



# Life Cycles

A task setting PowerPoint Pack

Photos courtesy of U. S. Fish and Wildlife Service - Northeast Region, kiwinz, pictographic and cocoon2 (@flickr.com) - granted under creative commons licence - attribution

# Contents



**Introduction**

**Mammals**

**Amphibians**

**Insects**

**Birds**

**Comparison**

**Plants**

# What is a life cycle?



- What is a life cycle?
- What life cycles do you know about?
- Can you describe the life cycle of an animal or plant?

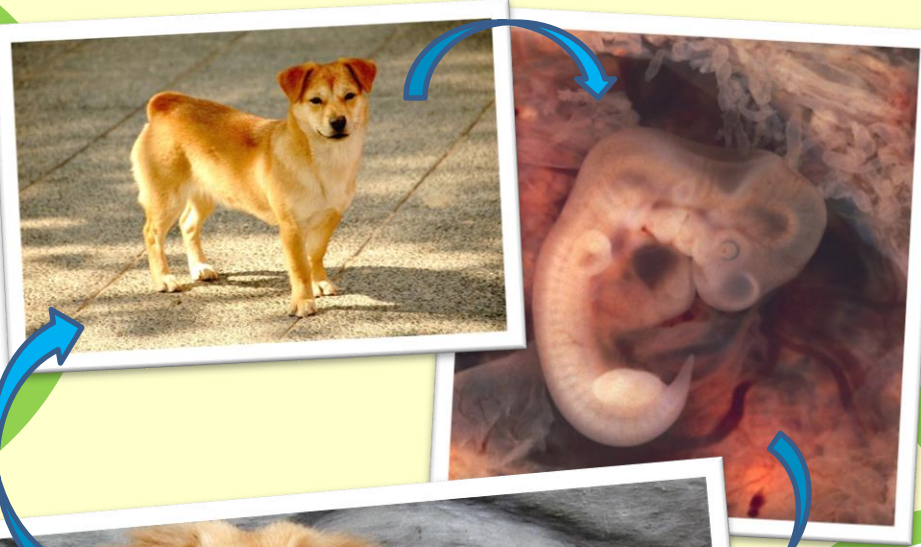
Share your ideas as a group and then as a class.



# LO: To understand the lifecycle of a mammal

The lifecycle of a mammal involves 3 main stages:

Independent adult usually seeks company from the opposite sex and mates. Adult female nurses their young.



**Gestation:**  
**embryo** growing inside the mother, where it is completely reliant upon the mother.

**Young:**  
main period of growth and developing independence from the parents.

## **Mammals:**

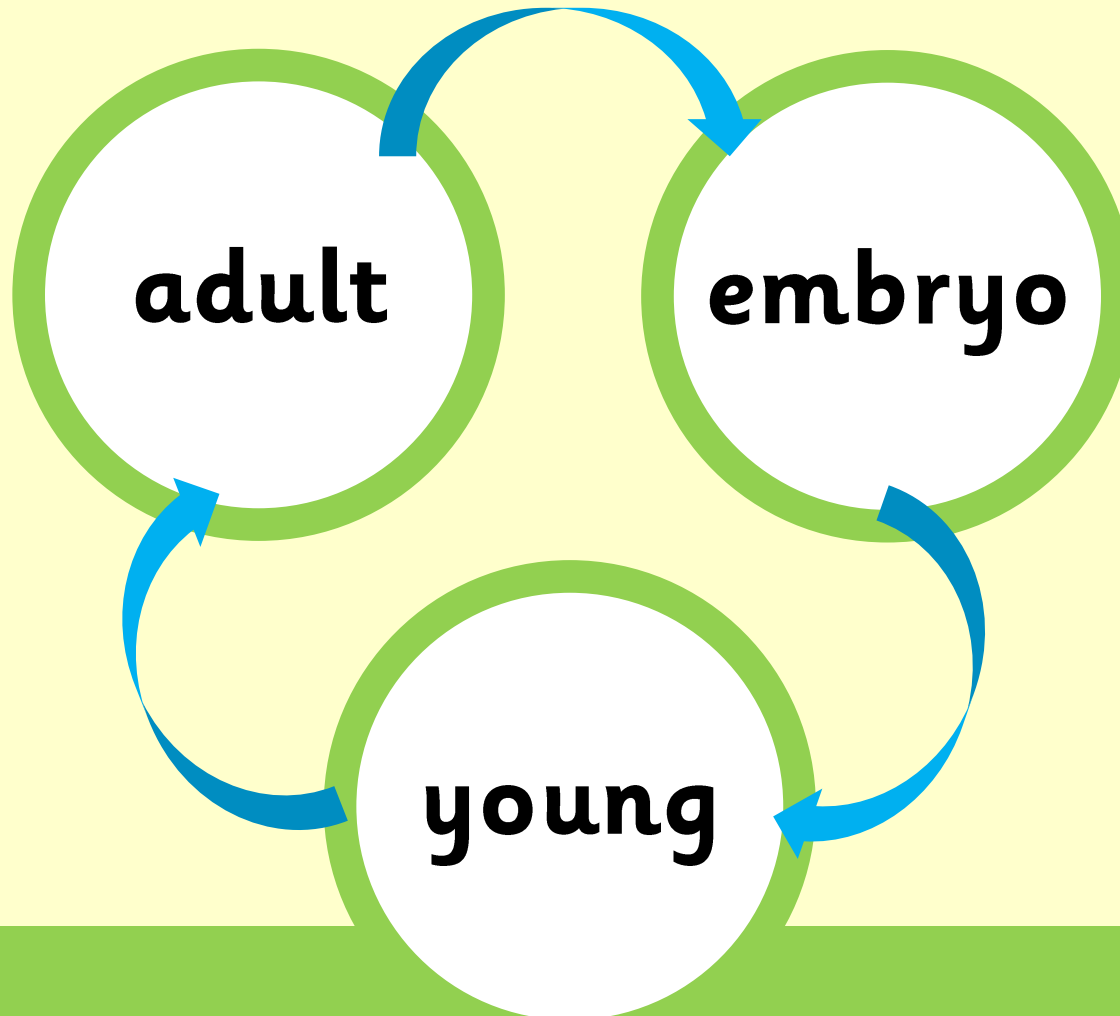
- have hair or fur
- warm-blooded
- feed babies milk
- give live birth

Photos courtesy of euthman, McPig and epSOS (@flickr.com) - granted under creative commons licence - attribution

**LO:** To understand the lifecycle of a mammal



Choose a mammal and draw the lifecycle stages.



# LO: To understand the life cycle of an amphibian

The life cycle of a frog involves 5 main stages:

The tail disappears and it starts to eat insects instead of plants. It takes 2-4 years to become an **adult frog**, when it can lay eggs.



The female lays mass of **eggs** which are fertilised by the male.



## Amphibians:

- live in water and on land
- moist slimy skin
- lays eggs
- babies different from adults

The tadpole grows front legs and tail shortens. Uses nutrients in tail as food. It jumps out of water onto land.



The tadpole grows fins and a stronger tail. Then it develops lungs and hind legs.



After 2-25 days the **tadpole** hatches from the egg. It swims and eats plants. It breathes through gills.



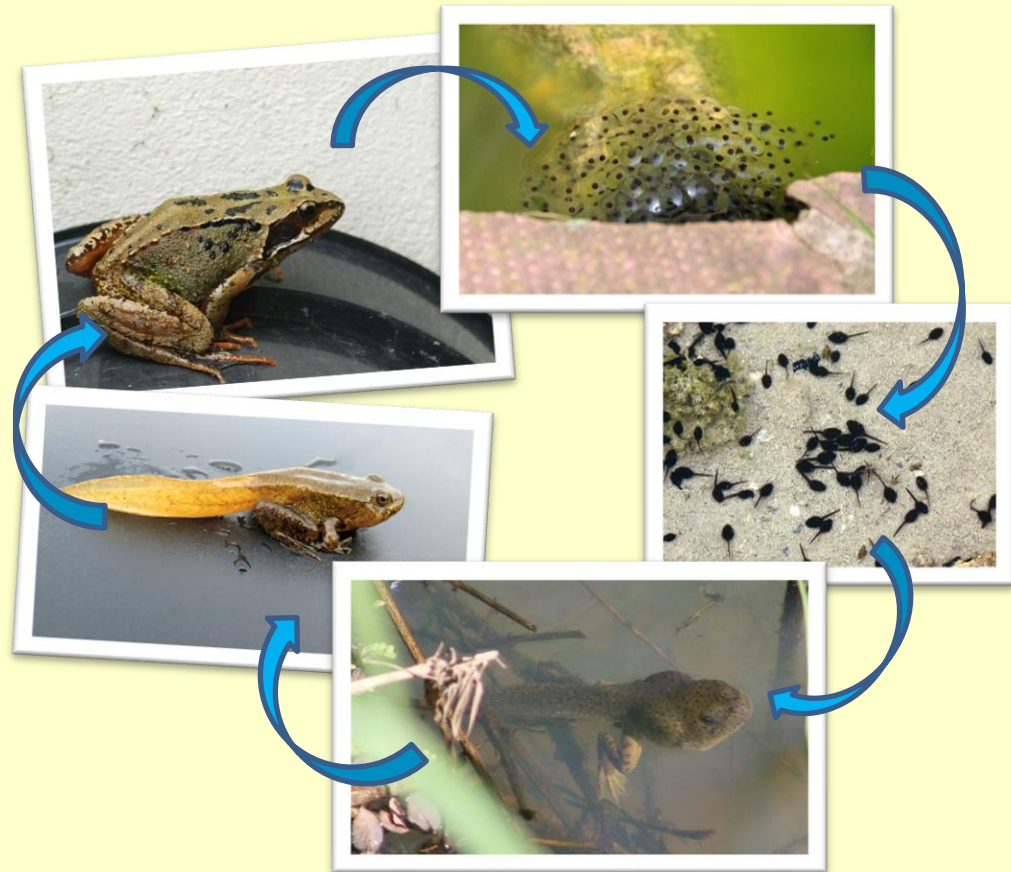
# LO: To understand the life cycle of an amphibian



The life cycle of a frog involves 5 main stages:

Present your learning about the life cycle of a frog (or a different amphibian) in one of these ways or in your own way:

- Create a computer based presentation like PowerPoint or Scratch
- Use drama
- Make a small book
- Your own idea





# LO: To understand the life cycle of an insect (complete metamorphosis)



Most insects undergo complete metamorphosis. This involves 4 main stages:

The **adult** breaks out of the pupa and matures.



**Eggs** are laid by the female insect.



## Insects:

- hatch from eggs
- some look like parents and shed skin as grow
- some go through metamorphosis young and adult are different.



The **pupa** is formed when the larva moults for the last time. Pupa have a hard protective coating and are often camouflaged. The larva transforms completely inside the pupa.



The eggs hatch into **larva**. The larva look nothing like the adult. This varies depending on species. Common forms are caterpillars, maggots, grubs.



## LO: To understand the life cycle of an insect (incomplete metamorphosis)

The lifecycles of insects that don't complete metamorphosis involve 3 main stages:

The nymph grows into the **adult** form, sometimes shedding skin. In winged insects fully functional wings mark the adult stage. Adult females lay eggs.



**Eggs** are laid by the female insect.



Eggs hatch into **nymphs**. Appearance varies depending on species. Nymphs look like a smaller adult insect and usually share the same habitat and food as the adult.

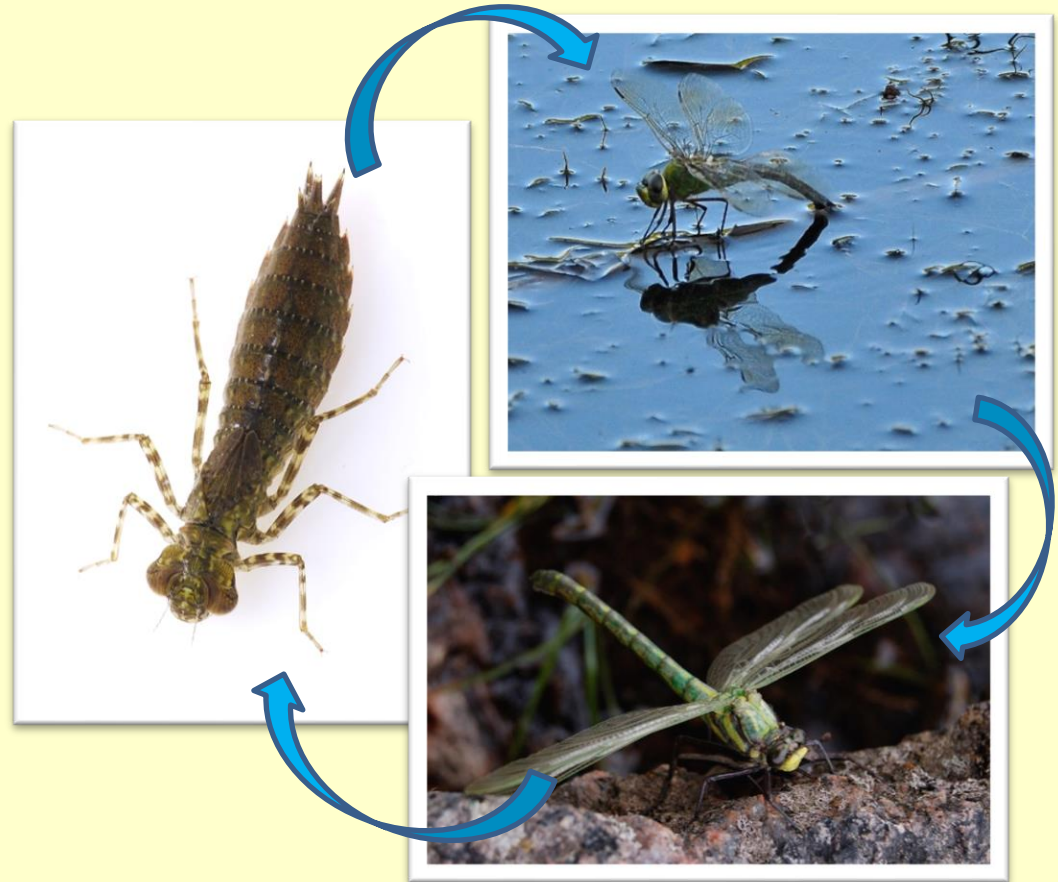


# The Life Cycle of an Insect



**Research the lifecycles of 2 different insects.**

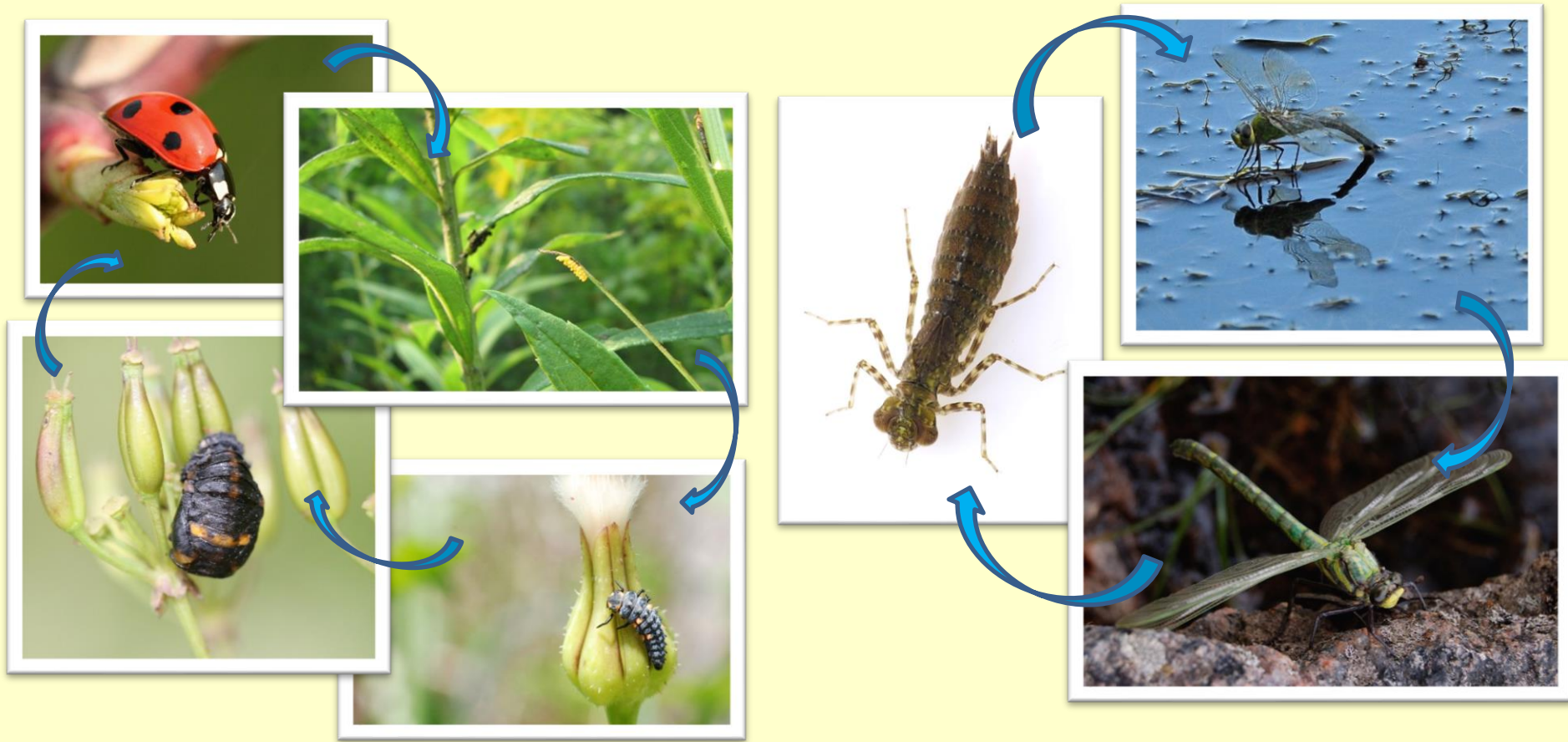
- Explain the specific lifestyle of each insect.
- Compare the lifecycles, what is the same and what is different?
- Think how you can present your ideas.



# LO: To compare life cycles of insects



The lifecycle of insects that complete metamorphosis involves 4 main stages:

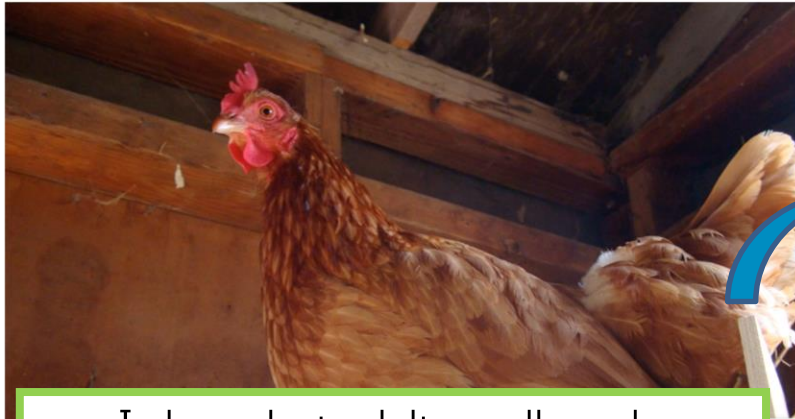




# LO: To understand the life cycle of a bird



The lifecycle of a bird involves 3 main stages:



Independent adult usually seeks company from the opposite sex and mates.

Eggs are laid by the mother and the mother and father care for the egg until it hatches.

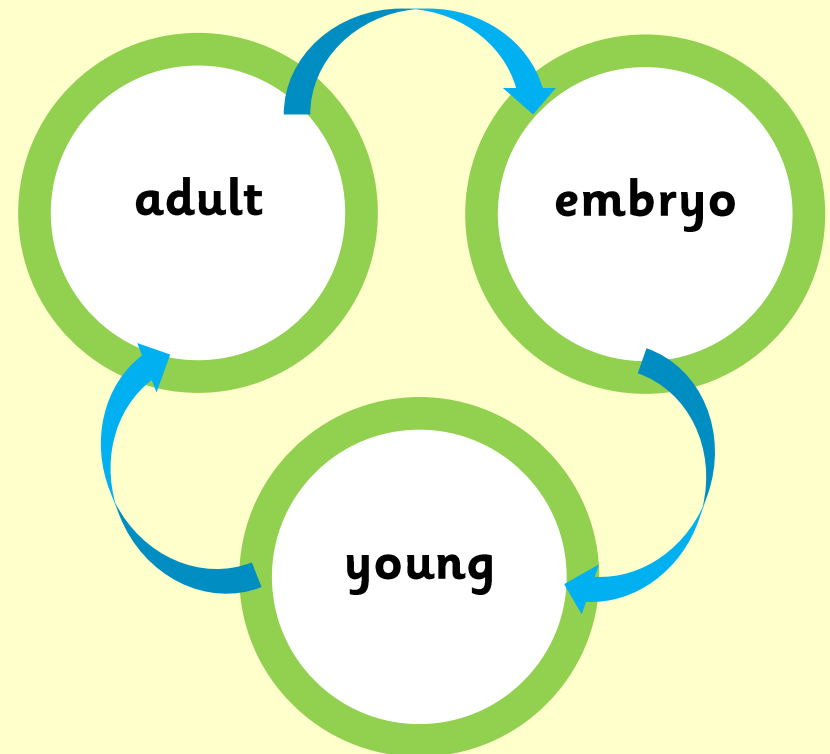
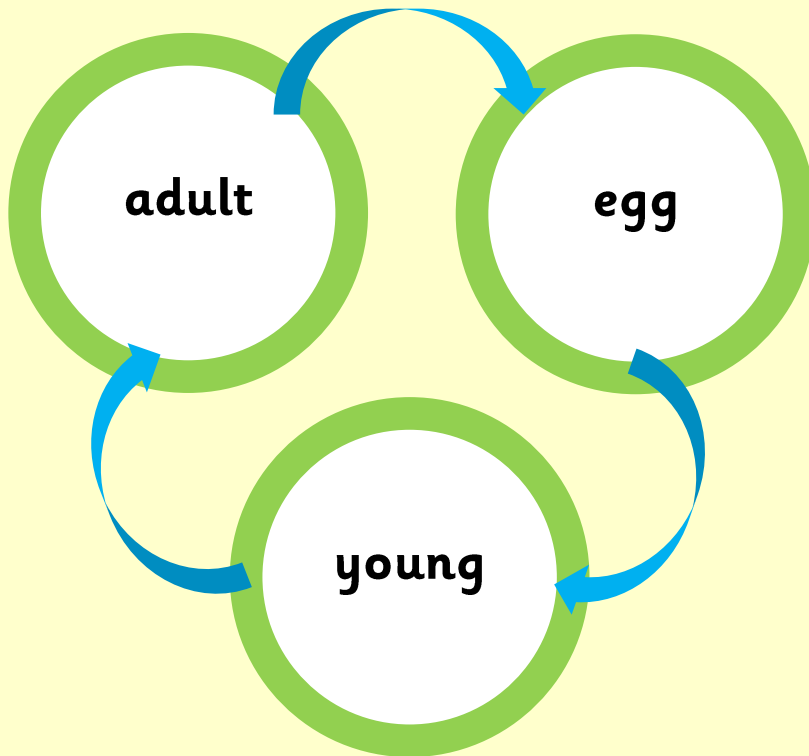


Mother and father feed the young bird until it is old enough to fly and find its own food.

## Birds

- have feathers and wings
- warm-blooded
- lays eggs

**LO:** To compare different life cycles



# LO: To compare different life cycles



Compare the life cycles of mammals and birds

Similarities	Differences
<ul style="list-style-type: none"><li>• 3 main stages</li><li>• First stage is where embryo forms and grows</li><li>• Second stage is where young is supported by parents.</li><li>• Third stage is adult stage where reproduction takes place.</li></ul>	<ul style="list-style-type: none"><li>• Mammals give birth to live young</li><li>• Birds lay eggs</li><li>• Mammal usually nursed by mother</li><li>• Young birds usually fed by adult male and female.</li></ul>



# Compare the life cycles of mammals and birds



Compare the life cycles of:

Similarities	Differences
<ul style="list-style-type: none"><li>• Text here</li></ul>	<ul style="list-style-type: none"><li>• Text here</li></ul>

# LO: To understand the life cycle of a flowering plant

The life cycle of a bean involves 5 main stages:

Seeds are spread out so they can grow where they are not fighting for space with the parent plant.



**Germination:** The seed starts to grow when conditions are suitable.



Roots grow, usually underground.

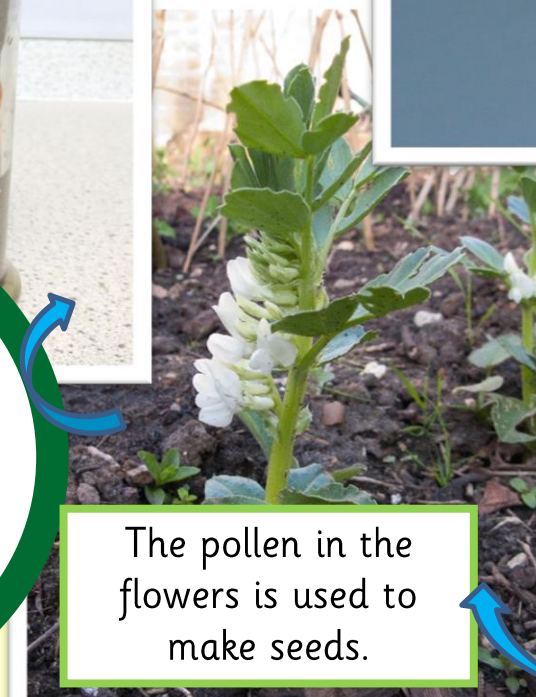


A stem and leaves form, and the plant makes its own food (photosynthesis).

## Flowering plants:

- have flowers
- flowers produce seeds
- seeds in fruit

The pollen in the flowers is used to make seeds.



## LO: To understand the life cycle of a non-flowering plant

The life cycle of a fern involves 5 main stages:

Seeds are spread out so they can grow where they are not fighting for space with the parent plant.

**Germination:** The seed starts to grow when conditions are suitable.

Roots grow, usually underground.

Seeds are produced (without flowers)

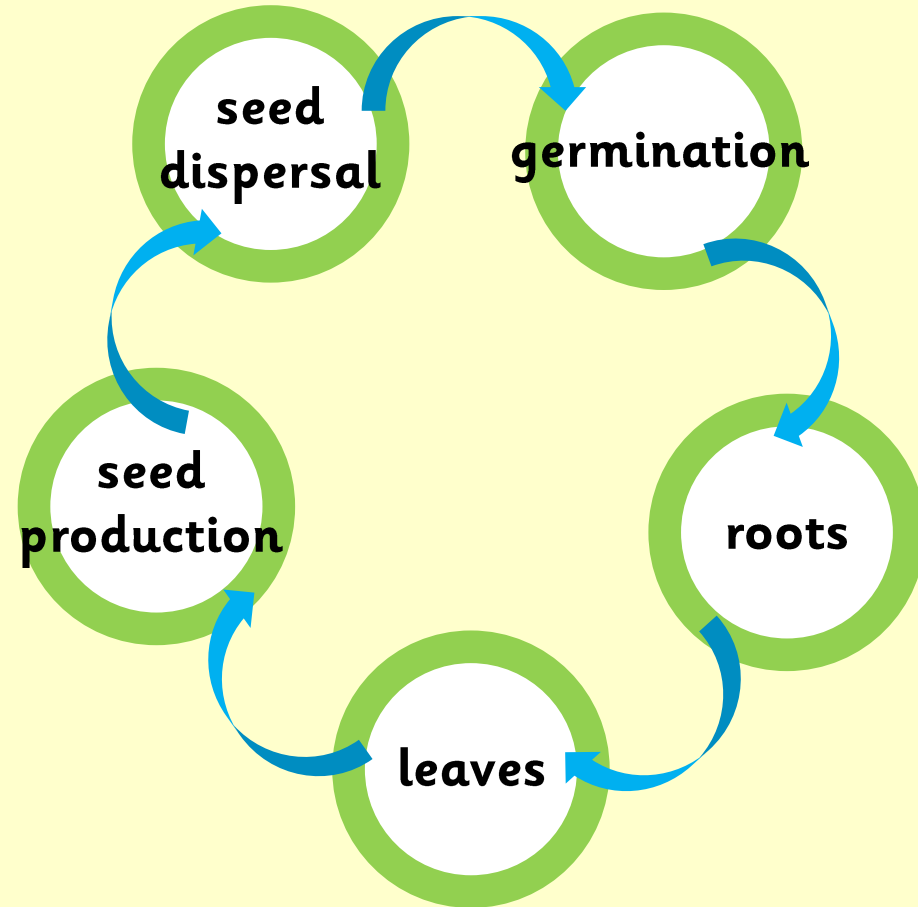
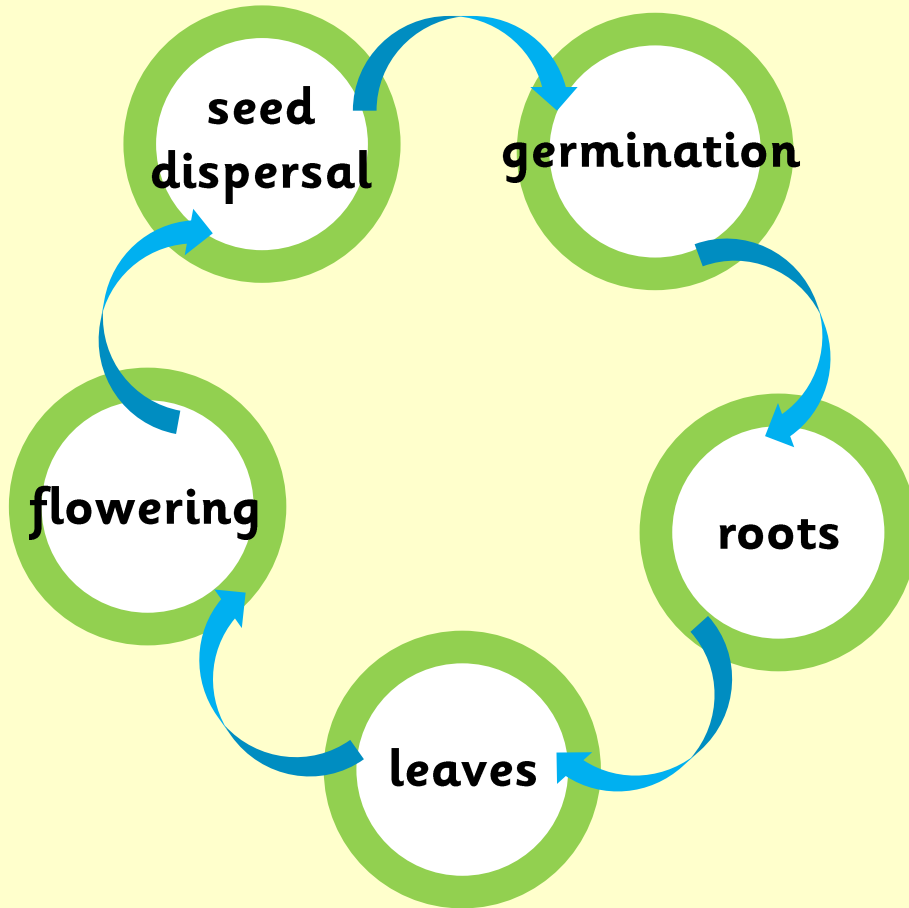
### Non-flowering plants:

- have no flowers
- seeds or spores are produced by pollen being spread (eg by wind)

A stem and leaves form, and the plant makes its own food (photosynthesis).



# LO: To compare different life cycles



THE END