GCSE Biology 1.1 Cells Knowledge organiser



Animal cells and plant cells



Specialised Cells

Cells can **differentiate** into **specialised** cells.

Specialised cells are **adapted** to specific functions and so are more **efficient** in carrying them out.



Red blood cells contain haemoglobin and are biconcave in shape to maximise efficiency in carrying oxygen.



Sperm cells have tails so they can swim to the egg cell.

Cell Structure	Function	Animal cells contain:	Plant cells contain:
Nucleus	Contains chromosomes which carry genetic information and controls actions of the cell.		
Cell membrane	Controls the entry and exit of substances		
Cytoplasm	Site of most cell reactions.		
Vacuole	Contains a watery sugar solution called sap. When full the vacuole pushes the cytoplasm against the cell wall.		
Chloroplasts	Site of photosynthesis.		
Cell wall	Contains cellulose and provides structural support for cells.		
Mitochondria	Site of aerobic respiration.		

Organisation

Level			
Cells	Smallest unit of life		
Tissues	A group of similar cells perf		
Organs	Different tissues working to		
Organ system	Organs working together		
Organism	A living thing		



Description

forming a specific function

ogether for a specific function