

**Barnsley Academy – (Year 10 Biology B1) Curriculum
Scheme of Work – 2023-24**

Term 1 Week				
	1	2	3	4
Lesson Focus	Comparison of cells	Difference between electron and light microscopes	Using a microscope – plant cell and animal cells	Specialised cells
Prerequisite Knowledge	7BC – basic cell biology from year 7	7BC – basic cell biology from year 7 B1 – parts and functions of the light microscope	7BC – basic cell biology from year 7 B1 – parts and functions of the light microscope	7BC – basic cell biology from year 7
Core Knowledge	Prokaryotic, Eukaryotic, compare	Describe the difference between light and electron microscopes	Describe how to use a light microscope Complete a practical to make your own specimen	Describe features of specialised cells, using key structures Explain the reason for the special features in terms of the cell's function. Explain the importance of cell differentiation.
Expert Model /Guided Practice/Agreed Approach (Procedural Knowledge)	Guided practice – How to write a comparison in science	Understanding the key term comparison	Expert model – steps in calculating image size, actual size and magnification Demonstrating using visualiser – how to prepare a slide	Expert model – Teacher to explain the purpose of each cells adaptations
Independent Practice	Label the plant and animals cells and define their role. Classify something as prokaryote and eukaryote. Make comparisons between plant and animal cells	Comparing the usefulness of light vs electron microscope Comparing the difference between light and electron microscope	Label parts of the microscope and recall their jobs Write a method on how to make a slide Carry out a practical to create a slide Calculate magnification (exam question)	IP1 – slide 16 describe the job of the listed specialised cells. IP2 – Annotate the cell diagrams. IP3 – Describe and explain the role of each specialised cell. IP4 – Exam question

Assessment (Informal/Formal)	Learning checks (WB) Exam questions cells	Learning checks WB IP tasks	Learning checks WB IP tasks Exam question Success in making a slide (practical)	
Resources				
Specific SEN(D)/EAL support	LAP and HAP slides for IP – use the ones that are suitable for your group/ individuals.		Stick in conversion sheet for LAPS/ SEN to refer to	Scaffolded LAP sheet for IP3 Use of visualiser