

**Year 8 Medium Term Plan Terms 1&2**

Unit Title and Lesson Number	Lesson Intent	Knowledge Goal	Practical Work	Steps to Success & Vocabulary	Assessment Opportunities & Homework
Biology Terms 1 & 2 lesson 1	<p>To know what is used and produced by plants.</p> <p>Feeds on from KS2 green plants where students learnt about the factors that effect plants.</p> <p>Feeds forward to year 10 bioenergetics where students study in detail the factors that affect and limit photosynthesis.</p>	To describe the process of photosynthesis.	Testing leaves for starch.	<ul style="list-style-type: none"> <li>• I can list the reactants and products for photosynthesis.</li> <li>• I can state the word equation for photosynthesis.</li> <li>• I can state and explain why most life depends on photosynthesis.</li> <li>• I can link the importance of photosynthesis to atmospheric gases.</li> </ul> <p><b><u>Vocabulary:</u></b> Oxygen, carbon dioxide, glucose, water, light, energy, photosynthesis</p>	<p>Answers to retrieval questions.</p> <p><b><u>Homework:</u></b> KS3 Science Workbook Pages 40 and 41</p>
Biology Terms 1 & 2 lesson 2	<p>To know why leaves are designed the way they are.</p> <p>Feeds on from year 7 biology term 1 where students learnt about pallisade cells.</p> <p>Feeds forward to year 10 bioenergetics where students study in detail the factors</p>	To describe how leaves are adapted to their roles.	Plastercine leaf models.	<ul style="list-style-type: none"> <li>• I can state that plants make glucose in their leaves.</li> <li>• I can describe leaf adaptations including the role of the stomata.</li> <li>• I can explain lead adaptations</li> </ul> <p><b><u>Vocabulary:</u></b></p>	Answers to retrieval questions.

	that affect and limit photosynthesis.			Mesophyll, exchange, diffuse, pallisade,	
Biology Terms 1 & 2 lesson 3	To know why plants need certain minerals. Feeds on from KS2 green plants where students learnt about the factors that effects plants. Feeds forward to year 10 bioenergetics where students study in detail the factors that affect and limit photosynthesis.	To describe the role of minerals in plants.		<ul style="list-style-type: none"> <li>I can state that plants gain nutrients and water from soil via roots.</li> <li>I can explain the necessity for each mineral a plant takes up.</li> </ul> <p><b><u>Vocabulary:</u></b> Nitrate, phosphate, potassium, magnesium, photosynthesis, chlorophyll, mineral.</p>	<p>Answers to retrieval questions.</p> <p>Answers to homework questions.</p>
Biology Terms 1 & 2 lesson 4	To know how to measure the rate of photosynthesis. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.	To undertake a required practical.	Pond weed investigation.	<ul style="list-style-type: none"> <li>I can state the factors that affect photosynthesis.</li> <li>I can explain why each factor limits photosynthesis.</li> <li>I can collect and process experimental data.</li> </ul> <p><b><u>Vocabulary:</u></b> Limiting factor, concentration, rate, intensity,</p>	<p>Answers to retrieval questions.</p> <p><b><u>Homework:</u></b> 6 mark question on photosynthesis.</p>
Biology Terms 1 & 2 lesson 5	To know why our lungs work. Feeds on from year 7 biology term 1 where students learnt about	To describe the structure of the lungs.	Pluck demo	<ul style="list-style-type: none"> <li>I can name some tissues and organs involved in gas exchange.</li> </ul>	<p>Answers to retrieval questions.</p> <p>Exit Ticket 1</p>

	<p>organs and organ systems.</p> <p>Feeds forward to year 9 organisation where students learn how the lungs work with other organ systems in the body.</p>			<ul style="list-style-type: none"> <li>• I can describe what happens during breathing.</li> <li>• I can label a diagram of the gas exchange system.</li> <li>• I can explain adaptations of structures in the gas exchange system.</li> <li>• I can link adaptations of the gas exchange system to their functions.</li> <li>• I can explain how ventilation occurs with reference to pressure changes and lung volume.</li> </ul> <p><b><u>Vocabulary:</u></b> Inhale, exhale, diaphragm, contract, expand, bronchi, alveoli, capillary.</p>	
<p>Biology Terms 1 &amp; 2 lesson 6</p>	<p>To know how our body changes when we need more energy.</p> <p>Feeds on from KS2 humans and other animals where students learnt about circulation and movement.</p> <p>Feeds forward to year 10 bioenergetics where students study</p>	<p>To describe aerobic respiration.</p>		<ul style="list-style-type: none"> <li>• I can state that respiration release energy from food.</li> <li>• I can write a word equation for aerobic respiration.</li> <li>• I can identify the reactants and products in aerobic respiration.</li> </ul> <p><b><u>Vocabulary:</u></b></p>	<p>Answers to retrieval questions.</p>

	the impacts of two types of respiration.			Aerobic, respiration, glucose, oxygen, carbon dioxide, water.	
Biology Terms 1 & 2 lesson 7	To investigate some factors that affect our respiration. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.	To investigate the factors affecting pulse rate.	Pulse rate investigation	<ul style="list-style-type: none"> <li>I can identify factors that affect pulse rate.</li> <li>I can explain these factors in terms of aerobic respiration.</li> <li>I can explain why the body behaves differently when respiration rate increase.</li> </ul> <p><b><u>Vocabulary:</u></b> Supply, rate, increase, cellular, muscle.</p>	<p>Answers to retrieval questions.</p> <p>Feedback on 6 mark question.</p> <p><b><u>Homework:</u></b> KS3 Science Workbook Pages 25 and 26</p>
Biology Terms 1 & 2 lesson 8	To know we can get energy in other ways. Feeds on from lesson 6 where students learnt about aerobic respiration. Feeds forward to year 10 bioenergetics where students look at applications of respiration.	To describe anaerobic respiration.		<ul style="list-style-type: none"> <li>I can name two types of respiration.</li> <li>I can state the difference aerobic and anaerobic respiration.</li> <li>I can compare/contrast aerobic and anaerobic respiration.</li> <li>I can describe applications of respiration such as fermentation including word equations.</li> </ul> <p><b><u>Vocabulary:</u></b></p>	<p>Answers to retrieval questions.</p>

				Anaerobic, lactic acid, sprint, burst, fermentation.	
Biology Terms 1 & 2 lesson 9	To investigate factors that affect how micro-organisms respire. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.	To undertake a required practical.	Yeast investigation.	<ul style="list-style-type: none"> <li>I can identify factors that affect fermentation.</li> <li>I can suggest a method to measure how fast fermentation happens.</li> <li>I can analyse data and suggest improvements.</li> </ul> <p><b><u>Vocabulary:</u></b> Yeast, suspension, interval, volume.</p>	Answers to retrieval questions.
Biology Terms 1 & 2 lesson 10	To know the affects of smoking on our bodies. Feeds on from KS2 Humans and other animals where students learnt about factors affecting human health. Feeds forward to year 9 organisation where students learn about risk factors of heart disease.	To describe the affects of smoking.	Smoking machine.	<ul style="list-style-type: none"> <li>I can describe the effects of smoking on health.</li> <li>I can describe the impact of smoking, asthma and exercise on the gas exchange system.</li> <li>I can interpret and evaluate data on the effects of exercise, asthma and smoking on the gas exchange system.</li> </ul> <p><b><u>Vocabulary:</u></b> Addiction, pulmonary, nicotine, elevated.</p>	Answers to retrieval questions.  Answers to homework questions.  <b><u>Homework:</u></b> Smoking and lung cancer reading and comprehension task.
Biology Terms 1 & 2 lesson 11	To know what makes up blood.	To describe the components of blood.	Model blood experiment	<ul style="list-style-type: none"> <li>I can name the components of blood.</li> </ul>	Answers to retrieval questions.

	<p>Feeds on from KS2 humans and other animals where students learnt about the circulation of blood.</p> <p>Feeds forward to year 9 organisation where students learn about the importance of each component in blood.</p>			<ul style="list-style-type: none"> <li>I can describe the function of each component.</li> <li>I can explain how each component is adapted to its role.</li> </ul> <p><b>Vocabulary:</b> Plasma, platelet, biconcave.</p>	
Biology Terms 1 & 2 lesson 12	<p>To know how the heart is designed.</p> <p>Feeds on from KS2 humans and other animals where students learnt about circulation in humans.</p> <p>Feeds forward to year 9 organisation where students learn about how heart disease affects the ability of the heart to function.</p>	To describe the structure and function of the heart.	Heart dissection	<ul style="list-style-type: none"> <li>I can name the four chambers of the heart.</li> <li>I can name the four blood vessels connected to the heart.</li> <li>I can explain the adaptations of the heart.</li> </ul> <p><b>Vocabulary:</b> Artery, vein, valve, vena cava, aorta, thickness.</p>	<p>Answers to retrieval questions.</p> <p>Answers to homework questions.</p>
Biology Terms 1 & 2 lesson 13	To consolidate all of our learning in the unit.	To prepare for assessment		<ul style="list-style-type: none"> <li>I can identify my areas to develop.</li> <li>I can use a variety of resources to support my revision.</li> </ul>	<p>Answers to retrieval questions.</p> <p>Exit Ticket 2</p> <p><b>Homework:</b> Revision (Seneca, mats, bitesize)</p>
Biology Terms 1 & 2 lesson 14	To check what we know.	To undertake assessment	Low stakes assessment and go through identifying misconceptions.		Low stakes end of topic assessment.

Chemistry Terms 1 & 2 lesson 1	To classify everyday materials as acids or bases. Feeds on from year 7 chemistry terms 2 and 3 where students learnt about methods of classifying materials. Feeds forward to year 10 chemical changes where students learn about what makes substances acids, alkali or bases.	To describe uses of acids and bases.	Rainbow fizz	<ul style="list-style-type: none"> <li>I can list everyday examples of acids and bases.</li> <li>I can describe the properties of acids and bases.</li> <li>I can link the properties of acids and bases to their uses.</li> </ul> <p><b><u>Vocabulary:</u></b> Sour, corrosive, litmus, slippery.</p>	Answers to retrieval questions.  <b><u>Homework:</u></b> KS3 Science Workbook Pages 113 and 114
Chemistry Terms 1 & 2 lesson 2	To be able to manage dangerous situations. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.	To describe how to write risk assessments.	Conc sulphuric acid with sugar.	<ul style="list-style-type: none"> <li>I can identify risks.</li> <li>I can name hazard symbols.</li> <li>I can suggest suitable precautions to minimise risk.</li> <li>I can explain how my suggested precautions will minimise the risk.</li> <li>I can describe the difference between risk and hazard.</li> </ul> <p><b><u>Vocabulary:</u></b> Minimise, assess, legislation, COSHH.</p>	Answers to retrieval questions.
Chemistry Terms 1 & 2 lesson 3	To interpret data on pH values.	To classify substances as acids or bases.	pH testing with different indicators.	<ul style="list-style-type: none"> <li>I can recognise that acids and bases have different strengths</li> </ul>	Answers to retrieval questions.

	<p>Feeds on from year 7 chemistry term 2 where students learnt to classify oxides.</p> <p>Feeds forward to year 10 chemical changes where students learn about what makes substances acidic, alkaline or basic.</p>			<p>and that indicators are used to show this.</p> <ul style="list-style-type: none"> <li>I can describe how to use universal indicator to find the strength of an acid or base.</li> <li>I can explain the difference between a base and an alkali.</li> </ul> <p><b><u>Vocabulary:</u></b> Acidic, basic, alkaline, neutral, strong, weak, indicator.</p>	Answers to homework questions.
Chemistry Terms 1 & 2 lesson 4	<p>To compare and contrast different indicators.</p> <p>Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes.</p> <p>Feeds forward to year 10 rates of change where students look at pH in greater detail.</p>	To evaluate different indicators.	Red cabbage and beetroot indicators.	<ul style="list-style-type: none"> <li>I can identify advantages and disadvantages of different indicators.</li> <li>I can evaluate combinations of indicators.</li> </ul> <p><b><u>Vocabulary:</u></b> Observable, noticeable, contrasting.</p>	<p>Answers to retrieval questions.</p> <p><b><u>Homework:</u></b> Graphene reading and comprehension task.</p>
Chemistry Terms 1 & 2 lesson 5	<p>To know how we can cancel out acids and bases.</p> <p>Feeds on from KS2 changing materials where students learnt to classify materials.</p>	To describe how acids and bases can be neutralised.	Simple neutralisation of NaOH with HCl and getting the salt.	<ul style="list-style-type: none"> <li>I can define the term neutralisation.</li> <li>I can identify neutralisation as an example of a chemical reaction.</li> <li>I can carry out a neutralisation</li> </ul>	<p>Answers to retrieval questions.</p> <p>Exit Ticket 1</p>



	<p>Feeds forward to year 10 chemical changes where students learn to explain what happens during neutralisation reactions.</p>			<p>reaction with precision.</p> <p><b><u>Vocabulary:</u></b> Indicator, precise, pipette, neutralisation, neutralise, exothermic.</p>	
<p>Chemistry Terms 1 &amp; 2 lesson 6</p>	<p>To represent reactions as equations.</p> <p>Feeds on from year 7 term 3 chemistry where students learnt about chemical reactions.</p> <p>Feeds forward to year 10 chemical changes where students learn to explain what happens during neutralisation reactions.</p>	<p>To write equations for neutralisation reactions.</p>		<ul style="list-style-type: none"> <li>I can define the word salt.</li> <li>I can describe neutralisation reactions using word equations.</li> </ul> <p><b><u>Vocabulary:</u></b> Salt, nitrate, sulphate, chloride, nitric, sulphuric, hydrochloric.</p>	<p>Answers to retrieval questions.</p> <p>Answers to homework questions.</p>
<p>Chemistry Terms 1 &amp; 2 lesson 7</p>	<p>To know how metals react with acids.</p> <p>Feeds on from KS2 changing materials where students learnt about chemical reactions.</p> <p>Feeds forward to year 10 chemical changes where students learn to explain what happens during acid reactions.</p>	<p>To describe the reaction between an acid and a metal.</p>	<p>Marking zinc sulphate exp.</p>	<ul style="list-style-type: none"> <li>I can identify acid and metal reactions as a type of chemical reaction.</li> <li>I can describe a standard procedure to obtain dry salt crystals.</li> </ul> <p><b><u>Vocabulary:</u></b> Effervescence, salt, hydrogen, evaporate, filter.</p>	<p>Answers to retrieval questions.</p> <p><b><u>Homework:</u></b> 6 mark question on marking salts.</p>

<p>Chemistry Terms 1 &amp; 2 lesson 8</p>	<p>To represent reactions as equations. Feeds on from year 7 chemistry term 3 where students learnt about chemical reactions. Feeds forward to year 10 chemical changes where students learn to explain what happens during acid reactions.</p>	<p>To write equations for the reactions between acids and metals.</p>		<ul style="list-style-type: none"> <li>I can describe the reaction between metals and acids using word equations.</li> </ul> <p><b>Vocabulary:</b> Salt, nitrate, sulphate, chloride, nitric, sulphuric, hydrochloric.</p>	<p>Answers to retrieval questions.</p>
<p>Chemistry Terms 1 &amp; 2 lesson 9</p>	<p>To evaluate how effective different remedies are. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.</p>	<p>To undertake a required practical.</p>	<p>Testing indigestion remedies.</p>	<ul style="list-style-type: none"> <li>I can explain what variables I am controlling.</li> <li>I can explain how my results are comparable.</li> <li>I can identify systematic and random errors.</li> <li>I can describe improvements to the method.</li> </ul> <p><b>Vocabulary:</b> Random, systematic, reliable, accuracy, precision.</p>	<p>Answers to retrieval questions.</p> <p>Feedback on 6 mark question.</p>
<p>Chemistry Terms 1 &amp; 2 lesson 10</p>	<p>To consolidate all of our learning in the unit.</p>	<p>To prepare for assessment</p>		<ul style="list-style-type: none"> <li>I can identify my areas to develop.</li> <li>I can use a variety of resources to support my revision.</li> </ul>	<p>Answers to retrieval questions.</p> <p>Exit Ticket 2</p> <p><b>Homework:</b> Revision (Seneca, mats, bitesize)</p>

Chemistry Terms 1 & 2 lesson 11	To check what we know.	To undertake assessment	Low stakes assessment and go through identifying misconceptions.		Low stakes end of topic assessment.
Physics Terms 1 & 2 lesson 1	To know that energy cannot be created or destroyed. Feeds on from year 7 term 3 physics where students learnt about energy in circuits. Feeds forward to year 9 energy where students learn to calculate different types of energy.	To describe types of energy	Energy Circus	<ul style="list-style-type: none"> <li>I can list energy stores.</li> <li>I can recognise what energy is and where it is stored.</li> <li>I can recall forms of potential energy.</li> <li>I can discuss how all materials have an energy store inside them.</li> </ul> <p><b><u>Vocabulary:</u></b> Potential, gravitational, kinetic, elastic, store.</p>	Answers to retrieval questions.
Physics Terms 1 & 2 lesson 2	To describe the conservation of energy. Feeds on from year 7 term 3 physics where students learnt about energy in circuits Feeds forward to year 9 energy where students learn to calculate different types of energy.	To describe energy transfer and calculate efficiency.	Energy Circus	<ul style="list-style-type: none"> <li>I can recognise that energy is conserved or transferred.</li> <li>I can describe situations where energy is transferred, wasted and dissipated.</li> <li>I can calculate energy efficiency.</li> <li>I can compare and evaluate energy efficiency.</li> <li>I can interpret block and sankey diagrams.</li> </ul>	Answers to retrieval questions.

				<ul style="list-style-type: none"> <li>I can explain how to reduce energy wastage.</li> </ul> <p><b><u>Vocabulary:</u></b> Efficiency, dissipated, transferred.</p>	
Physics Terms 1 & 2 lesson 3	<p>To describe renewable and non-renewable energy</p> <p>Feeds on from year 7 term 3 physics where students learnt about energy in circuits</p> <p>Feeds forward to year 9 energy where students learn to calculate different types of energy.</p>	To describe methods of producing electrical energy.	Steam engine, solar cell, wind turbine.	<ul style="list-style-type: none"> <li>I can list energy resources.</li> <li>I can describe different energy resources.</li> <li>I can explain how almost all energy comes from the sun.</li> <li>I can compare energy resources.</li> <li>I can justify suggestions about suitability of energy resources.</li> </ul> <p><b><u>Vocabulary:</u></b> Geothermal, hydroelectric, reliability, environmental, economic.</p>	<p>Answers to retrieval questions.</p> <p><b><u>Homework:</u></b> 6 mark question on energy resources.</p>
Physics Terms 1 & 2 lesson 4	<p>To plan a valid investigation.</p> <p>Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes.</p> <p>Feeds forward to GCSE required practicals where students learn to</p>	To plan an investigation into the energy content of foods.		<ul style="list-style-type: none"> <li>I can calculate and compare energy values in food.</li> <li>I can link the energy content of food to a balance diet.</li> </ul> <p><b><u>Vocabulary:</u></b> Logical, repeatable, indirect, calorie, joule.</p>	Answers to retrieval questions.

	plan analyse and evaluate investigations.				
Physics Terms 1 & 2 lesson 5	To carry out and analyse the results of an investigation. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.	To carry out an investigation into the energy contents of foods.	Burning crisps investigation.	<ul style="list-style-type: none"> <li>I can calculate and compare energy values in food.</li> <li>I can link the energy content of food to a balance diet.</li> </ul> <p><b><u>Vocabulary:</u></b> Logical, repeatable, indirect, calorie, joule.</p>	Answers to retrieval questions.
Physics Terms 1 & 2 lesson 6	To know the properties of fuels. Feeds on from KS2 classifying materials where students learnt to group and classify substances. Feeds forward to year 9 energy changes where students learn about specific heat capacity.	To investigate what makes a good fuel.	Burning types of fuel.	<ul style="list-style-type: none"> <li>I can identify properties that make a material a good fuel.</li> <li>I can link the properties of a fuel to a situation.</li> </ul> <p><b><u>Vocabulary:</u></b> Combustible, fumes, storage, distribution, heat.</p>	Answers to retrieval questions. Feedback on 6 mark question. Exit Ticket 1  <b><u>Homework:</u></b> KS3 Science Workbook Pages 149 and 151
Physics Terms 1 & 2 lesson 7	To know how energy passes through solids. Feeds on from year 7 chemistry term 1 where students learnt about states of matter. Feeds forward to year 10 particle model of	To describe how heat travels through solids.	Conduction ring and plates.	<ul style="list-style-type: none"> <li>I recognise that heat is transferred by conduction.</li> <li>I can describe conduction.</li> <li>I can explain conduction in terms of particles.</li> </ul>	Answers to retrieval questions.

	<p>matter where students learn about the physical changes between state.</p>			<ul style="list-style-type: none"> <li>I can suggest how conduction maybe changed.</li> </ul> <p><b><u>Vocabulary:</u></b> Conductor, energy flow, insulation, conduction.</p>	
<p>Physics Terms 1 &amp; 2 lesson 8</p>	<p>To know how energy passes through liquids and gases. Feeds on from year 7 chemistry term 1 where students learnt about states of matter. Feeds forward to year 10 particle model of matter where students learn about the physical changes between state.</p>	<p>To describe how energy is transferred through liquids and gases.</p>	<p>Convection tube and chimneys.</p>	<ul style="list-style-type: none"> <li>I recognise that heat is transferred by convection.</li> <li>I can describe convection.</li> <li>I can explain convection in terms of particles.</li> <li>I can suggest how convection maybe changed.</li> </ul> <p><b><u>Vocabulary:</u></b> Fluid, dense, rise, fall, convection.</p>	<p>Answers to retrieval questions.</p> <p>Answers to homework questions.</p>
<p>Physics Terms 1 &amp; 2 lesson 9</p>	<p>To know how energy passes through areas with no particles. Feeds on from year 7 chemistry term 1 where students learnt about states of matter. Feeds forward to year 10 particle model of matter where students learn about the physical changes between state.</p>	<p>To describe how heat is transferred by radiation.</p>	<p>Leslie cube</p>	<ul style="list-style-type: none"> <li>I recognise that heat is transferred by radiation.</li> <li>I can describe radiation.</li> <li>I can explain radiation in terms of particles.</li> <li>I can suggest how radiation maybe changed.</li> </ul> <p><b><u>Vocabulary:</u></b> Dark, shiny, matt, reflect, absorb, radiation.</p>	<p>Answers to retrieval questions.</p> <p><b><u>Homework:</u></b> KS3 Science Workbook Pages 147 - 148</p>

<p>Physics Terms 1 &amp; 2 lesson 10</p>	<p>To investigate types of insulation. Feeds on from year 7 how science works where students learnt about controlling variables and measuring changes. Feeds forward to GCSE required practicals where students learn to plan analyse and evaluate investigations.</p>	<p>To undertake a required practical.</p>	<p>Insulation req prac.</p>	<ul style="list-style-type: none"> <li>I can describe how to investigate the effectiveness of thermal insulators.</li> <li>I can describe applications of thermal insulators.</li> <li>I can suggest why thermal insulators work.</li> </ul> <p><b><u>Vocabulary:</u></b> Insulator, trapped</p>	<p>Answers to retrieval questions.</p>
<p>Physics Terms 1 &amp; 2 lesson 11</p>	<p>To know there is a difference between heat and temperature. Feeds on from earlier lessons in this unit where students learnt about different types of energy. Feeds forward to year 10 particle model of matter where students learn about latent heat and specific heat capacity.</p>	<p>To explain the difference between heat and temperature.</p>	<p>Bowls and temp probes.</p>	<ul style="list-style-type: none"> <li>I can describe the difference between heat and temperature.</li> <li>I can link my understanding of temperature to kinetic energy.</li> </ul> <p><b><u>Vocabulary:</u></b> Kinetic, thermal, particles, vibration, energy.</p>	<p>Answers to retrieval questions.  Answers to homework questions.</p>
<p>Physics Terms 1 &amp; 2 lesson 12</p>	<p>To know what work and power are. Feeds on from KS2 force and motion where students learnt about types of force. Feeds forward to year 9 energy and year 11 forces where students</p>	<p>To describe and calculate work done and power.</p>	<p>Slotted masses, rulers and stopwatches.</p>	<ul style="list-style-type: none"> <li>I can define the terms work done and power.</li> <li>I recognise that appliances have power ratings.</li> <li>I can describe what a higher power rating means.</li> </ul>	<p>Answers to retrieval questions.  <b><u>Homework:</u></b> Hedy Lemarr reading and comprehension task.</p>

	learn about resolving forces.			<ul style="list-style-type: none"> <li>I can explain the effect of power rating on cost and energy wastage.</li> <li>I can calculate the electrical power and energy transferred.</li> </ul> <p><b><u>Vocabulary:</u></b> Work done, power, mechanical, transferred, opposing.</p>	
Physics Terms 1 & 2 lesson 13	<p>To know what happens to energy when substances change state.</p> <p>Feeds on from year 7 chemistry term 1 where students learnt about states of matter.</p> <p>Feeds forward to year 10 particle model of matter where students learn about the physical changes between state.</p>	To describe what happens when substances change state.	Stearic acid cooling curve.	<ul style="list-style-type: none"> <li>I can explain the effect of temperature on the motion and spacing of particles.</li> </ul> <p><b><u>Vocabulary:</u></b> State, attraction, force, kinetic, potential, internal.</p>	Answers to retrieval questions.
Physics Terms 1 & 2 lesson 14	<p>To know how we pay for electricity.</p> <p>Feeds on from year 7 term 3 physics where students learnt about current and voltage.</p> <p>Feeds forward to year 9 energy where students learn about pay back time and efficiency.</p>	To calculate the cost of using electricity.		<ul style="list-style-type: none"> <li>I can calculate the amount of energy transferred.</li> <li>I can calculate the cost of electricity.</li> </ul> <p><b><u>Vocabulary:</u></b> Kilowatts, pence, decimal, conversion.</p>	<p>Answers to retrieval questions.</p> <p>Answers to homework questions.</p>



Physics Terms 1 & 2 lesson 15	To consolidate all of our learning in the unit.	To prepare for assessment		<ul style="list-style-type: none"> <li>• I can identify my areas to develop.</li> <li>• I can use a variety of resources to support my revision.</li> </ul>	<p>Answers to retrieval questions.</p> <p>Exit Ticket 2</p> <p><b><u>Homework:</u></b> Revision (Seneca, mats, bitesize)</p>
Physics Terms 1 & 2 lesson 16	To check what we know.	To undertake assessment	Low stakes assessment and go through identifying misconceptions.		Low stakes end of topic assessment.