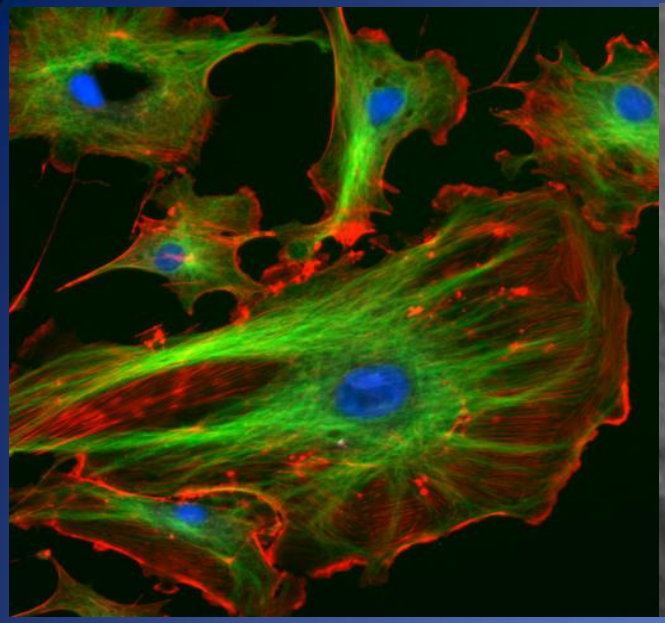
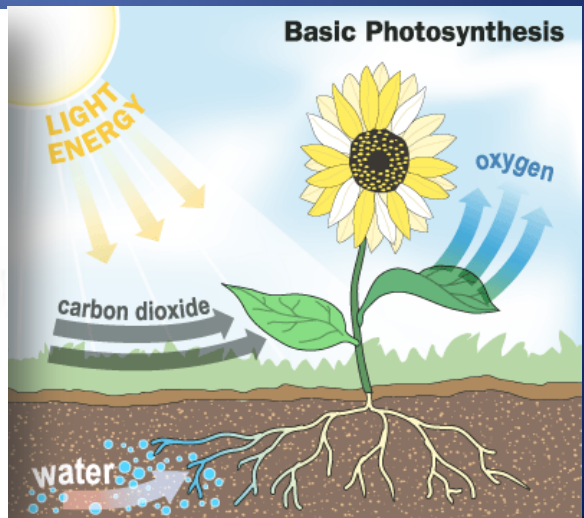
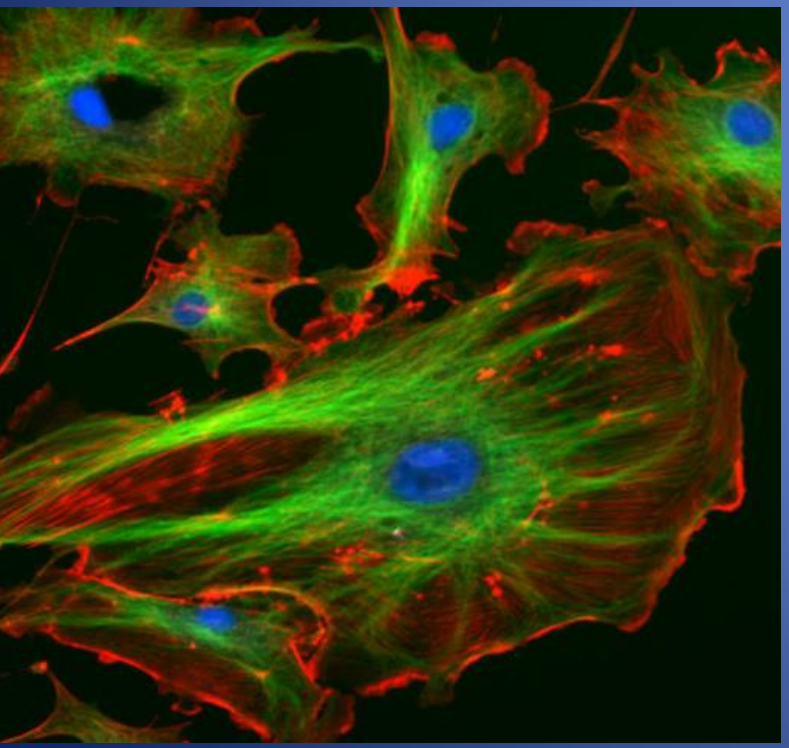


The Six Characteristics of Life



1. Living things have Cells

- A cell is the _____
- Cells contain all of the materials necessary for life to exist



- Some organisms are…
  - _____ (only <u>one cell</u>) →like **bacteria**
  - _____ (<u>many cells</u>) →like **humans (>100 trillion cells in fact)**

❖ Human cells have _____ _____ – like for nerves or skin

2. Living Things Sense and Respond to Change

- Living things respond to a _____
- **A stimulus is…**
  anything that _____
_____
- A stimulus can include:

- _____(good or bad)
- _____
- _____
- _____(touching a hot stove)
- Light or darkness (**plants respond**)
- _____(what would you do if you were about to fall?)

2. Living Things Sense and Respond to Change

Homeostasis

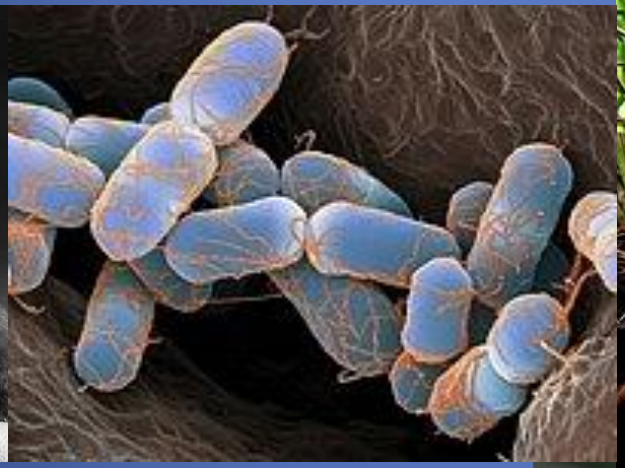
When _____ responds to changes in order to keep its _____

_____

What happens when our bodies get too cold or hot?

3. Living Things Reproduce

Living things must reproduce to make sure their species survives



3 Types of Reproduction:

1. _____
2. _____
3. _____

Sexual VS Asexual Reproduction

- SEXUAL = _____of genetic material (_____) from ____**parents**

Asexual = an exact _____of the genetic material (_____) from _____ **parent**

Asexual Reproduction (**A=** NOT**)**

Examples:

- _____

- _____

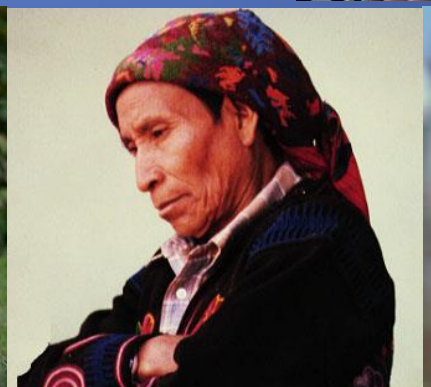
Sexual Reproduction

- Two parents combine their DNA to produce a new offspring
  - _____= male sex cell
  - _____= female sex cell
- This mix of DNA creates an organism with the genetic _____of both parents

Sexual Reproduction

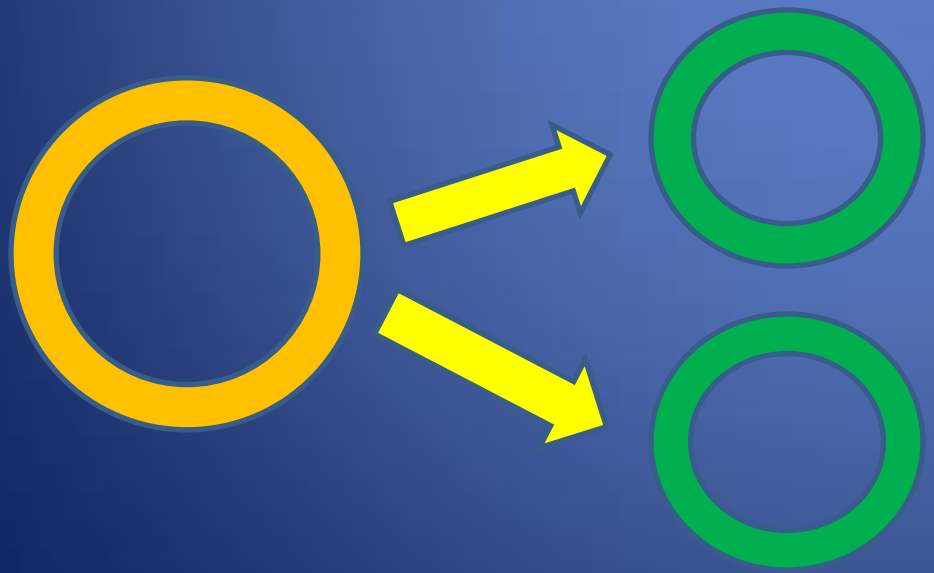
Sexual reproduction helps make _____ _____ look very different

(compare to **A**sexual)



Binary Fission

- The simplest form of reproduction which occurs in _____(aka – **bacteria**)
- Binary fission involves _____a circle of _____and dividing into **two copies with** _____
- A form of _____ reproduction



4. Living things have DNA

- Living things need **DNA** (Deoxyribonucleic acid) because it _____**all the** _____ **and** _____ **of an organism**
- **DNA is a special molecule** that contains the _____(a macromolecule)

Copies of DNA are passed down from the parent to the next _____.

Adopting a parent's features is called…

_____

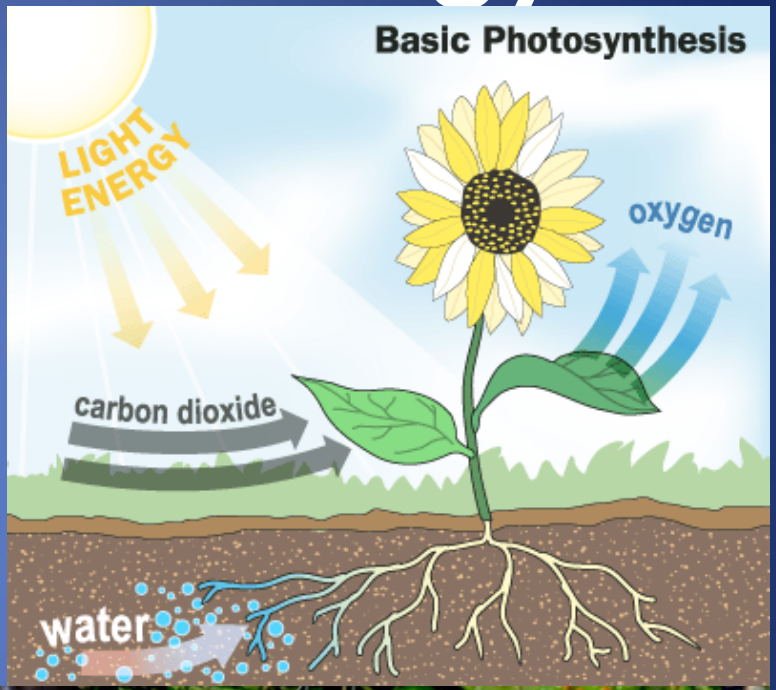
5. Living things Use Energy

- Living things use energy to:
  - ✓ _____ and _____ food
  - ✓ _____
  - ✓ Move things _____of the cell
  - ✓ And move, grow, reproduce and other things
- All of these activities involve _____ _____
- _____ is the _____chemical activities in an organism

5. Living things Use Energy

_____ are plants or bacteria that can make (produce) their own _____ using the _____ in a process called _____

Any other organism is either a _____ (like a wolf) or a _____ (like mushroom)



6. Living Things Grow and Develop

Development = living things change and _____as they grow over _____

Organisms pass through different _____ as they grow

_____ **celled** organisms = grow _____

_____**-celled** organisms = grow in _____**of cells**

6. Living Things Grow and Develop

_____is when organisms have a _____

change of _____

Examples: - Tadpole → _____

- Caterpillar → _____