

Life Cycles & Living Things

Reproduction, classification & habitats



1. How does a mammal's life cycle work?

Most mammals are born **live** and grow through infancy, adolescence and adulthood.

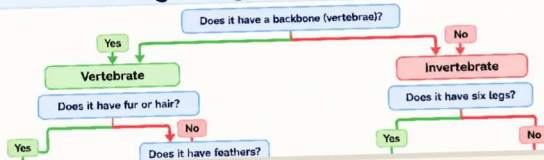
- Young mammals are usually cared for by a parent when born.
- They grow bigger but keep roughly the same body shape throughout life.

3. How do we group living things using a classification key?

A **classification key** uses yes/no questions to sort living things by their features.

- Scientists use keys to identify unfamiliar plants and animals.
- The seven main animal groups are: mammals, birds, fish, amphibians, reptiles, insects, other invertebrates.

Living Things Classification Key



5. What makes an environment change, and how does this affect living things?

Environments can change due to **humans, weather, or natural events**, affecting the living things there.

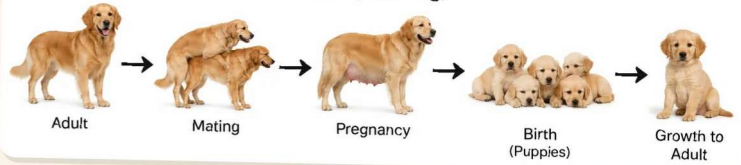
- Habitat loss can threaten a species' survival.
- Some species adapt or move; others may struggle to survive change.

6. Greater Depth: how do life cycles of different animal groups compare?

Mammals, birds, amphibians and insects all reproduce, but their life cycles differ greatly.

- Amphibians and insects undergo metamorphosis; mammals and birds do not.
- Comparing life cycles side by side reveals these similarities and differences.

Mammal Life Cycle (Example: Dog)



2. What is metamorphosis, and how does a frog or butterfly change?

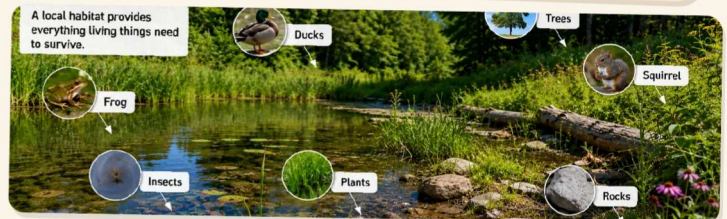
Metamorphosis is a dramatic change in body shape during an animal's life cycle.

- A frog goes: egg → tadpole → froglet → adult frog.
- A butterfly goes: egg → caterpillar → pupa (chrysalis) → adult butterfly.

4. How do plants reproduce, and what is pollination?

Flowers are pollinated by insects or wind, leading to seed and fruit formation.

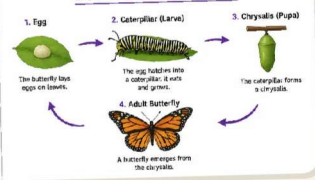
- Some plants also reproduce asexually — from runners, bulbs, or cuttings.
- Both methods let plants create new individuals.



FROG LIFE CYCLE



BUTTERFLY LIFE CYCLE



7. TAPS: How do we write up our life-cycle comparison report?

RESEARCH

Our TAPS task: **what is the difference between the life cycle of an insect and a mammal?** This is a **research report** — we research one insect and one mammal, then compare and write up what we find.

- Question → decide what to research → find & record evidence.
- Research → compare findings → write our comparison → **conclusion**.

Phylum

PHYLUM
Chordata

Animals with a backbone
(spinal column)

Class

MAMMALIA
Mammals

AVES
Birds

REPTILIA
Reptiles

AMPHIBIA
Amphibians

PISCES
Fish

KEY VOCABULARY

life cycle metamorphosis classification classification key vertebrate invertebrate pollination reproduction habitat environment evidence conclusion

SKILLS I'LL USE

- Use & build a classification key
- Sequence a life cycle diagram
- Compare life cycles
- Record findings in a table
- ★ GD: explain how environmental change affects survival