

7th grade Week 30 Notes Day 1

Cell: What is it?

C-notes

- The smallest unit that can perform all life processes, that is:

Reproduce

Grow/develop

Respond to stimuli

Organized

- Have the same needs:

1. Energy

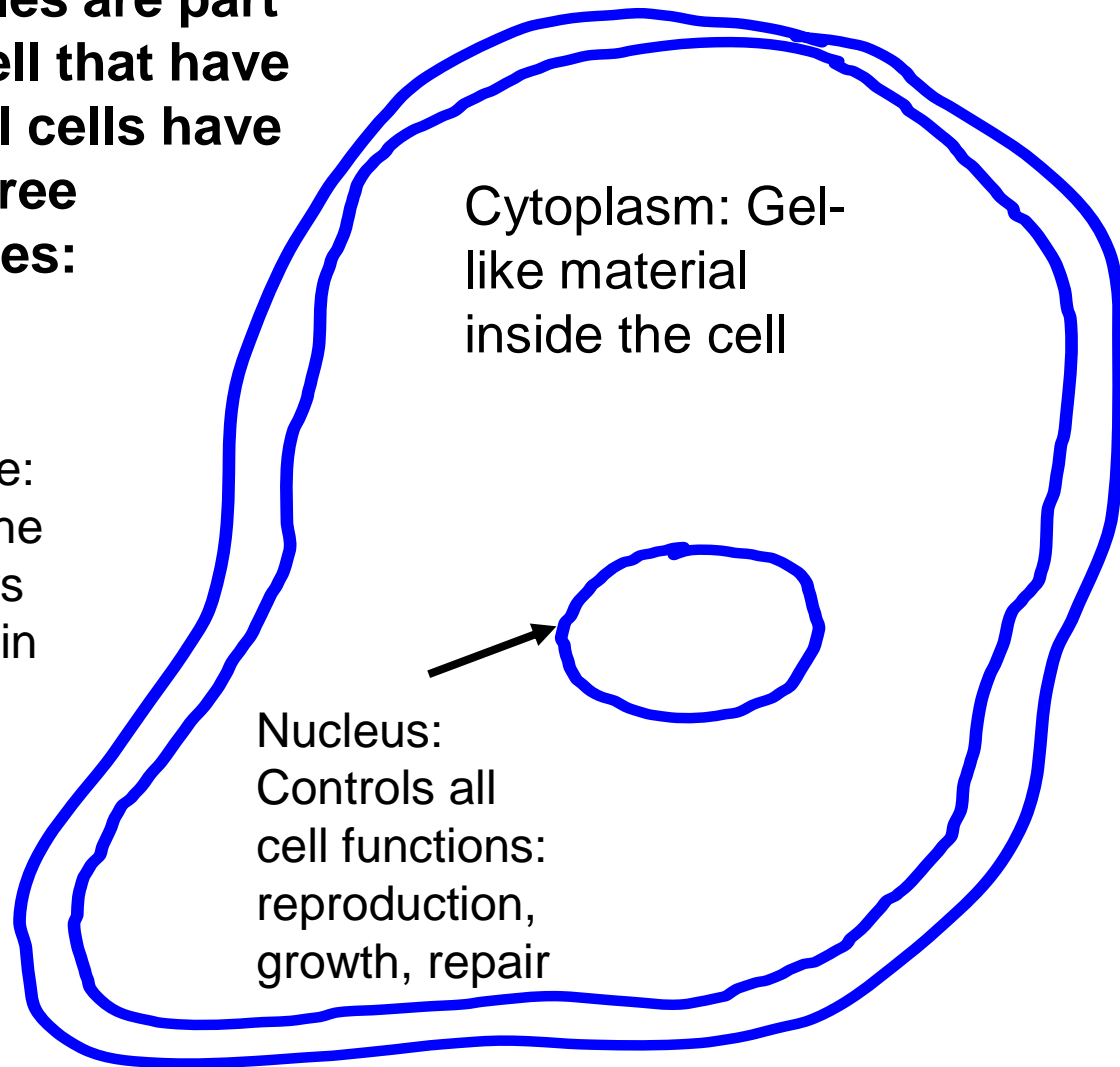
2. Materials (water, oxygen, minerals)

3. Living Space

Basic Cell Organelles

Organelles are part of the cell that have a job. All cells have these three organelles:

Cell Membrane: protects the cell, allows materials in or out



Cytoplasm: Gel-like material inside the cell

Nucleus: Controls all cell functions: reproduction, growth, repair

Basic Cell Organelles

- **Many cells don't have a specific shape...**
- **All cells have special parts that do a job, these are called CELL ORGANELLES**
- **organelles means (“little organs”)**

Why do Cells divide?

In unicellular organisms: They divide to REPRODUCE

In multicellular organisms....

REMEMBER:

ALL CELLS WORK AS A TEAM

Cells get damaged

Cells get “old” and “die”

Cells have to BECOME

specialized (that is only early in life)



Why do Cells divide?

These are the three reasons cells divide in a multicellular organism:

GROWTH- to increase in size of the multicellular organism

REPAIR- replaces damaged, dead cells or tissue

DEVELOPMENT- cells become specialized and change the appearance of an organism in it's lifetime

Caterpillar to butterfly