

2 Plant and animal cells – Part 1

Name: _____ Class: _____ Date: _____

Vocabulary

Write each word three times.

English	Write it 3 times (English)		
cells	_____	_____	_____
animal	_____	_____	_____
plant	_____	_____	_____
cell membrane	_____	_____	_____
cytoplasm	_____	_____	_____
nucleus	_____	_____	_____
genetic material	_____	_____	_____
mitochondria	_____	_____	_____
respiration	_____	_____	_____
ribosomes	_____	_____	_____
proteins	_____	_____	_____
cell wall	_____	_____	_____
cellulose	_____	_____	_____
vacuole	_____	_____	_____
cell sap	_____	_____	_____

English	Write it 3 times (English)		
chloroplasts	_____	_____	_____
chlorophyll	_____	_____	_____
photosynthesis	_____	_____	_____

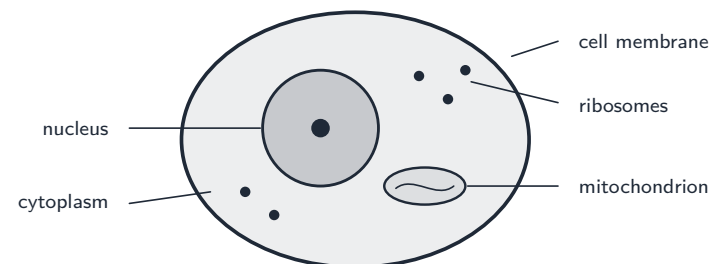
Recall

Every living thing is made of **cells** – the smallest parts that can carry out the life processes. Here you compare an **animal** cell with a **plant** cell.

New ideas

Read these first, then do the Practice.

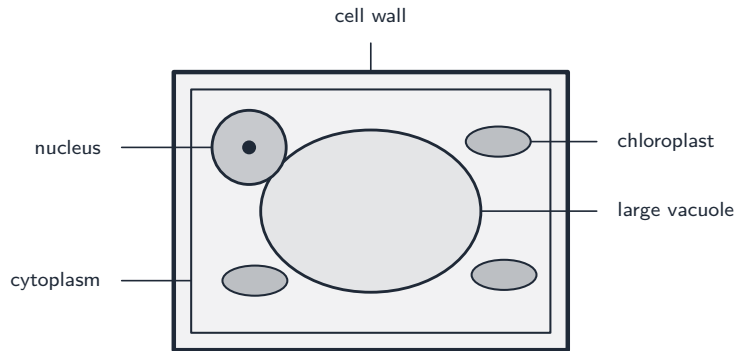
■ 1 The animal cell



- **cell membrane** – controls what enters and leaves the cell.
- **cytoplasm** – jelly where many reactions happen.
- **nucleus** – controls the cell; holds the **genetic material**.
- **mitochondria** – where **respiration** releases energy.
- **ribosomes** – where **proteins** are made.

■ 2 The plant cell

A plant cell has everything an animal cell has, **plus** three extra parts:



- **cell wall** – made of **cellulose** ; gives strength and a fixed shape.
- a large **vacuole** – filled with **cell sap** ; keeps the cell firm.
- **chloroplasts** – hold **chlorophyll** for **photosynthesis** .

Watch out: a plant cell has **everything** an animal cell has **plus** a cell wall, a large vacuole and chloroplasts – so “has a nucleus” does not tell the two apart. Only those *extra three* are plant-only.

Practice

Try these in order.

2.1 Name three parts found in **both** a plant cell and an animal cell. [3]

2.2 Name the three parts found **only** in a plant cell. [3]

2.3 What is the job of the cell membrane? [1]

2.4 In which part of a cell does respiration take place? [1]

2.5 What substance is the plant cell wall made of? [1]

2.6 Challenge. A cell seen under a microscope has a nucleus, a cell wall and chloroplasts. Is it a plant or an animal cell? Give the feature that decides it. [2]
