7th grade Notes Week 30 Day2

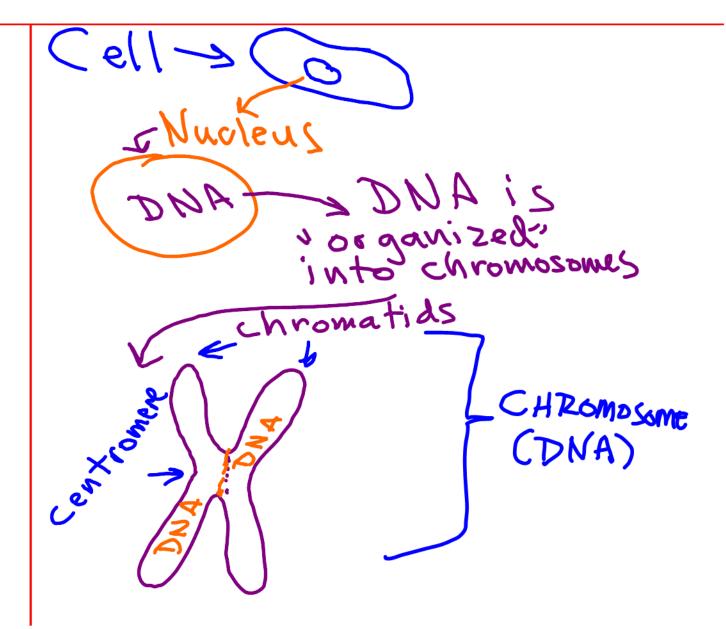
Cells divide Cell division is controlled by DNA DNA is located in the **NUCLEUS** of most cells

DNA is a compound that holds a "recipe" to make an individual organism. Example: the DNA in your cells has the recipe to make another "you"

Genetic Material: DNA

- The DNA is grouped into CHROMOSOMES
- A chromosome contains part of the DNA
- Different living things have different numbers of chromosomes
- Humans have 23 pairs; total =
- •Chimpanzees have 24 pairs; total = 48

Genetic Material: DNA



Types of Reproduction: Sexual

 Type of reproduction that requires DNA to be exchanged/combined between two individuals of the species. Most multicellular organisms reproduce

this way

Types of Reproduction: Asexual

 Simplest form of reproduction •ALL UNICELLULAR organisms use this form Your individual cells use this type of reproduction •**Requires only ONE cell

Types of Reproduction: Asexual

Forms of Asexual Reproduction

- 1. <u>Binary Fission</u>- cell divides, then splits off (offspring)
- 2. <u>Budding</u> (multicellular) organism grows a "bud" that becomes a whole organism.
- 3. Regeneration (multicellular) organism grows a whole body part

Types of Reproduction: Asexual vs. Sexual

Same:

- Both forms of reproduction
- Both produce offspring

Types of Reproduction: Asexual vs. Sexual

Different:

- A- requires only one cell
- S- requires two cells
- S- has "parents"
- A- unicellular
- S- multicellular
- **S- has DNA from both parents
- ***A- produces offspring that are IDENTICAL to the "parent"