**Animal Reproduction and Fertilization**

**How do Animals Reproduce?** \*Animals undergo either asexual or sexual reproduction to make more of their own kind or species.\*

**Asexual Reproduction:** One parent produces a new organism identical to itself. This new organism receives an exact copy of the parent’s set of genetic material, or DNA.

**2 examples of Asexual:**

Budding- a new animal grows out of the parent and breaks off. (sea sponges can do this)

Fragmentation- parents breaks into pieces and each piece develops a new organism. (worms, starfish can do this)

**Sexual Reproduction:** 2 parents, one with a sperm cell and one with an egg cell. These join to produce a new organism that has DNA that differs from both parents.

\*offspring have a combo of physical characteristics from both parents and may not look exactly like either parent.

Fertilization- joining of sperm and egg cells.

\*Most vertebrates, including mammals and most invertebrates reproduce sexually.\*

Several aquatic invertebrates, such as sponges and cnidarians, have life cycles that alternate (go back and forth) between asexual and sexual reproduction.

Larva- is an immature form of an animal that looks very different from the adult.

Cnidarians also alternate between two body forms:

A polyp- that looks like an upright vase (sea sponges)

A medusa- that looks like an open umbrella (jellyfish)

Larva- is an immature form of an animal that looks very different from the adult.

**How Do External and Internal Fertilization Differ?**

\*External fertilization occurs outside of the female’s body, and internal fertilization occurs inside the female’s body.\*

**External fertilization:**

Usually takes place in water to prevent the eggs and sperm from drying out. Females release eggs into the water. Then the male releases sperm nearby.

Many fish, amphibians, and aquatic invertebrates.

**Internal fertilization:**

Occurs directly in the body.

Some fish and all land animals.

Mammals have to carry their young (pregnancy). The length of time between fertilization and birth is called the **gestation period.**