

Subject	Science	
Week	Learning	Activities
<p>Week beginning 8th June</p>	<p><u>Biology Lesson: Eukaryotes and Prokaryotes</u></p> <p>In this lesson we are going to look at the main structures found in both Eukaryotic and prokaryotic cells with a view to comparing some of these features.</p>	<p>https://www.thenational.academy/year-9/science/eukaryotes-and-prokaryotes-year-9-wk1-1</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Eukaryotes and Prokaryotes</p>
	<p><u>Chemistry Lesson: Atoms, elements and compounds</u></p> <p>In this lesson we are going to explore the ideas behind the modern structure of the atom, learn how to find elements on the periodic table and how to classify a substance as an element, compound or a mixture.</p>	<p>https://www.thenational.academy/year-9/science/atoms-elements-and-compounds-year-9-wk2-1</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Atoms, Elements & Compounds</p>
	<p><u>Physics Lesson: History of the Atom</u></p> <p>In this lesson we will look at how our understanding of the atom has developed over time.</p>	<p>https://www.thenational.academy/year-10/science/history-of-the-atom-year-10-wk3-1</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: History of the Atom</p>
	<p><u>Biology Lesson: Specialised Cells</u></p>	<p>https://www.thenational.academy/year-9/science/specialised-cells-year-9-wk1-2</p>

<p>Week beginning 15th June</p>	<p>In this lesson we will be looking at how animal and plant cells can specialise to perform specific functions within an organism.</p>	<p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Specialised Cells</p>
	<p><u>Chemistry Lesson: Separating mixtures</u></p> <p>In this lesson we are going to look into techniques used to separate different mixtures. We will look into when to use filtration, chromatography and crystallization.</p>	<p>https://www.thenational.academy/year-9/science/separating-mixtures-year-9-wk2-2</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Separating Mixtures</p>
	<p><u>Physics Lesson: Atomic Structure and Subatomic Particles</u></p> <p>In this lesson we will describe the nuclear model of the atom and look at the subatomic particles within an atom.</p>	<p>https://www.thenational.academy/year-10/science/atomic-structure-and-subatomic-particles-year-10-wk3-2</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Atomic Structure</p>
<p>Week beginning 22nd June</p>	<p><u>Biology Lesson: : Microscopes</u></p> <p>In this lesson we will be investigating the differences between visible light microscopes and electron microscopes focussing on the differences in resolution and magnification.</p>	<p>https://www.thenational.academy/year-9/science/microscopes-year-9-wk1-3</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Microscopes</p>

	<p><u>Chemistry Lesson: Isotopes</u></p> <p>In this lesson we are going to explore the nuclear model of the atom and learn what an isotope is and how we can identify isotopes. Additionally we will recap how to calculate the number of neutrons, protons and electrons of an atom.</p>	<p>https://www.thenational.academy/year-9/science/isotopes-year-9-wk2-4</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Isotopes</p>
	<p><u>Physics Lesson: Working Scientifically - Variables</u></p> <p>In this lesson we will look at independent, depended and control variable and how to identify them.</p>	<p>https://www.thenational.academy/year-10/science/working-scientifically-variables-year-10-wk1-5</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Variables</p>
<p>Week beginning 29th June</p>	<p><u>Biology Lesson: Calculating magnification</u></p> <p>In this lesson we will be developing our understanding of microscopes further and looking at how to calculate image sizes, object sizes and magnification of images.</p>	<p>https://www.thenational.academy/year-9/science/calculating-magnification-year-9-wk1-4</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Calculating magnification</p>
	<p><u>Chemistry Lesson: Electron Configuration</u></p> <p>In this lesson we are going to look at how electrons are arranged within an atom. We are going to look at how many electrons fills an</p>	<p>https://www.thenational.academy/year-9/science/electron-configuration-year-9-wk5-1</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p>

	<p>energy level or shell and who to draw the arrangement for the first 20 elements.</p>	<p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Electron Configuration</p>
	<p><u>Physics Lesson: Working Scientifically – Maths Skills, Significant Figures; Means and Standard Form</u></p> <p>In this lesson you will learn/practice some maths skills for science. This will include mean calculations, including checking for anomalies, as well as significant figures and standard form.</p>	<p>https://www.thenational.academy/year-10/science/working-scientifically-maths-skills-significant-figures-mean-and-standard-form-year-10-wk2-5</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Maths Skills</p>
<p>Week beginning 6th July</p>	<p><u>Biology Lesson: Cell Division</u></p> <p>In this lesson we will be exploring the process of mitosis in body cells and how this is used for growth, repair and replacement. We will look at the three main stages of the cell cycle and the key features of each stage.</p>	<p>https://www.thenational.academy/year-9/science/cell-division-year-9-wk4-2</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Cell Division</p>
	<p><u>Chemistry Lesson: History of the periodic table</u></p> <p>In this lesson we will be exploring how scientists came to represent the periodic table as it now is by looking at key developmental steps and the scientists involved. We will focus on the input from Mendeleev and how we know he was correct.</p>	<p>https://www.thenational.academy/year-9/science/history-of-the-periodic-table-year-9-wk5-3</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: History of the Atom</p>
	<p><u>Physics Lesson: Working Scientifically: Command Words</u></p> <p>In this lesson we will look at different data sets and analyse</p>	<p>https://www.thenational.academy/year-10/science/working-scientifically-command-words-year-10-wk4-5</p>

	<p>them. We will focus on different command words and practise what is expected when being asked to describe, explain, compare or evaluate data.</p>	<p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Command Words</p>
<p>Week beginning 13th July</p>	<p><u>Biology Lesson: Stem cells</u></p> <p>In this lesson we will explore the differences between embryonic and adult stem cells in humans. We will also discuss the benefits of stem cells in plants both economically and for research purposes.</p>	<p>https://www.thenational.academy/year-9/science/stem-cells-year-9-wk4-3</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Stem cells</p>
	<p><u>Chemistry Lesson: History of the Atom</u></p> <p>In this lesson we will learn how the model of the atom has evolved to the current model we use today. We will look at Daltons, JJ Thompson, Rutherford and Bohr’s model and how these theories connect in to our current accepted model.</p>	<p>https://www.thenational.academy/year-9/science/history-of-the-atom-year-9-wk2-3</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: History of the Atom</p>
	<p><u>Physics Lesson: Working Scientifically – Continuous and Categorical Data</u></p> <p>This lesson will take a focus on some of the key skills of working scientifically. We will address the concepts of continuous and categoric variables before looking at key principles for drawing and interpreting graphs of data.</p>	<p>https://www.thenational.academy/year-9/science/continuous-and-categoric-data-year-9-wk3-4</p> <p>Follow the instruction and guidance to watch the video and work through the task and self-assess.</p> <p>Learning check is done through a forms quiz which is hyperlinked in the document or can be found:</p> <p>MS Forms: Data</p>

