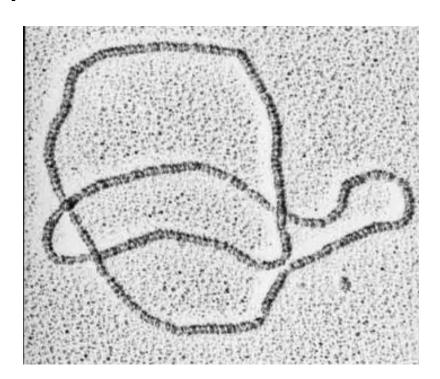


Genes and Chromosomes

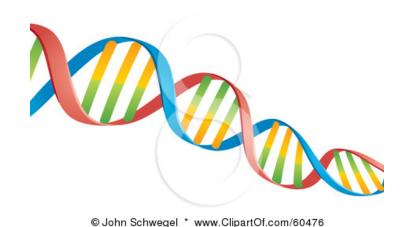
DNA

- Specific chemicals in the nucleus of a cell
- These chemicals store and pass along hereditary information



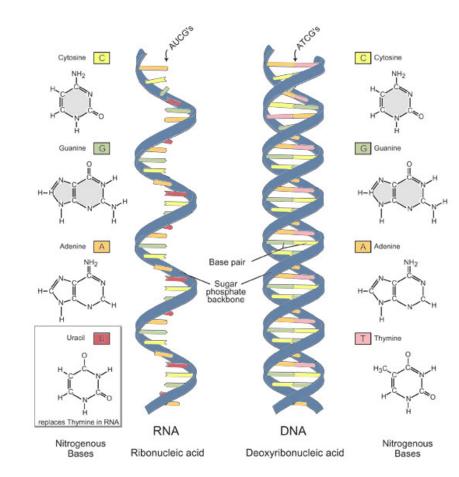
DNA

- The information in DNA determines what a cell will become
- The information in DNA determines how a cell will function and grow



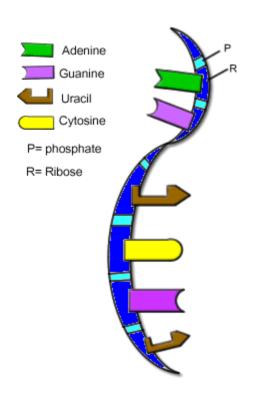
RNA

- Chemicals that are similar but different from DNA
- RNA gives instructions to the rest of the cell



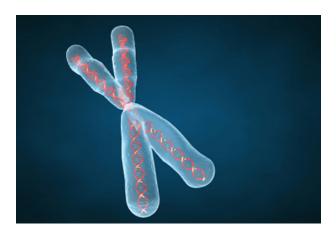
RNA

- RNA gives the recipe on how to make proteins
- Proteins are the basis for most cell functions



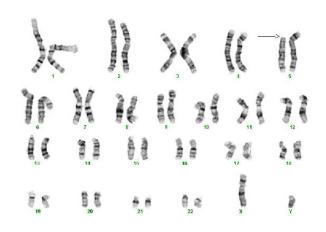
Chromosomes

- Long strands of DNA
- Chromosomes are stored in the nucleus of a cell

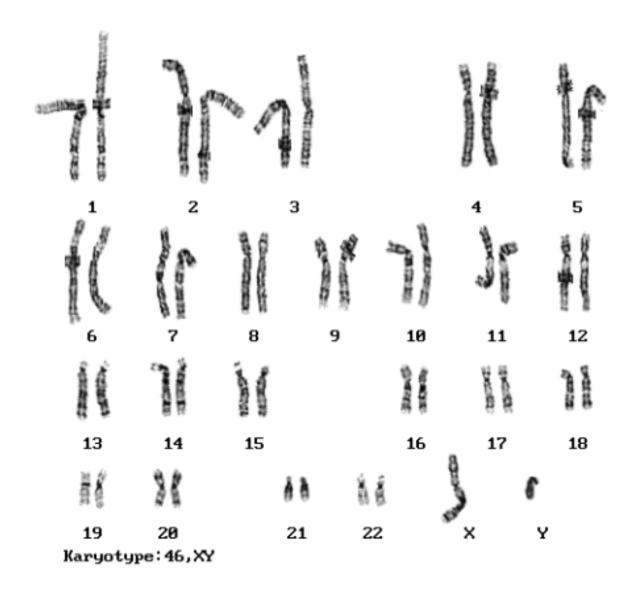


Chromosomes

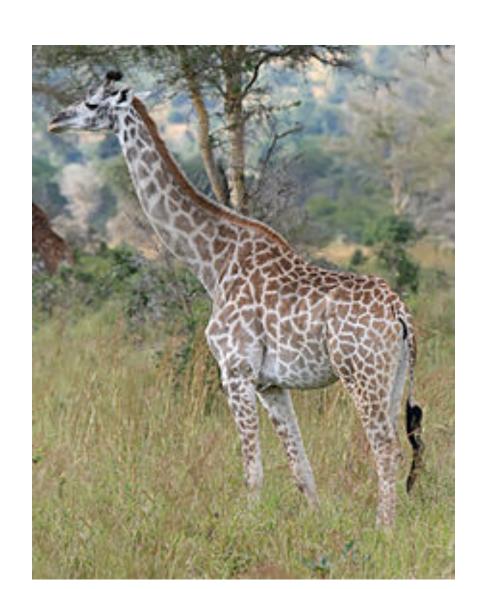
- Every organism has a specific number of chromosomes
- Each cell in your body has a copy of every chromosome – complete set of instructions to make any type of cell



Humans have 46 Chromosomes



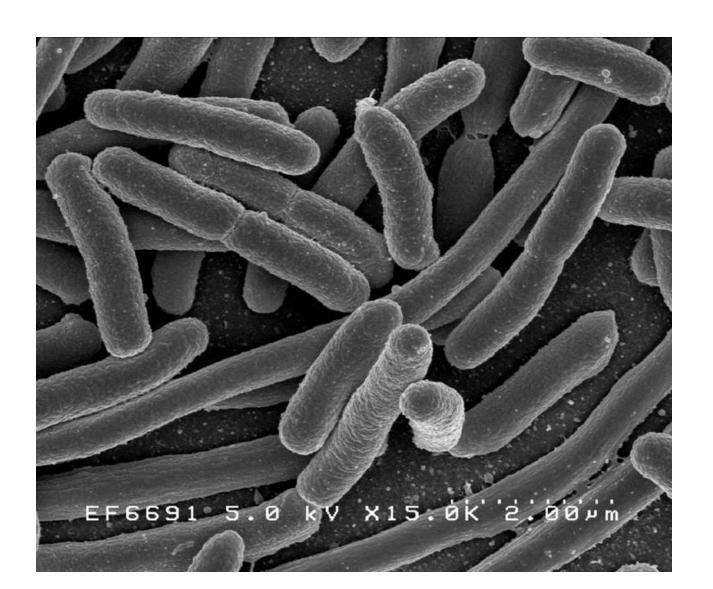
Giraffe – 62 chromosomes



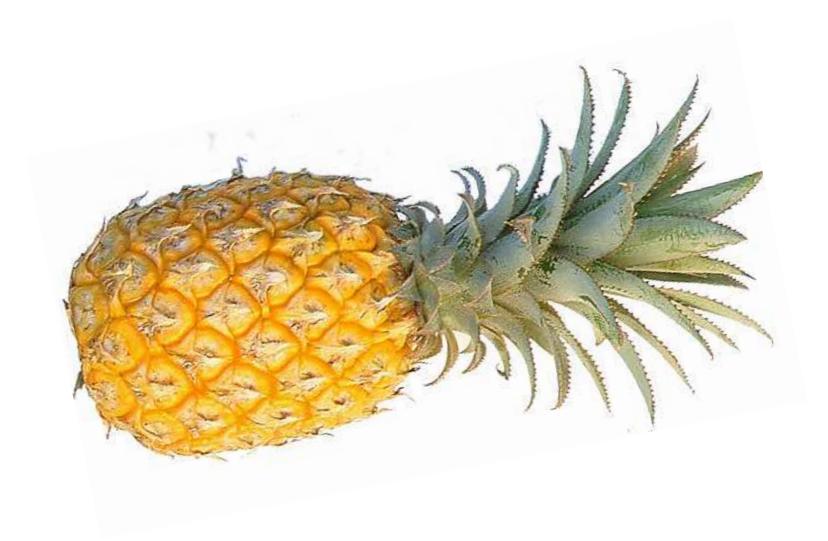
Fruit Fly 8 Chromosomes



Bacteria – 1 chromosome



Pineapple – 50 chromosomes

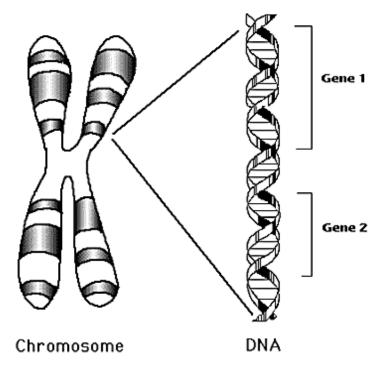


Genes

A section of DNA on a chromosome

Contains the instructions for making a specific

protein



Genes

Genes

- Proteins determine what traits an organism will have
- Each chromosome contains hundreds of thousands of genes

