

Eukaryotic and Prokaryotic Cells

1. Draw a simple animal cell and a simple plant cell and add the following labels to your eukaryotic cells (where necessary):

- Nucleus
- Cell membrane
- Mitochondria
- Ribosomes
- Cell wall
- Chloroplasts
- Cytoplasm
- Permanent vacuole

2. Use your previous knowledge and information about each feature to help you label this prokaryotic bacterial cell:

Genetic material – in the form of a loop of DNA not found in a nucleus

Cytoplasm – jelly-like substance where chemical reactions occur

Flagella – whip-like structures that allow the bacteria to move around

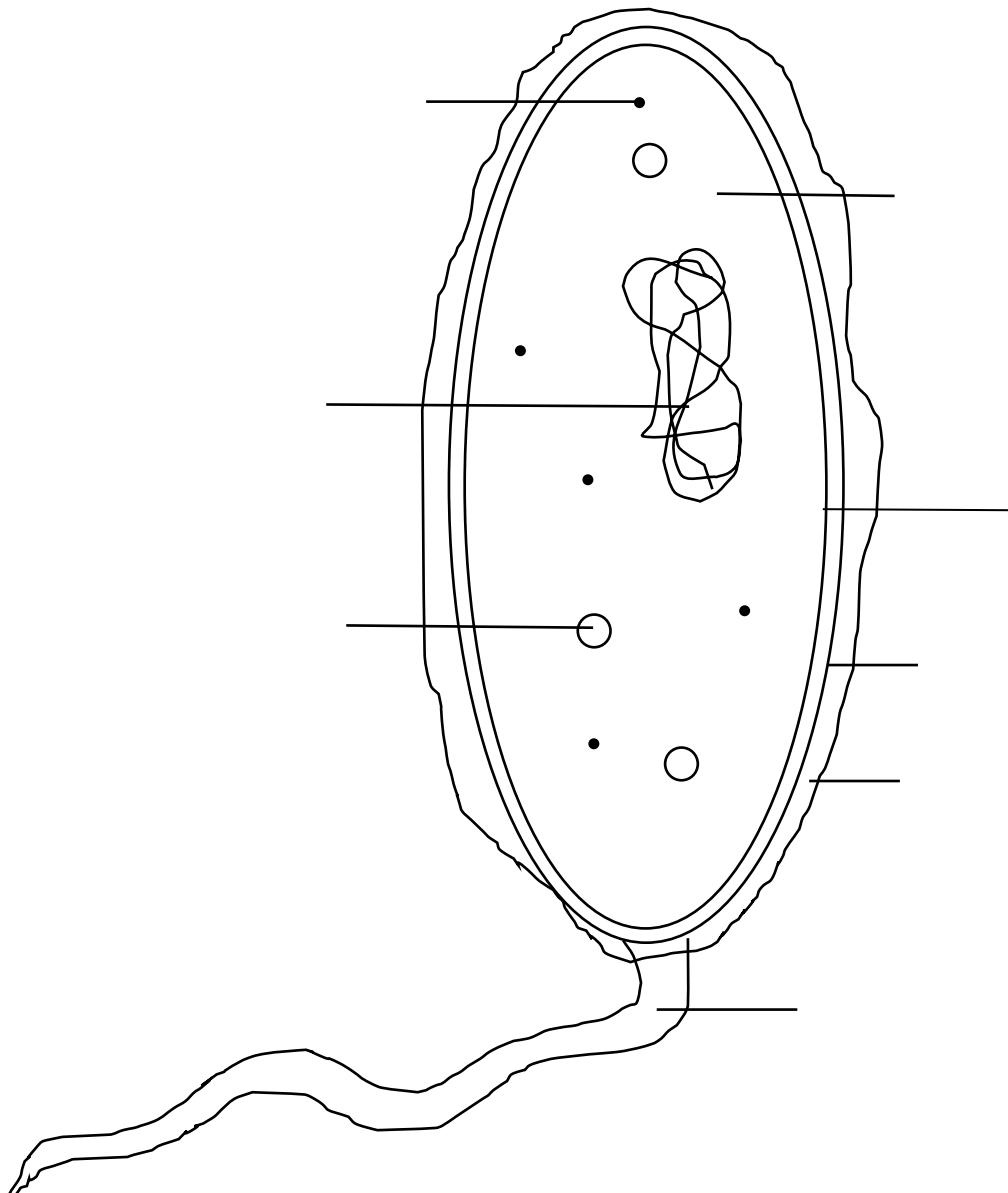
Cell wall – provides structure and support to the cell

Capsule – slimy outer layer that provides protection to the cell

Cell membrane – controls the entry and exit of substances to and from the cell

Plasmid – small ring of DNA

Ribosome – very small organelle that carries out protein synthesis



3. Place ticks in the correct boxes to summarise the features that are found in each type of cell.

Feature	Animal Cell	Plant Cell	Bacterial Cell
Nucleus			
Plasmids			
Cell membrane			
Cell wall			
Chloroplasts			
Cytoplasm			
Permanent vacuole			
Flagella			

Stretch Activity

The image below shows a *Euglena* cell. *Euglena* is a unicellular organism. Decide if it is a prokaryotic or eukaryotic cell based on its features and explain your decision.

