

## Year 7

<b>Topics</b>	Energy 1 (energy transfer)
<b>Prior knowledge / skills</b>	<ul style="list-style-type: none"><li>● Heat is a form of energy</li><li>● Food gives us energy</li></ul>
<b>Key concepts / knowledge / skills covered this half term</b>	<ul style="list-style-type: none"><li>● Energy is stored and transferred and wasted</li><li>● Conservation of energy</li><li>● Appliances use energy</li><li>● Efficiency can be calculated</li><li>● Energy is source from renewable and non-renewable resources</li><li>● Food is a store of chemical energy that can be used to help us perform many functions</li><li>● Appliances have power which can be calculated</li></ul>
<b>Assessment</b>	<p>The assessment will assess the following topics and students need to revise at least 2 weeks in advance:</p> <ul style="list-style-type: none"><li>● Working scientifically</li><li>● Forces 1 (gravity and speed)</li><li>● Acids and alkalis</li><li>● Energy 1</li></ul>
<b>Personal Development opportunities</b>	<p>You can see the energy associated with food on food labels When you buy an appliance a label should tell you how efficient the appliance is</p>
<b>Homework requirements</b>	<p>Homework will be set on Google Classroom every week and will take 30 minutes to complete</p> <ul style="list-style-type: none"><li>● Week 1 – Seneca</li><li>● Week 2 – Lesson tasks</li><li>● Week 3 – Comprehension</li><li>● Week 4 – Revision resource</li><li>● Week 5 – Seneca</li><li>● Week 6 – Revision sheet</li></ul>

## Year 8

<b>Topics</b>	Organisms 2 (drugs)	Earth 2 (global warming)
<b>Prior knowledge / skills</b>	<ul style="list-style-type: none"> <li>• Gases that we breathe in and out</li> <li>• Examples of drugs that are good or bad</li> <li>• Where oxygen goes in our bodies</li> <li>• Some drugs are used for medicine others for fun (recreation)</li> </ul>	<ul style="list-style-type: none"> <li>• The earth is getting hotter caused by global warming</li> <li>• Carbon dioxide concentration contributes to global warming</li> </ul>
<b>Key concepts / knowledge / skills covered this half term</b>	<ul style="list-style-type: none"> <li>• Journey of oxygen and carbon dioxide through the body</li> <li>• How gas exchange happens</li> <li>• The structure of the respiratory system</li> <li>• How breathing happens</li> <li>• Examples of medicinal, recreational and illegal drugs</li> <li>• The short term and long term effects of alcohol</li> <li>• Effects of smoking on the lungs</li> </ul>	<ul style="list-style-type: none"> <li>• The process of global warming caused by greenhouse gases</li> <li>• How carbon is cycled via the process of photosynthesis, respiration and combustion</li> <li>• Stores of carbon (e.g. oceans, sedimentary rock, trees, fossil fuels)</li> <li>• How metals are extracted from ores in the ground</li> <li>• Reduction process to extract metals</li> <li>• How aluminium is recycled</li> </ul>
<b>Assessment</b>	<p>The assessment will assess the following topics &amp; students need to revise at least 2 weeks in advance:</p> <ul style="list-style-type: none"> <li>• Working scientifically</li> <li>• Forces 2 (motion and pressure)</li> <li>• Matter 2 (periodic table)</li> <li>• Organisms 2 (drugs)</li> </ul>	
<b>Personal Development opportunities</b>	Effect of addiction in our society, debating legalising cannabis, health effects of drugs	
<b>Homework requirements</b>	Homework will be set on Google Classroom every week and will take 30 minutes to complete	
	<b>Homework task</b>	<b>Description / links</b>
	1. Seneca	Seneca tasks on Motion and pressure
2. Lesson tasks	<a href="https://classroom.thenational.academy/lessons/group-7-lfrpjz">https://classroom.thenational.academy/lessons/group-7-lfrpjz</a> <ul style="list-style-type: none"> <li>• Complete the lesson on Group 7.</li> <li>• Watch video</li> <li>• Make notes</li> <li>• Complete the quiz</li> <li>• Show your quiz score</li> </ul>	

3. Comprehension	<ul style="list-style-type: none"><li>● Complete comprehension task</li><li>● Read the story about the immune system</li><li>● Answer the questions about what you read</li></ul>
4. Revision resource	Create revision resource: <ul style="list-style-type: none"><li>● Mind map</li><li>● Flash cards</li><li>● Self quizzing</li></ul>
5. Seneca	Set seneca tasks on organisms 1
6. Revision sheet	Make notes at least A4 sheet of knowledge about these topics: <ul style="list-style-type: none"><li>● Group 1 elements</li><li>● Group 7 elements</li><li>● Group 0 elements</li></ul>

## Year 9

<b>Topics</b>	Electricity	Homeostasis								
<b>Prior knowledge / skills</b>	<ul style="list-style-type: none"> <li>● Batteries power circuits</li> <li>● Switches can make circuits turn off or on</li> <li>● Electromagnets</li> <li>● Electrolysis</li> </ul>	<ul style="list-style-type: none"> <li>● Your nervous system is made of nerve cells</li> <li>● Your 5 senses</li> </ul>								
<b>Key concepts / knowledge / skills covered this half term</b>	<ul style="list-style-type: none"> <li>● Recalling the circuits symbols</li> <li>● Constructing electric circuits</li> <li>● Differences between series &amp; parallel</li> <li>● Potential difference, current &amp; resistance characteristics in a circuit</li> <li>● Alternating &amp; direct current</li> <li>● Resistance of a wire &amp; length</li> </ul>	<ul style="list-style-type: none"> <li>● Knowing that your body controls water, glucose &amp; temperature</li> <li>● Journey of an impulse</li> <li>● Reflex action</li> <li>● Investigating reaction time</li> <li>● Explaining the control of blood glucose concentration</li> <li>● Describing diabetes</li> <li>● Menstrual cycle basics</li> </ul>								
<b>Assessment</b>	<p>The assessment will assess the following topics, and students need to revise at least 2 weeks in advance:</p> <ul style="list-style-type: none"> <li>● Working scientifically</li> <li>● Chemical changes</li> <li>● Separating mixtures</li> <li>● Electricity</li> </ul>									
<b>Personal Development opportunities</b>	<p>Role of obesity on diabetes and health            Things that affect reaction time (drugs / alcohol link to Year 8)</p>									
<b>Homework requirements</b>	<p>Homework will be set on Google Classroom every week and will take 30 minutes to complete.</p> <table border="1"> <thead> <tr> <th>Homework task</th> <th>Description / links</th> </tr> </thead> <tbody> <tr> <td>1. Seneca</td> <td>Set Seneca tasks on the chemical changes unit</td> </tr> <tr> <td>2. Revision clock sheet</td> <td>Students to complete mind map activity on chemical changes topic – to be uploaded to Google Classroom</td> </tr> <tr> <td>3. Revision resource</td> <td>           Create revision resource in preparation for the end of term test:           <ul style="list-style-type: none"> <li>● flash cards</li> <li>● mind map</li> <li>● self quizzing</li> </ul> </td> </tr> </tbody> </table>		Homework task	Description / links	1. Seneca	Set Seneca tasks on the chemical changes unit	2. Revision clock sheet	Students to complete mind map activity on chemical changes topic – to be uploaded to Google Classroom	3. Revision resource	Create revision resource in preparation for the end of term test: <ul style="list-style-type: none"> <li>● flash cards</li> <li>● mind map</li> <li>● self quizzing</li> </ul>
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	4. Revision / retrieval	Students to complete retrieval clock on current unit. Break down into any 12 subcategories to fill in the clock. To be uploaded to Google Classroom – please make a copy of this doc ( <a href="#">Retrieval Clock.pptx</a> )
	5. Seneca	Seneca task on separating techniques
	6. Seneca	Seneca task on genes