

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

Term 1 – Week ...				
	1	2	3	4
Lesson Focus	Active transport	Cell cycle	Stem cells	CTG
Prerequisite Knowledge	Diffusion Osmosis Mitochondria Respiration	Cell organelles Fertilisation and reproduction (gamete fusion, number of chromosomes) Basic cell division	Specialised cells Fertilisation and reproduction (gamete fusion, number of chromosomes)	Use blank template – teacher to make their own CTG lesson that is personalised to their class
Core Knowledge	<p><u>Describe</u> the process of active transport and give some examples</p> <p><u>Interpret secondary data on active transport</u></p> <p><u>Compare diffusion, osmosis and active transport</u></p>	<p><u>Identify</u> DNA, genes chromosomes on a diagram</p> <p><u>Describe</u> the main stages in the cell cycle(interphase, mitosis and cytokinesis)</p> <p><u>Use information provided to calculate time spent in different phases</u></p>	<p><u>Name</u> sources of stem cells and their uses</p> <p><u>Describe</u> some potential uses of stem cell technology</p> <p><u>Evaluate</u> difference stem cell sources.</p>	
Expert Model /Guided Practice/Agreed Approach (Procedural Knowledge)	<p>Skill for command word (Compare) Slides 8 – 10 modelling active transport and key terminology required</p> <p>Slide 21 – modelling how data shows the type of transport used</p>	<p>Slide 18 – Expert model of the steps in the cell cycle</p> <p>Slide 29-30 – Expert model – steps to calculate time in each stage of the cell cycle</p>	<p>Slide 29 – Expert model – steps in an evaluate question</p>	
Independent Practice	<p>IP1 – Exam question active transport and diffusion IP2 – Data exam question, active transport IP3 – comparing the types of transport</p>	<p>IP1 – Describe the stages in the cell cycle IP2 – using the steps of the expert model, calculate the time spent in stages of the cell cycle IP3 – Exam question cell cycle</p>	<p>IP1 – Knowledge recall questions on stem cells IP2 – Evaluate the use of stem cells IP3 – Exam question stem cells</p>	<p>IP1 - IP2 - IP3 -</p>

Assessment (Informal/Formal)	Live marking Teacher circulation Exam questions Self-assess	Live marking Teacher circulation Exam questions Self-assess	Live marking Teacher circulation Exam questions Self-assess	Live marking Teacher circulation Exam questions Self-assess
Resources				
Specific SEN(D)/EAL support	IP 1 – exam questions high and low demand versions IP3 – scaffold for written task			