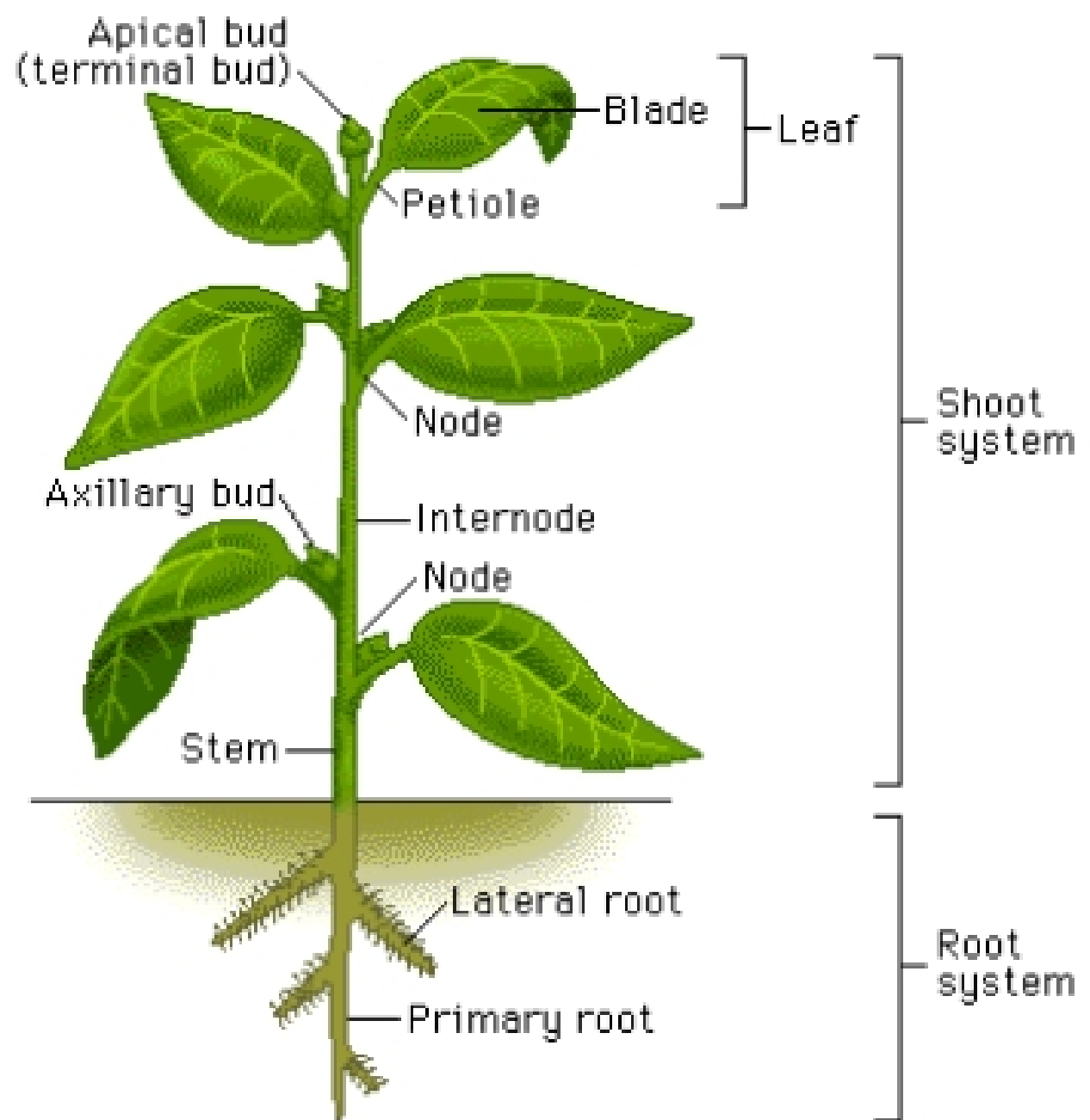


Plant Cell Walls





**All Plant Cells are
surrounded
by an extracellular matrix
known as the Cell Wall**



- a polysaccharide-rich matrix that surrounds all plant cells
- plays multiple roles in plant growth, development and defense responses
- there are two types of wall: **primary** & **secondary**

Primary Wall

- first wall laid down
- surrounds growing cells
- surrounds meristematic cells
- cells in succulent tissues
- found at the junction of cells and at the outer edges of secondary walls
- composed of ~ 90% carbohydrate and 10% protein

Secondary walls

- surround cells that differentiate to form specialized functions (i.e. wood cells, xylem cells)
- have altered polysaccharide composition
- often are lignified