

SUBCELLULAR STRUCTURE	EUKARYOTES		PROKARYOTES
	ANIMAL CELLS	PLANT CELLS	
Cell wall	✗	✓	✓
Plasma membrane	✓	✓	✓
Nucleus & nucleoli	✓	✓	✗
Chromosomes	✓	✓	Single circular loop of DNA
Centrioles	✓	✗	✗
Mitochondria	✓	✓	✗
Plastids (chloroplasts, chromoplasts etc.)	✗	✓	✗
Sap vacuole	✗	✓	✗
Food vacuoles	Some	✗	✗
Contractile vacuoles	Some	✗	✗
Pseudopods	Some	✗	✗
Cilia	Some	✗	✗
Flagellae	Undulating	Undulating	Rotating
Microtubules	✓	✓	✗
Lysosomes	✓	✓	✗
Golgi apparatus	✓	✓	✗
Microvilli	Some	✗	✗
Endoplasmic reticulum	✓	✓	✗
Nuclear envelope & pores	✓	✓	✗
Vesicles	✓	✓	✗
Ribosomes	✓ (bigger)	✓ (bigger)	✓ (smaller)
Mesosome	✗	✗	✓
Organelle membranes	✓	✓	✗
Macromolecular structures	✓	✓	✓

LIGHT MICROSCOPE – PRIMARY CELL STRUCTURE

ELECTRON MICROSCOPE – FINE or ULTRA STRUCTURE