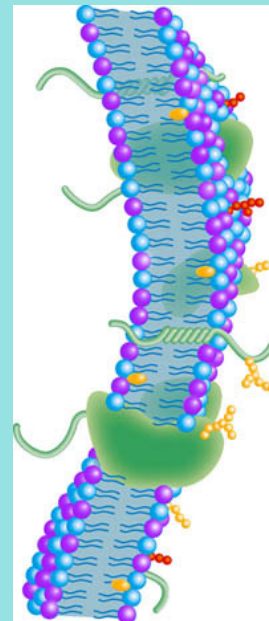


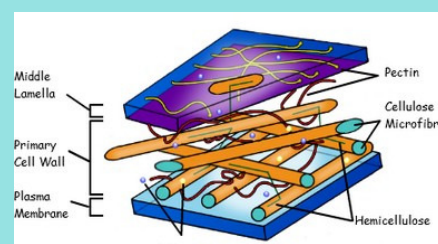
CELL MEMBRANE

- size: extremely thin
- found in both plant and animal cells
- functions: controls movement in and out of the cell, important in cell recognition, bind hormones and neurotransmitters (receptor sites), in animal cells it can fold to form micro-villi to provide a larger area for absorption, helps cells form tissue



CELL WALL

- size: 10-80 nm
- found in plant cells
- functions: to prevent cell from bursting, mechanical strength to plant as a whole, allow water to pass through it



VACUOLE

- size: relatively large
- found in both plant and animal cells
- functions: stores water, ions, sugars, and pigments, gives turgidity to the cell



CENTRIOLES + MICROTUBULES

- size: 200 nm in diameter (centrioles) 25mm in diameter (microtubules)
- found in both plant and animal cells
- functions: centrioles organize microtubules to form spindle fibers during nuclear division, modified centrioles (basal bodies) organize microtubules to form cilia and flagella, microtubules form part of the cytoskeleton (internal skeleton of the cell) which provides support and structure, microtubules serve as a scaffold for the movement and positioning of organelles

