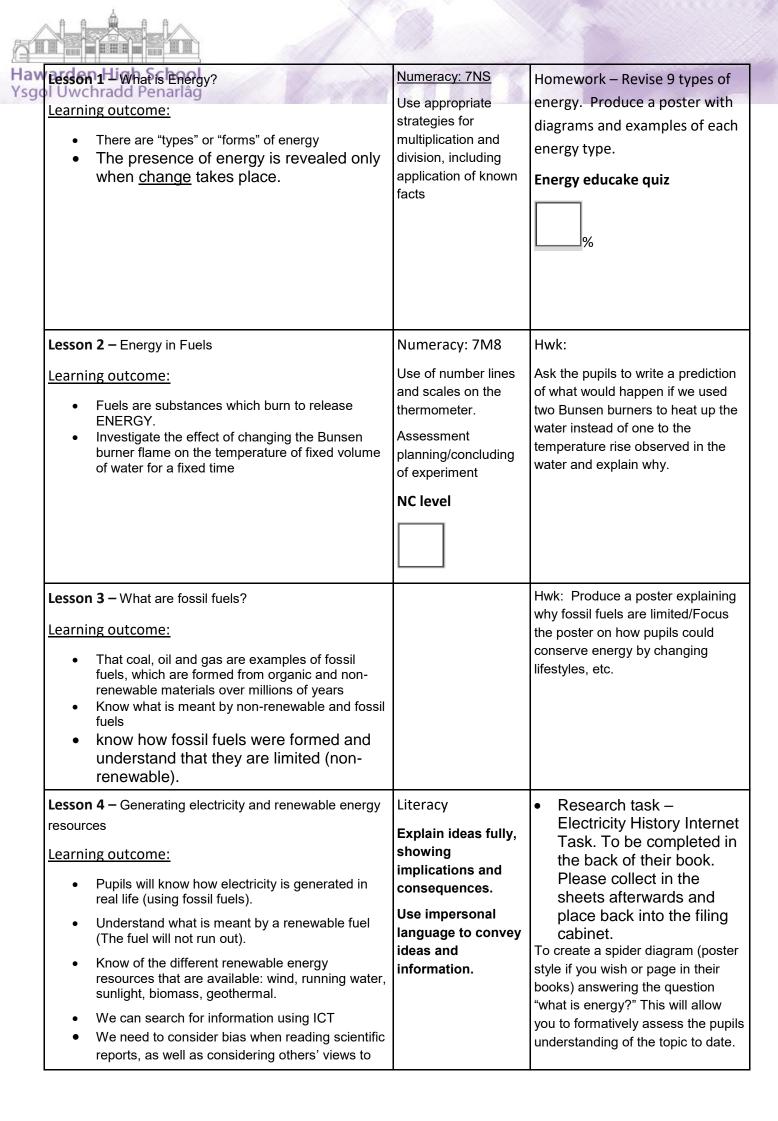
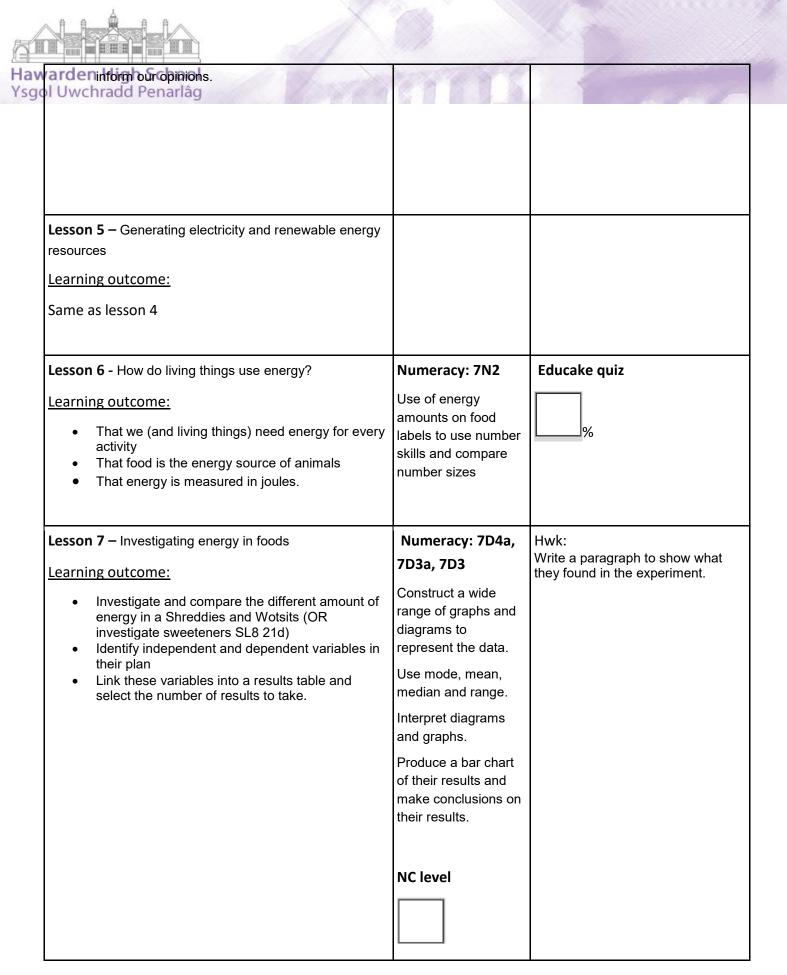


Subject Learning Program 2019-2020

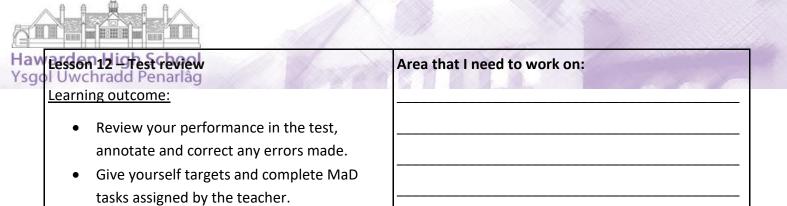
Pwnc:			Topic/ Topig:
Science	7		Energy
kills, Knowl	edge and Understanding to be develope	d:	Key Terms/ words:
✓ Comm ✓ Enquir variable be red ✓ Devel other ✓ Refled impro ✓ Devel ✓ Devel ✓ How red ✓ How red ✓ How red ✓ How feren ✓ Learn can b	nunication - Develop their communication skiring - Predictions, identifying independent coles, identifying the number of observations corded oping - Using prior knowledge to explain lines is views to inform opinions / decisions cting - Evaluating outcomes against success vements made to methods, linking learning lop your communication skills. It lop your research skills and ability to world evices work by energy transfers benewable and non-renewable energy resour ate electricity food is used as a fuel by the body. Interdependence of organisms and use of formal extended the second content of the second content	ills and dependent s / measurements to ks, considering s criteria, justifying to other situations k with others. can be stored ces can be used to od chains to show ays in which energy	Energy, Light, Energy change, Potential, Sound, kinetic, light, heat, nuclear, electrical,, chemical, elastic, gravitational, fuel, Fossil fuels, Non- renewable, renewable, electricity, mean results, energy transfer, aim, variables, independent variable, dependent variable, control variables, method, safety, results, analysis, evaluation.
✓ how f	food is used by the body as a fuel during r	respiration.	

Assesu





Learning outcome: • write up the experiment with key sections/headings (aim, independent variable, dependent variable, control variables, safety, method, results, graph, analysis, evaluation) and conclude which cereal had the most energy. • Describe the energy changes that took place in the experiment.	Numeracy: 7D4a, 7D3a, 7D3 Construct a wide range of graphs. Use mode, mean, median and range. Calculate mean results. Interpret diagrams and graphs.	Hwk - Write a paragraph to show what they found in the experiment.
 Learning outcome: Do the energy chain by using prior knowledge. Identify the energy needs of different people by interpreting data. Interpret the data and give a basic explanation of it to highlight it as information. Link the information to prior learning. Predict what other people's energy intake may be depending on their lifestyle. 	Numeracy: 7U4 Interpretation of a numeric set of data	Educake quiz
Learning outcome: Provide feedback to the teacher based on the level / comments provided by the teacher. Identify ways to improve work. Learning outcome: Learning outcome: Answer questions on the Energy.	Literacy Making corrections to spelling/grammar. Test score	Revise for end of topic test.





Subject Learning Plans 2019-2020

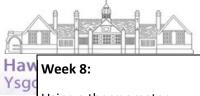
<u>Subject:</u>	<u>Year:</u>	<u> 7</u>	erm:	<u>Topic:</u>	
<u>Pwnc:</u>	<u>Blwyddyn:</u>	<u>Tymor:</u>		<u>Topig:</u>	
Science	7	Αι	ıtumn	Solids, liquids and gases	
Skills, Knowledge and Understanding to be developed:			Key Terms/Words:		
Skills =			Bunsen burner	Solids	
To use a Bunsen burn	ner, thermometer, measuring	cylinder	Thermometer	Liquids	
and top pan balance			Balance	Gases	
Develop communication skills.			Particles		
Identify trends and patternsMake simple observations			Soluble		
Knowledge =			Insoluble		
The properties of sol	ids, liquids and gases.		Melting		
To use the particle model to explain expansion and contraction.		d	Boiling		
To use the particle model to explain changes of state.			Condensation		
Understanding =			Evaporation		
 Classify materials as solid, liquid or gas. 			Expanding		
The effect of heating and cooling a substance.			Contracting		
Pure substances have fixed melting and boiling points.			Diffusion		
 The rate of diffusion in a liquid and a gas are different. Mass is conserved when a solute is added to a solvent. 					
- Iviass is conserved w	TIETI a solute is added to a solv	/EIIL.			
Learning outcomes and success	s criteria:	Assessment / Skills	Homework:		
Deilliannau dysgu a meini prawf llwyddo:			Gwaith Cartref:		
		Asesu/Sgilia			

u

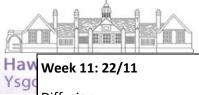
Wweer 1: High School Of Uwchradd Penarlâg Safety in the lab.	611	
Learning outcome =		
 To understand safety rules and why they are necessary. To recognise unsafe behaviour in the lab. 		
Success Criteria =		
 To list a set of safety rules for the lab and give reasons. 		
Week 2:		Bunsen burner homework sheet.
Lighting and using a Bunsen.		
Learning outcome =		
 To name the different parts of a Bunsen burner. To light a Bunsen Burner safely. To name the three types of flames. Success Criteria =		
 To use a Bunsen Burner and to be able to change the type of flame depending on what you are heating. 	2	
Week 3:		
Heating solids and liquids.		
Learning outcome =		
• To identify which flame to use when heatin a liquid and a solid.	5	
Learning outcome = • To identify which flame to use when heatin a liquid and a solid. Success Criteria = • To demonstrate heating a boiling tube of water and a piece of magnesium. • To produce a labelled diagram and detailed method of the practical.		
Week 4:	NC Level	To complete investigation write-up.
Progress task 1- laboratory skills. Learning outcome = • To investigate the effect opening the air hole has on the temperature of a Bunsen burner flame.	AP1	



Success Criteria = To identify the variables, to choose the correct equipment and to write a detailed method to carry out the investigation. Week 5: Making observations. Learning outcome = To classify materials as solid, liquid or gas. To analyse a circus of experiments and to make simple observations. Success Criteria = To summarise a solid, liquid and gas. Week 6: Literacy Classifying materials. Complete literacy task. Learning outcome = To explore and classify different materials as a solid, liquid or gas. Success Criteria = To describe the properties of solids, liquids and gases. Week 7: Expanding and contracting. Learning outcome = That models can be used to explain phenomena which cannot be observed. To analyse two experiments and make simple observations. Success Criteria = To use the particle model to explain expansion and contraction.



Week 8:	Numeracy	Temperature conversion hwk sheet.
Using a thermometer.	hwk.	
Complete numeracy task and hwk sheet.		
Learning outcome =		
To accurately use and read a thermometer.	Numeracy:	
Success Criteria =	7M8	
 To successfully carry out the practical and to measure and record the temperature of the water with the appropriate scale. To use the boiling point and melting point of substances to identify what state they are in at different temperatures. 	17	
Week 9:		
Changes of state.		
Learning outcome =		
 To investigate what happens to the temperature when ice melts and when salt is added. 		
Success Criteria =		
 To summarise the temperature changes when ice melts. To explain what happens to the melting point when salt is added. 		
Week 10:		
Boiling and condensing.		
Learning outcome =		
 To investigate the changes taking place when boiling water under a conical flask of ice. 		
Success Criteria =		
 To explain the changes of state taking place inside the beaker and inside/outside of conical flask. 		



Week 11: 22/11		Diffusion worksheet.
Diffusion.		
Learning outcome =		
 To analyse different experiments and to make simple observations. 		
Success Criteria =		
To explain diffusion in a solid, liquid and gas.		
Week 12: 29/11		Revise for test
Soluble or insoluble.		
Learning outcome =		
 To observe whether a substance is soluble or insoluble. To compare the mass before the solute is added and after. 		
Success Criteria =		
 To explain the terms soluble and insoluble. To explain why mass is conserved. 		
Week 13:		
Test.	%	
	AP2	