

16. Centrioles

- Location: found in the cytoplasm near the nucleus.
- Structure: cylindrical organelles with two bundles at right angles to each other. They are composed of microtubules.
- Function: plays an important role in cell division within animal cells.

17. Cell Wall (plant cells only)

- Location: outside the cell membrane
- Structure: rigid covering composed of cellulose. Contains many small openings which allow materials to pass to and from the cell membrane.
- Function: gives cell its shape and provides protection.

Plant Cell Wall

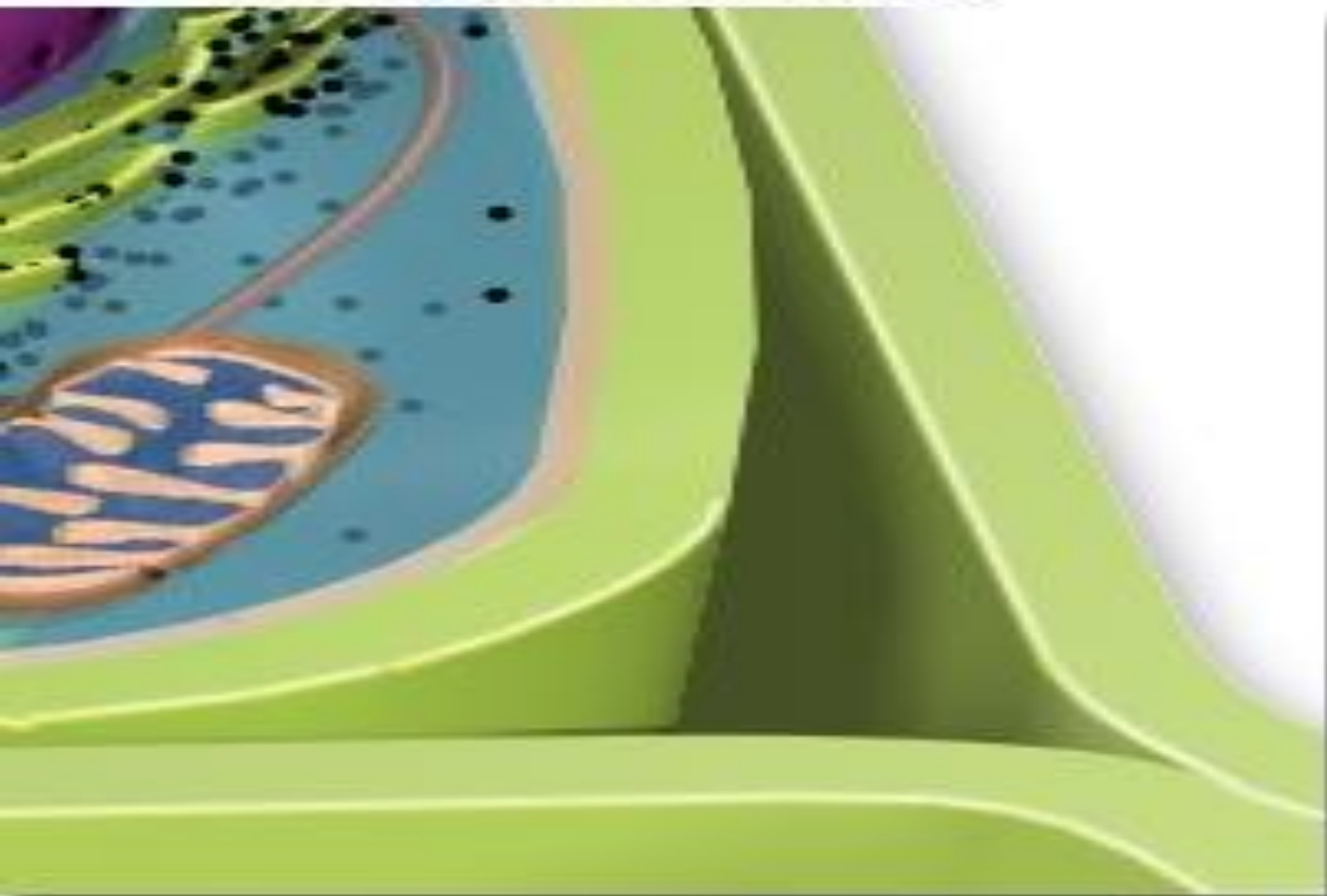


Figure 1

18. Plastids (plant cells only)

- Location: found in the cytoplasm
- Structure: bound by a double membrane, and has a system of membranes within the organelle
- Function: chemical factories and storehouse for food and colour pigment
- Types of plastids include:

- Chloroplast: most important form. Contains the green pigment chlorophyll. Carries on photosynthesis.
- Chromoplast: stores the orange and yellow pigments found in numerous plants
- Leucoplasts or amyloplasts: colorless plastids in which starch or other plant nutrients are stored.

Differences between plant and animal cells:

Animal Cells

No cell wall

No plastids

Small vacuoles

Few golgi bodies

Centrioles
present

Plant Cells

Cell wall present

Plastids present
(e.g. chloroplasts)

Large vacuoles

Many golgi
bodies

No centrioles