasing t caused by pathogens (viruses, b defend us from pathogens.	nd potential difference in series he length of wire. pacteria, fungi and protists) are						IALF TER
Inspire Opportunities	·	e changes through different cor ay choose not to get vaccinated	mponents such as a filament lar d. Explain herd immunity.	np.					I
Assessment Opportunities				End of	Topic Tests				

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6		
Topic	CO Introduction to GCSE Electrolysis and B1 Cell Biology							
Challenge Objective and Content (for all learners)	-Write half equations (History Research Programs) -Describe the structure of the structure	electrolysis, stating what in T)  able to, explain how the soft eukaryotic and prokaryotic, milli, micro ad nano. It is an	al and plant cells. le. anations of how cells divide. the use of stem cells. iffusion and osmosis	of cell relate to their funct ure and function of specia	. •	organ system, or the		





Inspire	CO – Consider the practical uses of electrolysis, such as electroplating.	
Opportunities	B1 - Use estimations and explain when they should be used to judge the relative size or area of sub-cellular structures.	
Assessment	End of Topic Tests	
Opportunities		

#### **Justice Term**

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
	B1 Cell Biology and C1 Atomic Structure C1 Atomic						-
Topic		and the Pe	riodic Tabl	e	Structure	e and the	
ТОРІС					Periodic <sup>-</sup>	Table and	
					P1 Er	nergy	
Challenge Objective and Content (for all learners)	function in a tissue, and a Describe the structure of specialised cells.  -WS 4.4 Use prefixes cerus 1.2 Recognise, draward 1.2 Recognise, draward 1.2 Use microscopes Explain the process of community 1.3 Evaluate the process 1.3 Evaluate the process 1.2 Draw and interport 1.2 Draward interport 1.2 Draward 1.4 Safe use of a range 1.4 Safe use of a range 1.5 Processing 1.5 Process	organ or organ system, or of eukaryotic and prokaryonti, milli, micro ad nano. It is and interpret images of control of the color of th	ells.  all and plant cells.  le.  anations of how cells divide.  the use of stem cells.  iffusion and osmosis  mass of plant tissue.  the atom and periodic table equations. chemical mixtures	cure and function of	C1 — Describe the devel the atom and periodic ta -Represent chemical read symbol equationsAT4 Safe use of a range chemical mixtures -WS 1.1,1.6 Describe how theories develop over tin  P1 - There are changes is stored when a system ch be able to describe all th the way energy is stored for common situations. I  a movin obstacle an object constant ovehicle	dopment and structure of table. ctions as word and of equipment to separate w scientific methods and me in the way energy is nanges. Students should ne changes involved in when a system changes, For example: ct projected upwards g object hitting an ect accelerated by a t force e slowing down water to a boil in an kettle. e amount of energy	





		-MS 3b,c Calculate kinetic energy, elastic potential energy and gravitational potential energy -RP1 Investigate the specific heat capacity of one or more materials -MS 3b, c Calculate power -Investigate thermal conductivity using rods of different materials -MS 1a,c, 3b,c Calculate and use efficiency values as a decimal or as a percentage
Inspire Opportunities	B1 - Use estimations and explain when they should be used to judge the relative size or area of subcellular structures.  C1 - Experimentally determine the empirical formula of an ionic compound from a given model or diagram that shows the ions in the structure	P1 - Experimentally compare and contrast two electric motors that both lift the same weight through the same height but one does it faster than the other C1 - Experimentally determine the empirical formula of an ionic compound from a given model or diagram that shows the ions in the structure
Assessment Opportunities	End of Topic Tests	End of Topic Tests

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
Topic	C1 Aton	nic Structu	re and the	Periodic	P1 Ene	rgy and	
торіс		Table and	P1 Energy		Revi	ision	
Challenge Objective and Content (for all learners)	-Represent chemical rea-AT4 Safe use of a range -WS 1.1,1.6 Describe how  P1 - There are changes to describe all the changes ituations. For example:  an objection and a nobjection of the changes ituations.  an objection of the changes ituations and objection of the changes ituations.  an objection of the changes ituations are changes ituations.  an objection of the changes ituations.  and objection of the changes ituations.  and objection of the changes ituations.  and objection of the changes ituations.	ctions as word and symbol of equipment to separate w scientific methods and the scientific methods are since the scientific methods are slowing down as water to a boil in an electer amount of energy associated.	chemical mixtures neories develop over time  d when a system changes. S ergy is stored when a system e nt force ric kettle. ated with a moving object or energy and gravitational por	Students should be able m changes, for common	for common situations. I  an object a moving obstacle an object constant a vehicle bringing electric -WS1.2, 4.3 Calculate the associated with a moving spring	nanges. Students should the changes involved in I when a system changes, For example: It projected upwards g object hitting an It accelerated by a t force e slowing down water to a boil in an kettle. e amount of energy	EASTER





	-Investigate thermal conductivity using rods of different materials	-RP1 Investigate the specific heat capacity of one
	-MS 1a,c, 3b,c Calculate and use efficiency values as a decimal or as a percentage	or more materials
		-MS 3b, c Calculate power
		-Investigate thermal conductivity using rods of
		different materials
		-MS 1a,c, 3b,c Calculate and use efficiency values
		as a decimal or as a percentage
	P1 - Experimentally compare and contrast two electric motors that both lift the same weight through	P1 - Experimentally compare and contrast two
Inspire	the same height but one does it faster than the other	electric motors that both lift the same weight
Opportunities	C1 - Experimentally determine the empirical formula of an ionic compound from a given model or	through the same height but one does it faster than the other
	diagram that shows the ions in the structure	than the other
	End of Topic Tests	
Assessment	End of Topic Tests	
Opportunities		





#### **Courage Term**

	Week 1	Week 2	Week 3	Week 4	Week 5	
Topic	F	P1 Energy a	and Revision	n		
Challenge Objective and Content (for all learners)	to describe all the change situations. For example  an obje a movir an obje a vehicl bringing -WS1.2, 4.3 Calculate th -MS 3b,c Calculate kinet -RP1 Investigate the spe -MS 3b, c Calculate pow -Investigate thermal cor	ges involved in the way ender ct projected upwards ing object hitting an obstact ct accelerated by a constant e slowing down g water to a boil in an elect e amount of energy associtic energy, elastic potential cific heat capacity of one coer	nt force tric kettle. ated with a moving object energy and gravitational p or more materials	em changes, for common or a stretched spring otential energy	of Year Assessments	HALF TERM
Inspire Opportunities	· ·	npare and contrast two ele e does it faster than the otl	ectric motors that both lift ther	he same weight through	End	
Assessment Opportunities		End of <sup>1</sup>	Topic Tests			

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	
Tania	P1 Ene	ergy C2 Bo	nding, Stru	cture, and	the Proper	rties of	
Topic			Ma	tter			ER
Challenge Objective and Content (for all learners)	energy is stored when a  an object a moving an object a vehicle bringing -WS1.2, 4.3 Calculate the	system changes, for come transport projected upwards group object hitting an obstact accelerated by a constact accelerated by a constact slowing down greater to a boil in an elect amount of energy associte cenergy, elastic potential cific heat capacity of one	nt force tric kettle. iated with a moving object of l energy and gravitational po	e: or a stretched spring	o describe all the changes i	nvolved in the way	SUMM





	nvestigate thermal conductivity using rods of different materials  AS 1a,c, 3b,c Calculate and use efficiency values as a decimal or as a percentage					
	C2 – Explain how atoms are held together in structures and describe their properties.					
	<ul> <li>Describe and draw ionic, covalent and metallic bonding.</li> <li>MS 5b Represent 2D and 3D forms of bonding</li> <li>Draw dot and cross diagrams for ionic and covalent bonds.</li> <li>Describe the structures of covalent and ionic bonds, including giant structures.</li> </ul>					
Inspire Opportunities	P1 - Experimentally compare and contrast two electric motors that both lift the same weight through the same height but one does it faster than the other C2 - Students should consider advantages and disadvantages of the applications of these nanoparticulate materials, but do not need to know specific examples or properties other than those specified.					
Assessment Opportunities	End of Topic Tests					