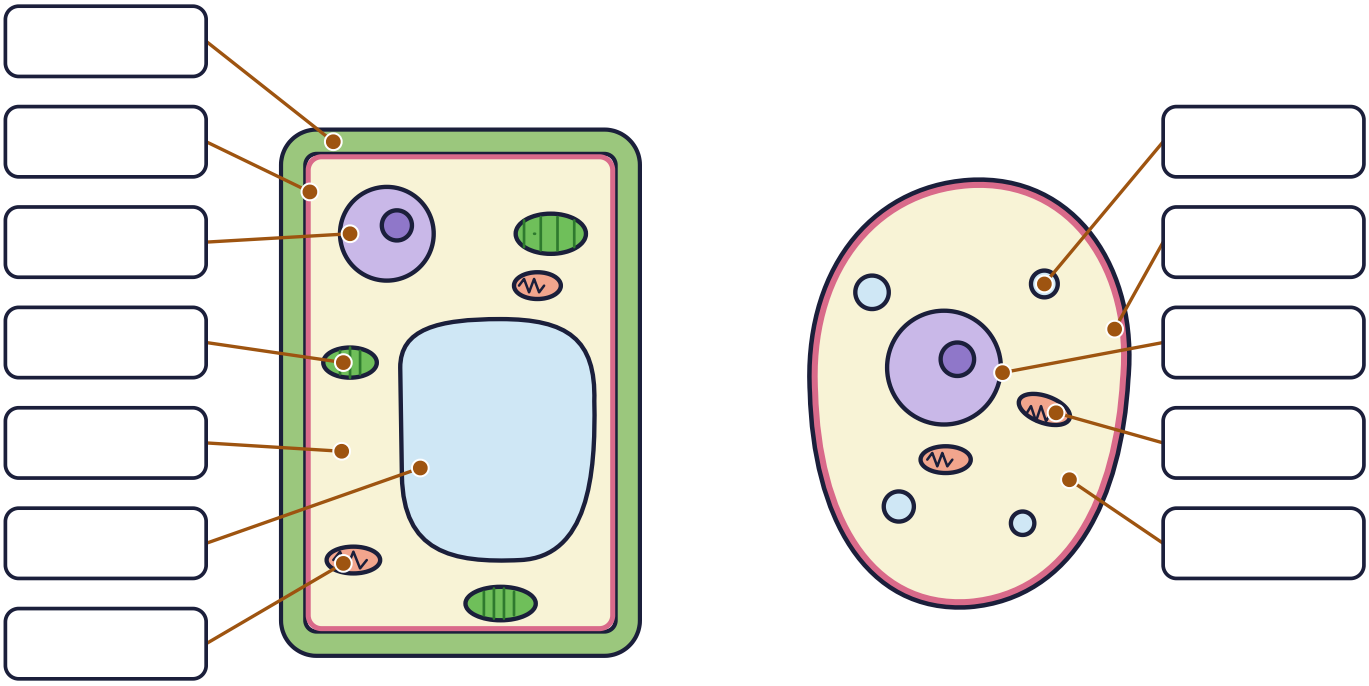
Plant cell and animal cell

Label both cells. Use the word bank.



PLANT CELL ANIMAL CELL

Word bank: Cell wall | Cell membrane ×2 | Cytoplasm ×2 | Nucleus ×2 | Mitochondria ×2 | Chloroplast | Large vacuole | Small vacuoles

Words marked ×2 are used once in each cell.

1. Name two parts that a plant cell has but an animal cell does not.

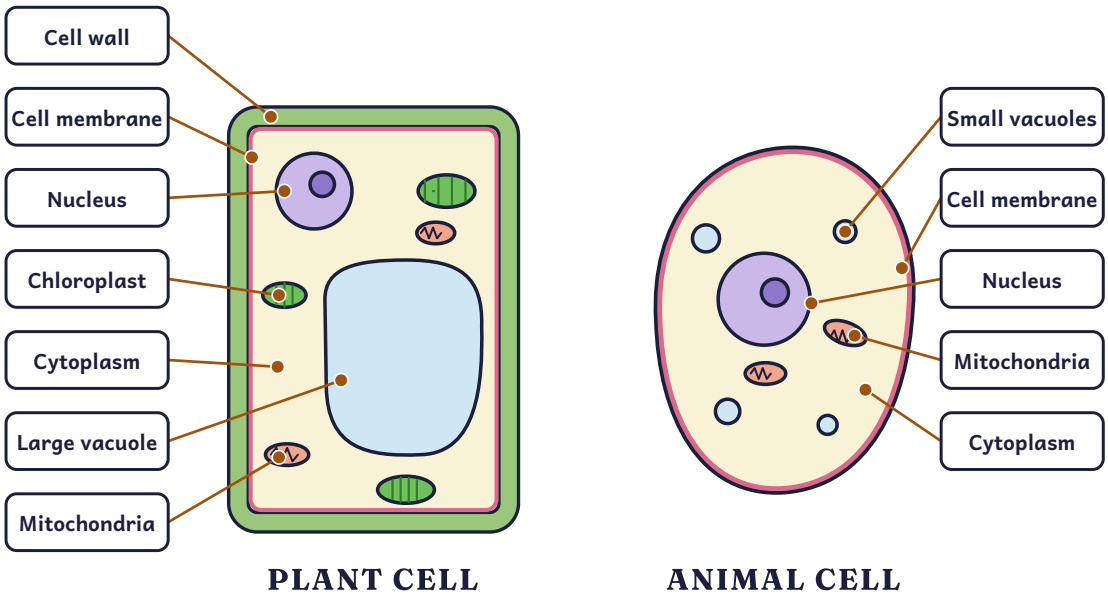
2. Which part is called the control centre of the cell?

3. Which part releases energy from food?

4. Why does a plant cell keep a fixed shape, while an animal cell can change its shape?

Plant and animal cells — answers

Both are living cells. They share most parts, but a few set them apart.



PLANT CELL ANIMAL CELL

Plant cell or animal cell? The differences

Feature	Plant cell	Animal cell
Cell wall	Present, made of cellulose	Absent
Chloroplasts	Present, so it can make its own food	Absent, so it takes in ready-made food
Vacuole	One very large vacuole in the centre	Several small vacuoles
Shape	Fixed and regular, often box-like	Round or irregular, can change shape
Position of nucleus	Pushed to one side by the big vacuole	Usually near the centre

What each part does

Cell wall: A stiff outer layer of cellulose. It gives the plant cell its fixed shape and support.

Cell membrane: A thin skin around the cell contents. It decides what may enter and leave.

Cytoplasm: The jelly-like fluid inside the cell where the other parts float and many reactions happen.

Nucleus: The control centre. It holds the cell's instructions (DNA) and directs its work.

Mitochondria: Release energy from food so the cell can do its work.

Chloroplast: Contain green chlorophyll and make food for the plant using sunlight (photosynthesis).

Large vacuole: One big sac of cell sap that stores water and keeps the cell firm.

Small vacuoles: Little sacs that store food, water and waste for a short time.

Answers to the questions

1. The cell wall and the chloroplasts. (The one large central vacuole is also a plant-cell feature.)
2. The nucleus. It directs all the cell's activities and holds its DNA.
3. The mitochondria.
4. A plant cell has a stiff cell wall outside its membrane. An animal cell has only a soft membrane.