

Levenshulme High School – Curriculum Map – Science

		Term 1		Term 2		Term 3	
No. of Weeks	8	7	6	6	5	7	
Year 11 Combined Science	Topic Title and NC link	Global Challenges <i>OCR Gateway Science specification - Combined Science A (9-1) - J250</i>	Energy And Global challenges <i>OCR Gateway Science specification - Combined Science A (9-1) - J250</i>	Global challenges <i>OCR Gateway Science specification - Combined Science A (9-1) - J250</i>	Paper 1 Revision	Paper 2 Revision	
	<i>Pupils should know...</i>	<ul style="list-style-type: none"> Improving processes and products Interpreting and interacting with Earth systems 	<ul style="list-style-type: none"> Work done Power and efficiency Physics on the move Powering Earth 	<ul style="list-style-type: none"> Monitoring and maintaining the environment Feeding the human race Monitoring and maintaining health 	<ul style="list-style-type: none"> Maths Skills Revision Skills Required Practical's Exam practice 	<ul style="list-style-type: none"> Maths Skills Revision Skills Required Practical's Exam practice 	
	<i>Pupils should be able to do...</i>	<p>AO1 -Demonstrate knowledge and understanding of:</p> <ul style="list-style-type: none"> scientific ideas Scientific techniques and procedures. <p>AO2- Apply knowledge and understanding of:</p> <ul style="list-style-type: none"> scientific ideas Scientific enquiry, techniques and procedures. <p>AO3 - Analyse information and ideas to:</p> <ul style="list-style-type: none"> interpret and evaluate make judgements and draw conclusions Develop and improve experimental procedures. 	<p>AO1 -Demonstrate knowledge and understanding of:</p> <ul style="list-style-type: none"> scientific ideas Scientific techniques and procedures. <p>AO2- Apply knowledge and understanding of:</p> <ul style="list-style-type: none"> scientific ideas Scientific enquiry, techniques and procedures. <p>AO3 - Analyse information and ideas to:</p> <ul style="list-style-type: none"> interpret and evaluate make judgements and draw conclusions Develop and improve experimental procedures. 	<p>AO1 -Demonstrate knowledge and understanding of:</p> <ul style="list-style-type: none"> scientific ideas Scientific techniques and procedures. <p>AO2- Apply knowledge and understanding of:</p> <ul style="list-style-type: none"> scientific ideas Scientific enquiry, techniques and procedures. <p>AO3 - Analyse information and ideas to:</p> <ul style="list-style-type: none"> interpret and evaluate make judgements and draw conclusions Develop and improve experimental procedures. 			
<i>Pupils should have remembered/ be familiar ...</i>	<ul style="list-style-type: none"> The properties of ceramics, polymers and composites. The method of using carbon to obtain metals from metal oxides. The composition of the Earth, the structure of the Earth, the rock cycle, the carbon cycle, the composition of the atmosphere and the impact of human activity on the climate. 	<ul style="list-style-type: none"> Energy listed as nine types, Key Stage 2 and Key Stage. Energy can be transferred in processes such as changing motion, burning fuels and in electrical circuits. Conservation of energy and that it has a quantity that can be calculated. The transfer of energy into useful and waste energies. Power and how domestic appliances can be compared. Insulators and how energy transfer are influenced by temperature. Ways to reduce heat loss in the home. Forces affect motion of objects. How vehicles are adapted to increase safety. Renewable and non-renewable energy resources. How power stations work and the cost of electricity in the home. Electrical safety features in the home. 	<ul style="list-style-type: none"> From B4, ecosystems and the various ways organisms interact. How biotic and abiotic factors influence communities. The gases of the atmosphere from key stage 3 Healthy human diet and the consequences of imbalances in a healthy daily diet. Their knowledge and understanding from topics B1, B4 and B5 The organisation of DNA what plants require enabling them to photosynthesise. The effects of 'recreational' drugs (including substance misuse) on behaviour, health and life processes The impact of exercise, asthma and smoking on the gas exchange system The consequences of imbalances in the diet, including obesity, starvation and deficiency diseases. 				