BIOLOGY: SB1 Key Concepts in Biology

CHURCH STRETTON SCHOOL

Assessment = ★

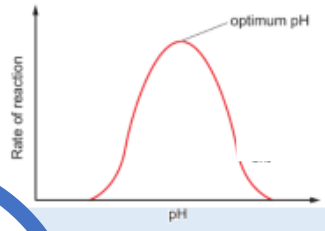
Core practical: Osmosis and potato

Investigate osmosis in potatoes

Revision

Retrieval, keyword definitions and equation practice.

SCAN ME



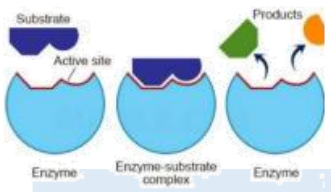
Final assessment ★

Review of learning

Apply:
SB2 Mitosis
SB2 Growth in animal and plant cells
SB2 Stem cells
SB3 Meiosis
SB6 Plant structures
SB8 Efficient transport and exchange
+16 Cell structure and function

Transporting substances

Diffusion, osmosis and active transport



Explain why enzymes do not work as well at high temperatures.

Core practical: pH and enzymes

Investigate the effect of pH on enzyme activity

Enzyme activity

The factors that affect enzyme activity

Enzyme action

Enzymes are fussy

Core practical: Testing foods

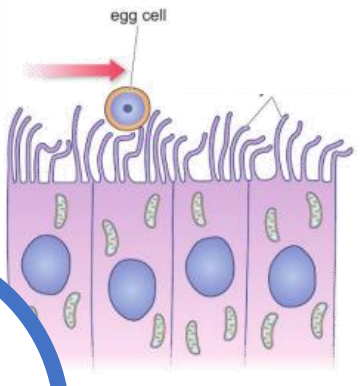
Higher tier only
Investigate the use of chemical reagents to identify starch, reducing sugars, proteins and fats

Enzymes and nutrition

What are enzymes and why are they important?

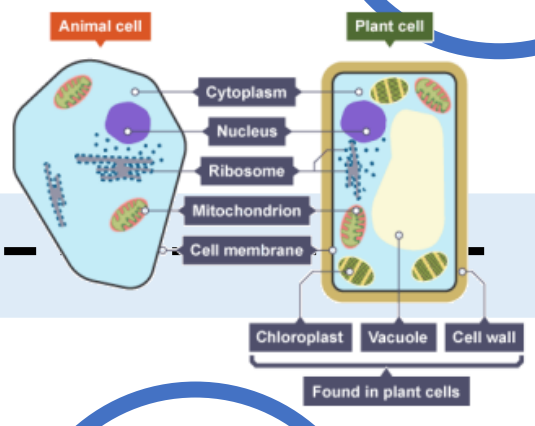
Testing foods

Higher tier only Which tests are used to identify different food groups? Using a calorimeter to measure energy stored in food



Inside bacteria

Comparing eukaryotic and prokaryotic cells



Specialised cells

Describing the adaptations of specialised cells

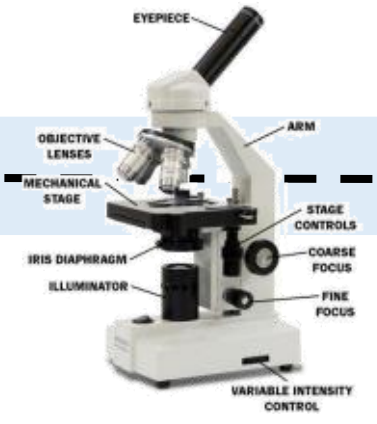
Core practical: Using microscopes

Investigate biological specimens using microscopes, including magnification calculations and labelled scientific drawings from observations

What is the job of the mitochondria / chloroplasts?

Plant and animal cells

Comparing the structure and function of the sub-cellular parts of animals and plant cells



LESSON 1

Microscopes

Comparing light and electron microscopes, and using magnification calculations

Retrieve:
B1.1 Observing cells
B1.2 Plant and animal cells
B1.3 specialised cells
B1.4 Movement of substances
B2.1 Nutrients
B2.2 Food tests
B2.5 bacteria & enzymes

Key terms

Make sure you can write definitions for these key terms.

Cells, nucleus, cytoplasm, cell membrane, cell wall, chloroplast, vacuole, mitochondria, enzymes, denatured, osmosis, diffusion, active transport