

Topics in this cycle: Cells and Organism, Movement	Taught: Autumn 2	Year Group: 7
Key knowledge/concepts to be learnt ('Tell me about...')		Websites/blogs/YouTube links and further reading to deepen and consolidate learning
<ul style="list-style-type: none"> • What is a microscope? <ul style="list-style-type: none"> • Explain what all living organisms are made of. • Explain what each part of the microscope does and how it is used. • Use a microscope to observe a prepared slide calculating a range of magnifications. • What are plant and animal cells? <ul style="list-style-type: none"> • Identify the different parts of a plant and animal cells. • Describe the functions of each part. • Identify the differences between plants and animal cells. • Do all cells look the same and have the same job? <ul style="list-style-type: none"> • Identify specialised cells in plants and animals. • Describe the function of each specialised cell. • Describe the adaptations of each cell. • What is a skeleton? <ul style="list-style-type: none"> • Describe the function of the musculoskeletal system. • Explain the functions of bones, ligaments, tendons and muscles. • Identify common bones and muscles in the body. • Explain the link between diet and healthy/unhealthy skeletal system. • What are joints? <ul style="list-style-type: none"> • Label diagrams of different types of joint and describe movement. • How do we measure force exerted by a muscle? 		<p>Microscope Microscopes and How to Use a Light Microscope - YouTube</p> <p>Plants and Animal Cells PLANT VS ANIMAL CELLS - YouTube Plant Cell and Animal cell Difference - Biology for Kids Mocomi</p> <p>Specialised Cells Specialized Cells: Significance and Examples - YouTube</p> <p>Skeleton The Skeletal System: Crash Course Anatomy & Physiology #19 - YouTube Overview of Skeleton Learn Skeleton Anatomy (visiblebody.com)</p> <p>Joint Types of joints in the human body - Anatomy & Examples Kenhub - YouTube</p>

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Key Vocabulary and Definitions To Be Learnt		What Will The Assessment Look Like?
Nucleus	Controls the activity of the cell and stores genetic information.	<p>Extended writing – Explain how to prepare a slide for an onion cell.</p> <p>End of Unit test: 25 marks</p> <ul style="list-style-type: none"> • Short answer questions • Multiple choice • Extended writing
Mitochondria	The part of the cell that releases energy for respiration.	
Cytoplasm	The part of the cell where most activities takes place.	
Cell Membrane	The part of the cell that allows substances in and out of the cell	
Cell Wall	Provides protection and support.	
Vacuole	Store cell sap	Family Learning Opportunities
Ribosome	Protein synthesis	<p>Make a cell model 10+ Awesome Ways to Make a Cell Model - Weird, Unsocialized Homeschoolers (weirdunsocializedhomeschoolers.com)</p> <p>Take a 3-D cell tour 3D Tour of the Cell – ScienceWiz</p> <p>Do a cell explorer challenge with your family. Cell Explorer – SCoPE (scopegurdoninstitute.co.uk)</p>
Microscope	Instrument used to observe small objects.	
Resolution	The ability to distinguish two objects from each other	
Magnification	The ability to make small objects seem larger.	
White Blood Cell	Fights infection	
Sperm Cell	Male Gamete	
Egg Cell	Female Gamete	
Red Blood Cell	Transport oxygen	

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