

How Do Animals Reproduce?

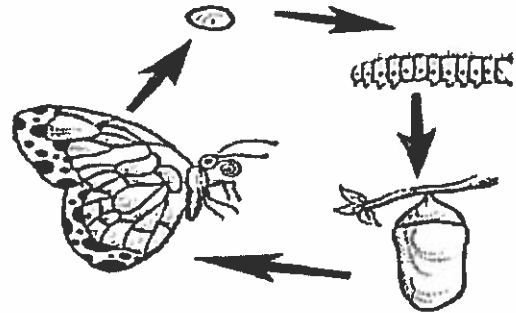
Science Words

Say each word quietly to yourself. Then read the meaning.

Read the tip to help you remember.

complete metamorphosis [kuhm•PLEET met•uh•MAWR•fuh•sis] a life cycle in which the animal goes through four different stages: egg, larva, pupa, adult (ELPA)

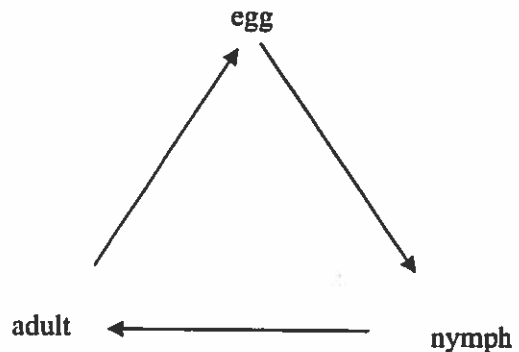
Think of *complete metamorphosis* as a square. Since *complete metamorphosis* has four stages, the square has one stage at each corner.



incomplete metamorphosis [IN•kuhm•PLEET met•uh•MAWR•fuh•sis] a life cycle in which the animal goes through three different stages: egg, nymph, adult (ENA)

Think of *incomplete metamorphosis* as a triangle. Since *incomplete metamorphosis* has three stages, the triangle has one stage at each corner.

nymph [NIMF] a stage in incomplete metamorphosis in which the animal looks like a tiny adult, but does not have wings, which develop later



Nymph ends with the same sound at the beginning of *fly*. A *nymph* cannot fly because it does not have wings.

A *nymph* is between “egg” and “adult” on the triangle of incomplete metamorphosis.

How Do Animals Reproduce?

Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Sexual reproduction is when sperm from a male joins an egg from a female.
2. The fertilized egg can become a new animal.
3. When a young animal becomes mature, it may have young of its own, in a repeating cycle.
4. Birds, fish, and reptiles hatch from eggs; dogs and mice are born live.
5. Some animals, such as penguins and deer, take care of their young; other animals do not.
6. Butterflies and moths go through four stages of complete metamorphosis.
7. The caterpillar is the larva stage in the life cycle of moths and butterflies.
8. During the pupa stage, a moth builds a cocoon where it changes into its adult form.
9. Grasshoppers and other insects go through three stages of incomplete metamorphosis.
10. During the nymph stage, a young grasshopper may molt, or shed its skeleton, many times.

How Are Living Things Adapted to Their Environment?

Science Words

Say each word quietly to yourself. Then read the meaning.

Read the tip to help you remember.

environment [en•VY•ruhn•muht] all the living and nonliving things in an area

Environment and *everything* begin the same way. The *environment* is everything in a place.

adaptation [ad•uhp•TAY•shuhn] a characteristic that helps a living thing survive

Adaptation and *adapt* are in the same word family. When you adapt to something, you change in order to fit in or get what you need. An *adaptation* is the change you made in order to adapt.

physical adaptation [FIZ•ih•kuhl ad•uhp•TAY•shuhn] an adaptation in a body part

When you think of *physical*, think of *physical fitness*. Physical fitness has to do with the fitness of the body. A *physical adaptation* has to do with an adaptation of the body.



A duck's webbed foot is a physical adaptation for swimming.

behavioral adaptation [buh•HAYV•yer•uhl ad•uhp•TAY•shuhn] something an organism does to help it survive

Behavioral and *behave* are in the same word family. How you behave is how you act. A *behavioral adaptation* is an adaptation in the way an animal acts.

instinct [IN•stinkt] a type of behavioral adaptation; an inherited behavior an animal knows how to do without having to learn it

Instinct contains the word *in*. *Instincts* are behaviors that are built in. For example, no one needs to teach a puppy to drink milk from its mother because this behavior is an *instinct*.

How Are Living Things Adapted to Their Environment?

Science Concepts

Read the Ideas more than once. Do your best to remember them.

1. Earth has many kinds of environments, such as arctic, tropical rainforests, deserts, and ocean.
2. The largest environment on Earth is the ocean.
3. Each living thing has adaptations that let it survive in its environment.
4. An ostrich's long legs are a physical adaptation that lets it run fast in open spaces.
5. The flexible stems of plants that live in rivers let them bend with the flow of the water.
6. The dark color of pond turtles is a physical adaptation that helps them hide in the mud.
7. In a behavioral adaptation, seeds of desert plants do not grow into new plants until it rains.
8. The waxy coatings of some desert plants are a physical adaptation to keep from losing water.
9. Male penguins have an instinct to huddle together, keeping themselves and their young warm.
10. A penguin's black feathers and layer of fat are physical adaptations to extremely cold weather.