

Introduction to Biology B1 Fact Sheet

Iodine is used to test for starch. Iodine goes black to show a positive result for starch.

Ethanol is used to test for fat. Ethanol goes cloudy to show a positive result for fat.

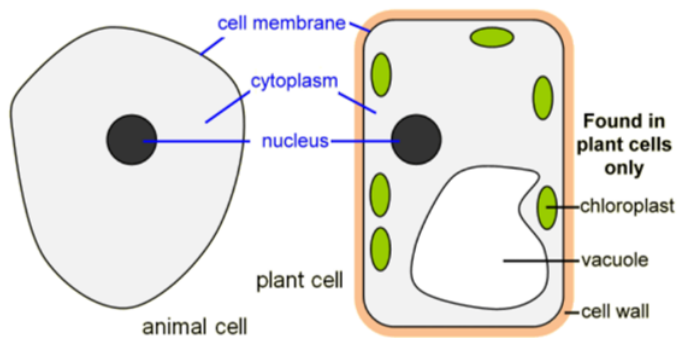
Biuret is used to test for protein. Biuret goes purple to show a positive result for protein.

Benedict's solution is used to test for sugar. Benedict's changes colour to 'brick red' if sugar is present. You must heat Benedict's solution up for it to work.

Cells make up all living organisms

Cells are too small to see with the naked eye so they can be seen using a microscope that magnifies objects

You should be able to draw a basic animal and plant cell.



All cells contain:

Cell membrane – which controls what goes in and out of a cell

Cytoplasm – jelly like substance where chemical reactions take place

Nucleus – Stores genetic information and controls what happens in the cell

Plant cells also contain

Cell wall – made from cellulose and gives rigid support to cell

Vacuole – Contains cell sap and provides support for cell

Chloroplast – contains green pigment and is where photosynthesis takes place

Cells are specialised to carry out different functions

Animal cell example - Sperm cell – needs to swim to egg cell and so has a long tail and lots of mitochondria to carry out this role.

Plant cell example – Root hair cell – collects water from soil for plant and has a large surface area to do this.

Unicellular organisms have only one cell, these include bacteria.

Multicellular organisms contain many cells

Cells carrying out the same function are often grouped together into tissues.

Different tissues work together to form organs

Different organs work together to form organ systems

Different organ systems make up whole organisms