Section 1.1 – Cell Biology

Levels of Organization

Atoms and molecules
✯Cells
✯Tissues
✯Organs
✯Organ systems
Organism
Population
Community
Ecosystem
Biome
Biosphere

Prokaryotic Cells

- Considered the first cells
- Very primitive cells
- No membrane bound nucleus or organelles
- Can carry out most cellular functions but not as efficient
- Exist today, we know them as bacteria

Eukaryotic Cells

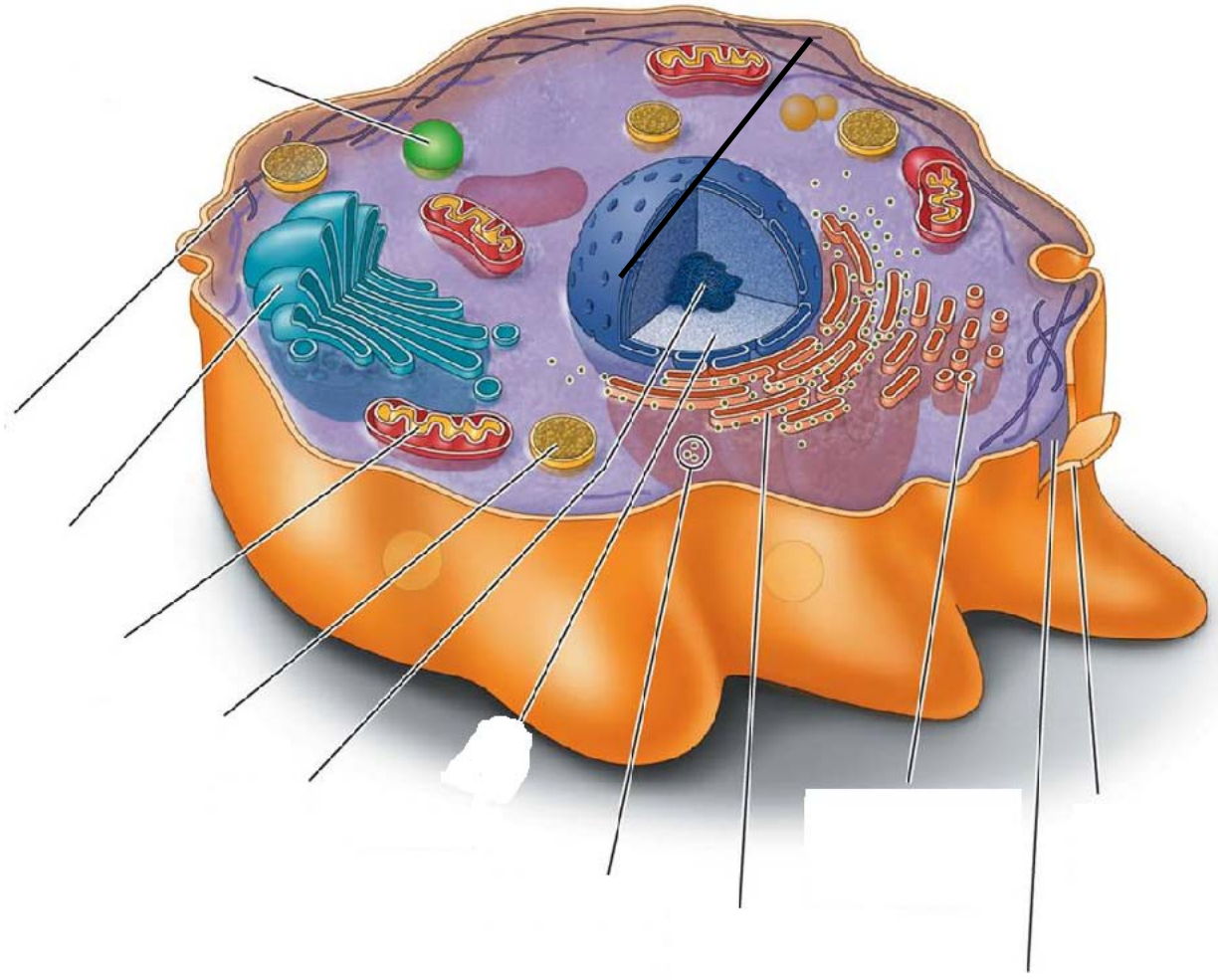
- Highly organized cells
- Have membrane bound nucleus and organelles
- Perform cellular functions in specialized structures
- Are found in animals, plants, protists (single cell organisms) and fungi
- Many types of specialized cells

The Model cell:

STRUCTURE OF AN ANIMAL CELL

Use the provided word bank to label the structure of the provided animal cell.

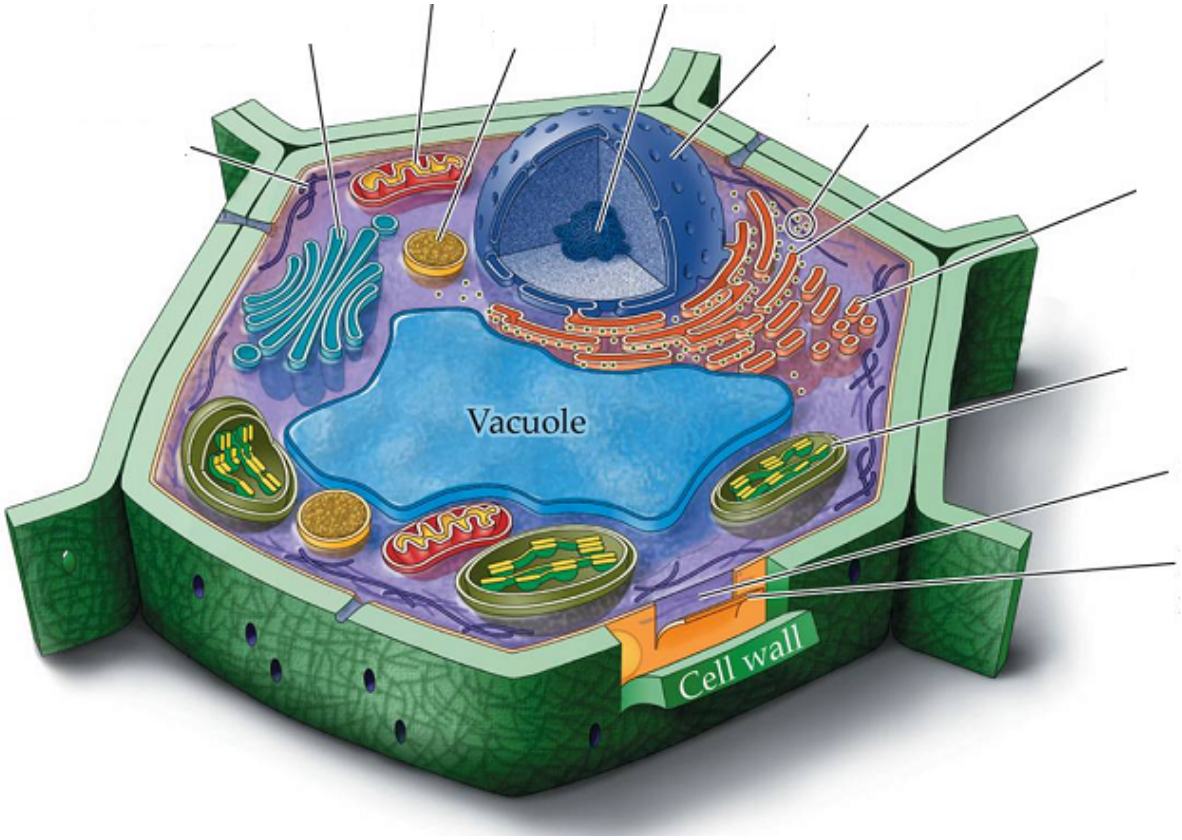
Nucleolus	Ribosome	Mitochondria
Cytoskeleton	Golgi Apparatus	Smooth Endoplasmic Reticulum
Rough Endoplasmic Reticulum	Lysosome	Cell Membrane
Nuclear Envelope	Vesicle	Cytosol



STRUCTURE OF A PLANT CELL

Use the provided word bank to label the structure of the provided a plant cell.

Nucleolus	Ribosome	Mitochondria
Cytoskeleton	Golgi Apparatus	Smooth Endoplasmic Reticulum
Rough Endoplasmic Reticulum	Lysosome	Cell Membrane
Nuclear Envelope	Vesicle	Cytosol



Make a Table in your notebook

Organelle **-spelling counts**	**Function** **-use proper terminology**	**Appearance** **(Make a diagram)**	**Life process or analogy of what it does** **-something that you can remember**

Life Processes

- Intake of nutrients
- Movement
- Growth
- Response to stimuli
- Exchange of gases
- Waste removal
- Reproduction
- etcetera

QUESTIONS:

- Page 16 questions 1-5