

Required Practical's

Required Practical Number	Title	Topic	RAG
1	Using a light microscope Use a light microscope to observe, draw, and label a selection of plant and animal cells and include a scale magnification.	B1.2	
2 (Triple only)	<i>Investigating the effect of antiseptics or antibiotics on bacterial growth</i> <i>Use agar plates and measure the zone of inhibition produced around colonies</i>	B5.4	
3	Investigate the effect of a range of concentrations of salt or sugar solutions on the mass of plant tissue Investigate osmosis by measuring how the mass of plant tissue changes in a range of concentrations of salt or sugar solution	B1.8	
4	Use standard food tests to identify food groups Detect sugars, starch and proteins in food using Benedict's test, the iodine test and Biuret reagent.	B3.3	
5	Investigate the effect of pH on the rate of reaction of amylase enzyme. Students should use a continuous sampling technique to determine the time taken to completely digest a starch solution at a range of pH values.	B3.6	
6	Investigate the effect of light intensity on the rate of photosynthesis Use an aquatic plant to observe the effect of light intensity has on the rate of photosynthesis.	B8.2	
7	Investigate the effect of a factor on human reaction time. Plan and carry out an investigation, choosing appropriate ways to measure reaction time and considering the risks and ethics of the investigation.	B10.2	
8 (Triple only)	Investigate the effect of light or gravity on the growth of newly germinated seedlings Record results both as length measurements and as accurate, labelled biological drawings to show the effects	B11.9	
9	Measuring the population size of a common species in a habitat Using sampling techniques to investigate the effect of a factor of the distribution of this species	B16.3	
10 (Triple only)	Investigate the effect of temperature on the rate of decay of fresh milk Measure the pH change of milk to investigate how temperature affects its rate of decay	B17.4	

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