

Life Cycles



A life cycle shows the different stages of life for a living thing. All animals, including humans, have a life cycle as all animals are born, grow, reproduce and die. Plants have life cycles too. Here are a few examples of the life cycles of different animals.



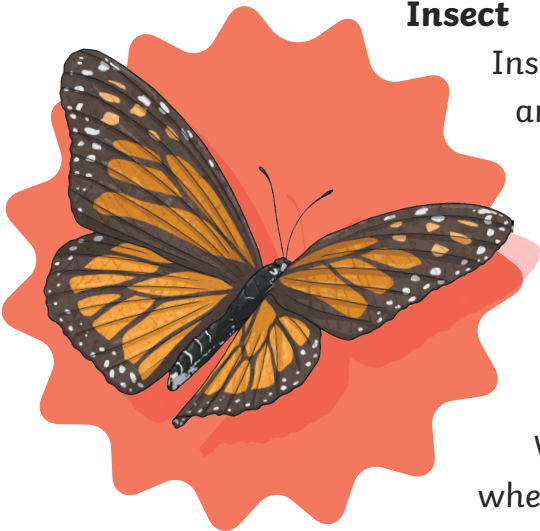
Mammal

Mammals have a clear and straightforward life cycle which includes three main stages. When a mammal's egg is fertilised, an embryo grows within the mother's womb. Here, the **embryo** is completely reliant on the mother, taking nutrients from what the mother eats and drinks. After birth, the **young** mammal begins to grow more and more independent from the mother as it ages. For humans, this stage is divided up even further, with a baby growing into a toddler, then a child, then a teenager and then to a young adult. When a mammal reaches **adulthood**, it is then able to begin the cycle again through reproduction.

Life Cycles

Bird

The life cycle of a bird is similar to that of a mammal in that it also has three main stages. The key difference is that birds lay **eggs**, where the embryo continues to develop. The mother bird will spend time sitting on the eggs to keep them warm. When an egg hatches, a **chick** will emerge. Like young mammals, chicks take time to become independent, with the parents often having to feed and care for their young. When the chick becomes an **adult**, it can feed itself and is ready to find a mate and continue the cycle.

**Insect**

Insect life cycles are more complicated than mammals and birds. Different types of insects have different life cycles depending on whether or not they undergo metamorphosis. A butterfly is an example of an insect that **does** undergo metamorphosis. It begins life as an **egg** before hatching into a **larva**. In the case of a butterfly, the larva is called a caterpillar. As the larva grows, a hard shell grows around it, called a pupa. Within the **pupa**, the larva undergoes metamorphosis where it changes into an **adult**. When it breaks free of the pupa, it can then go on to mate and lay its own eggs.

A dragonfly is an example of an insect that **does not** undergo complete metamorphosis. It begins life as an **egg** which hatches into a **nymph**. A nymph might look like a smaller version of the adult insect. Usually, nymphs live underwater and they can't fly yet. When a nymph grows into an **adult**, it might shed its skin or begin to fly.



Amphibian

An amphibian is a creature that spends part of its life living in water and part of its life on land. An example of an amphibian is a frog. Frog mothers lay a mass of eggs called **frogspawn** which the male then fertilises. An egg hatches into a **tadpole**, which can breathe underwater using its gills. It grows into a **tadpole with legs** and its lungs develop. When it becomes a **froglet**, it leaves the water and begins to eat insects on land, rather than plants underwater. When a frog reaches the **adult** stage, it is able to lay its own eggs.

Life Cycles

Questions

1

Which type of animal **does not** lay eggs? Circle the correct answer

bird mammal amphibian insect

2

Write down the animals under the correct heading, based on how many stages they have in their life cycle.

human eagle frog butterfly dragonfly chicken dog

3 stages	4 stages	5 stages

3

How is a human's life cycle different from a dog's life cycle?

Life Cycles

...the embryo is completely reliant on the mother...

4

Which of these words is an antonym for **reliant**?

- dependent
- independent
- bonded

5

What is **metamorphosis**?

6

In what way is a bird's life cycle similar to that of a mammal?

7

What do all the animals have in common when they reach adulthood?

Life Cycles

8

Tick the boxes to show if these statements are true or false.

	true	false
Bird embryos grow in the mother's womb.		
Dragonfly nymphs are unable to fly.		
A butterfly begins life as a caterpillar.		
Tadpoles develop lungs before they become froglets.		

9

What do you think might happen if a mother bird does not sit on its eggs?

10

What features could the writer have included in this text to improve it?

Answers

1 Which type of animal **does not** lay eggs? Circle the correct answer

bird **mammal** amphibian insect

2 Write down the animals under the correct heading, based on how many stages they have in their life cycle.

human eagle frog butterfly dragonfly chicken dog

3 stages	4 stages	5 stages
human eagle chicken dog dragonfly	butterfly	frog

3 How is a human's life cycle different from a dog's life cycle?

Human life cycles are broken down further in the young stage, into baby, toddler, child, teenager and young adult.

Life Cycles

...the embryo is completely reliant on the mother...

4

Which of these words is an antonym for **reliant**?

- dependent
- independent
- bonded

5

What is **metamorphosis**?

Metamorphosis is the process where an insect larva changes into an adult in the pupa.

6

In what way is a bird's life cycle similar to that of a mammal?

Any of the following:

- **A bird's life cycle and a mammal's life cycle both have three stages.**
- **Chicks and young mammals both need to be cared for by their mothers as they get more independent.**
- **Embryos and eggs are both completely reliant on their mothers.**
- **When birds and mammals reach adulthood they are ready to reproduce.**

7

What do all the animals have in common when they reach adulthood?

All of the animals are ready to reproduce and continue the cycle when they reach adulthood.

Life Cycles

8

Tick the boxes to show if these statements are true or false.

	true	false
Bird embryos grow in the mother's womb.		✓
Dragonfly nymphs are unable to fly.	✓	
A butterfly begins life as a caterpillar.		✓
Tadpoles develop lungs before they become froglets.	✓	

9

What do you think might happen if a mother bird does not sit on its eggs?

Child's own answer, such as:

- The embryo inside the egg might become too cold.
- The embryo inside the egg might not grow as well.

10

What features could the writer have included in this text to improve it?

Child's own answer, such as:

- The writer could have included a glossary to explain some of the scientific terms.
- The writer could have included diagrams of life cycles so it is easier to understand.

We hope you find the information on our website and resources useful. As far as possible, the contents of this resource are reflective of current professional research. However, please be aware that every child is different and information can quickly become out of date. The information given here is intended for general guidance purposes only and may not apply to your specific situation.



visit [twinkl.com](https://www.twinkl.com)

