Triple Science, Higher Tier

B1 Cell Biology Revision Checklist

Topic	Content	✓
Cell Biology	Eukaryotes, prokaryotes, scale and order of magnitude	
	Animals and plant cells structures and functions	
	Cell specialisation and cell differentiation uses and examples	
	Microscopy, required practical 1: light microscopy	
	Culturing microorganisms, aseptic techniques	
	Required practical 2: effect of antiseptics/antibiotics on bacterial growth	
Cell Division	Chromosomes, mitosis and stages in the the cell cycle	
	Stem cells: function in embryos, adult animals and meristem in plants, therapeutic cloning, practical risks and benefits, social and ethical issues in use of stem cells in medical research and treatments	
Transport in Cells	Diffusion: factors which affect the rate of diffusion, need for specialised exchange surfaces and transport systems, including small intestine and lungs in mammals, gills in fish, roots and leaves in plants	
	Osmosis: importance, measuring rate of water uptake	
	Required practical 3: effect of salt/sugar concentration on mass of plant tissue	
	Active transport: importance, use in plant root hair cells and in the gut of mammals	

Triple Science, Foundation Tier

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Classroom 42

Double Science, Higher Tier

B1 Cell Biology Revision Checklist

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Classroom 42

Double Science, Foundation Tier

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