

# *Chapter 8*

## *Vocabulary*

8th Grade



# Vocab - Day 1

- ▶ **Asexual Reproduction** - A type of reproduction in which a new organism is produced from one parent and has hereditary material identical to the parent organism.
- ▶ **Chromosome** - Structure in a cell's nucleus that contains hereditary material.
- ▶ **Diploid** - When a cell has chromosomes in pairs.
- ▶ **DNA** - Deoxyribonucleic acid, which is the genetic material of all organisms, made up of two twisted strands of sugar-phosphate molecules and nitrogen bases.
- ▶ **Egg** - Haploid sex cell formed in the female reproductive organs.



# Vocabulary Day 2

- ▶ **Fertilization** - In sexual reproduction, the joining of a sperm and egg.
- ▶ **Gene** - Section of DNA on a chromosome that contains instructions for making specific proteins.
- ▶ **Haploid** - When a cell has only half the number of chromosomes as body cells.
- ▶ **Meiosis** - Reproductive process that produces four haploid sex cells from one diploid cell and ensures offspring will have the same number of chromosomes as the parent organisms.
- ▶ **Mitosis** - Cell process in which the nucleus divides to form two nuclei identical to each other, and identical to the original nucleus, in a series of steps (prophase, metaphase, anaphase, & telophase).



# Vocab - Day 3

- ▶ **Mutation** - Any permanent change in a gene or chromosome of a cell.
- ▶ **RNA** - Ribonucleic acid, which carries codes for making proteins from the nucleus to the ribosome.
- ▶ **Sexual Reproduction** - A type of reproduction in which two sex cells, usually an egg and a sperm, join to form a zygote, which will develop into a new organism with a unique identify.
- ▶ **Sperm** - Haploid sex cells formed in the male reproductive organs.
- ▶ **Zygote** - New diploid cell formed when a sperm fertilizes an egg; will divide by mitosis and develop into a new organism.



# Vocab - Day #4

- ▶ **Eukaryote** (eukaryotic) - An organism or cells with a formed nucleus and organelles surrounded by membranes.
- ▶ **Prokaryote** (prokaryotic) - Single-celled organism that doesn't have an organized nucleus or organelles.
- ▶ **Reproduction** - The process through which organisms produce offspring.
- ▶ **Fission** - A reproductive method used by bacteria in which one divides to form two bacteria having identical genetic material.
- ▶ **Budding** - A type of asexual reproduction in which a new organism grows from the body of its parent; for example, yeast reproduces this way.



# Vocab - Day 5

- ▶ **Regeneration** - A type of asexual reproduction in which a whole new organism grows from just a part of the parent organism; a sea star.
- ▶ **Gametes** - In organisms that reproduce sexually, the sex cells, or haploid cells that join to form a zygote.
- ▶ **Chromatid** - During cell division, each part of a double-stranded chromosome, joined by a centromere, after replication.
- ▶ **Replication** - The process by which DNA copies itself.
- ▶ **Protein Synthesis** - The process by which proteins are made in the ribosome from amino acids.
- ▶ **Amino Acid** - Substance from which organisms build proteins.