ANIMAL GROWTH AND REPRODUCTION

Life Cycles

A **life cycle** is the stages of development an organism goes through starting from an **egg** to growing into an **adult**. Living organisms each have their own unique way of reproducing, giving birth, growing, and developing.

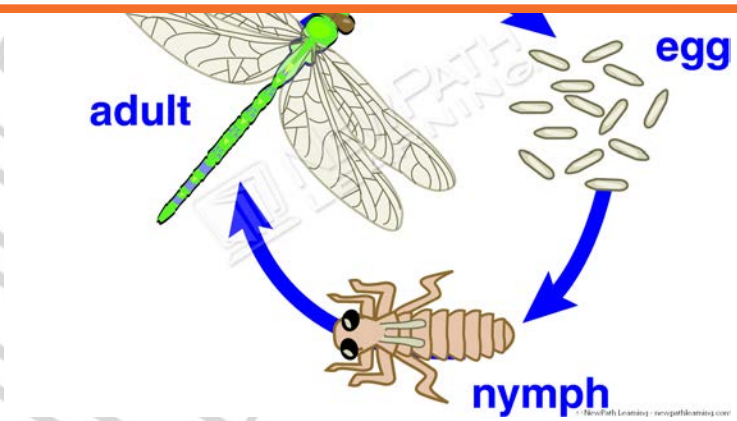
Organisms such as mammals and birds have simple life cycles. These organisms look similar to their parents when they are born. Many organisms, however, have complex life cycles and do not look like their parents when they are born.

Lesson Checkpoint:
What is a life cycle?

Metamorphosis

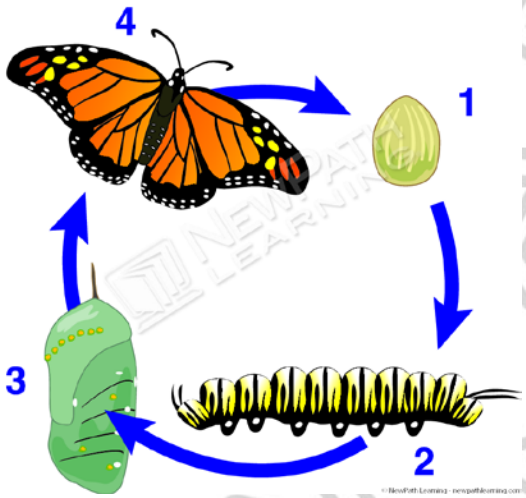
Metamorphosis is the process of a rather **sudden change** in the appearance a

Organisms th rough **three** stages of dev



Lesson Checkpoint:
What are the three stages of development in incomplete metamorphosis?

Organisms that go through **complete metamorphosis** go through four stages of development while include: egg, larva, pupa, and adult.



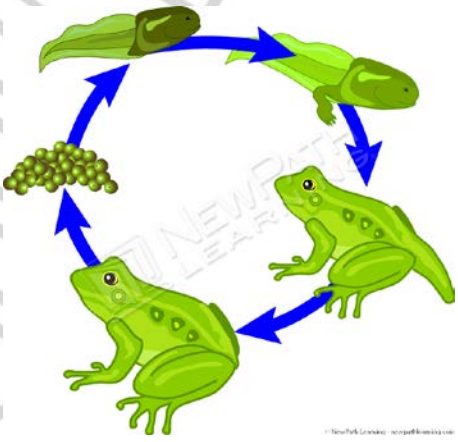
Most insects go through complete metamorphosis.

How r osis?

Animals produ

- Many anim develop **inside** the he live young. Th ent.
- Other organisms, like chickens and frogs, **lay eggs** instead of having live births. **External development** is when an organism develops outside of an organism.

Animal life cycles vary in how long they take. Some animals have short life cycles while others take longer.



Reproduction

Organisms also reproduce in several different ways. **Reproduction** is the creation of a **new individual** or individuals from existing individual or individuals.

Fertilization

Fertilization is the **union** of a male sperm and a female egg to form an offspring. This is one way animals reproduce. Internal fertilization takes place **inside** an organism.

Fertilization does NOT need to take place in every organism in order for reproduction to occur. A **single** individual can produce offspring without fertilization from another organism without fertilization taking place. This is called **asexual reproduction**.

Some animals develop inside the parent organism, as in those who have live birth, and it is **called internal development.**

External dev of an organism.

Budding is th **y** of the parent. Hydra asexually through this p

If a piece of a parent is **detached**, and it can grow and develop into a completely new individual, this process is known as **regeneration**. Some types of worms and starfish can regenerate in this way.

Lesson Checkpoint:
What are two ways an organism can reproduce asexually, without fertilization occurring?

Traits

Animals have both inherited and acquired traits. An **inherited trait** is a characteristic or quality that an organism is born with. An **acquired trait** is a trait one learns through its experiences but is not born with.

Heredity is the passing of traits and characteristics from parents to their offspring.

Lesson Checkpoint:
What is the difference between an acquired and inherited trait?