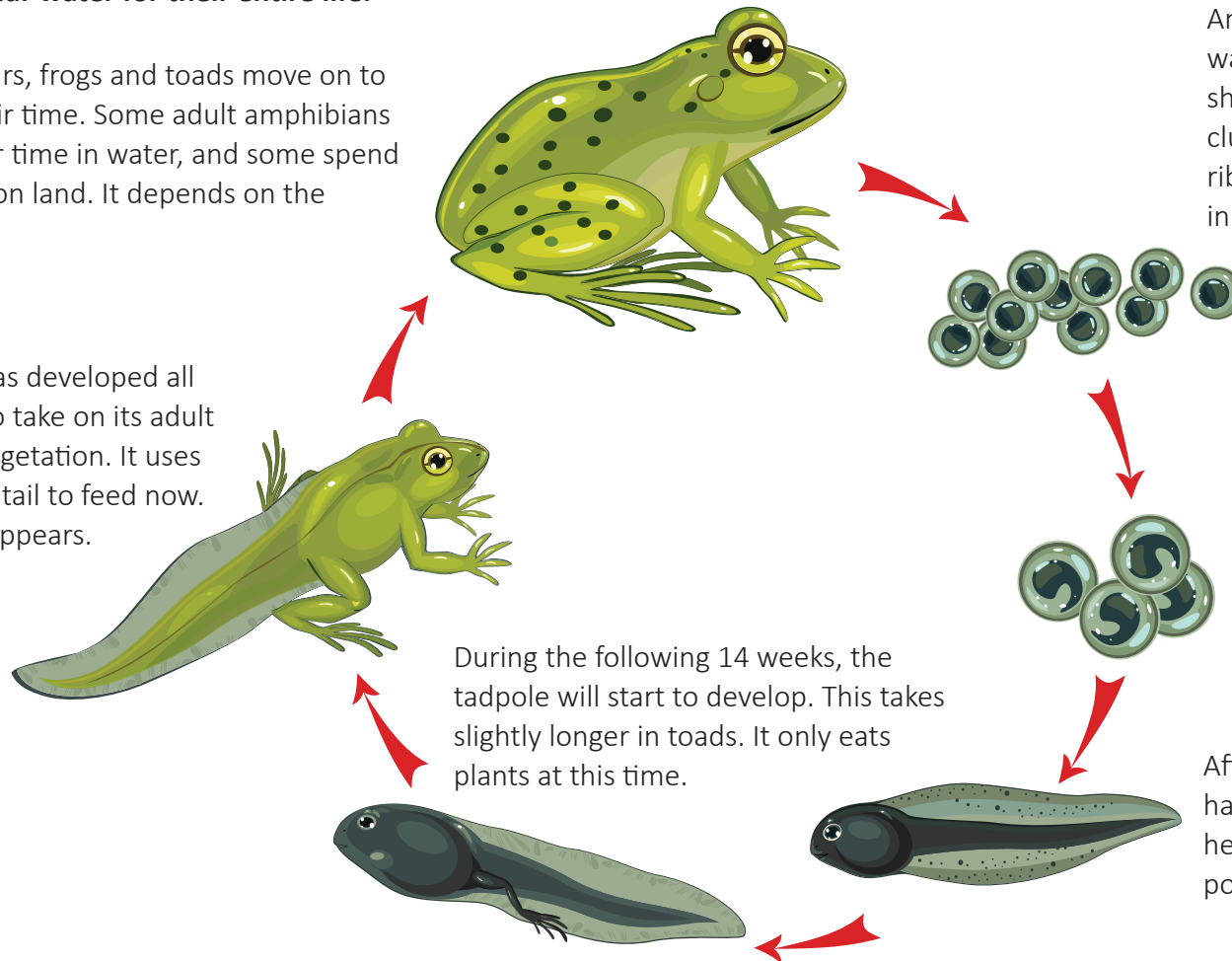


# Life Cycle of an Amphibian

Amphibians are sometimes thought of as being closely related to reptiles, but there are several significant differences in their life cycles. Both lay eggs and are cold-blooded (ectotherms). Reptiles lay hard-shelled eggs whereas amphibian eggs are encased in jelly. Reptile young are born with lungs, yet amphibians are born with gills to breathe underwater. Reptiles live in a wide range of habitats, but amphibians live in or near water for their entire life.

As the tail disappears, frogs and toads move on to land for part of their time. Some adult amphibians spend most of their time in water, and some spend most of their time on land. It depends on the species.

Once the amphibian has developed all four legs and started to take on its adult form, it stops eating vegetation. It uses nutrients stored in the tail to feed now. Eventually, the tail disappears.



Amphibians lay their eggs (spawn) in water, often near to the edge or in shallow areas. Frogspawn forms in clumps, while toadspawn is laid in long ribbons. Spawn appears in spring, usually in February or March.

Over the next 7 to 9 days, the embryos inside the eggs will start to develop. If you look closely, you can observe these changes each day.

After this period, the embryos will hatch as tadpoles. Tadpoles have a head and a tail but no limbs at this point.

During the following 14 weeks, the tadpole will start to develop. This takes slightly longer in toads. It only eats plants at this time.

## RETRIEVAL FOCUS

1. What is the main difference between frogspawn and toadspawn?
2. How long does it take for amphibian spawn to hatch?
3. How long does it take a frog to develop from a tadpole into a small frog?
4. Where are the nutrients stored that a frog will need to use once it has all four legs?
5. What determines whether amphibians spend most of their time on land or in the water?

## VIPERS QUESTIONS

**S**

List two differences between reptiles and amphibians.

**V**

Which word or phrase means closest to “see or watch”?

**S**

What happens to the embryos once they are fully formed?

**E**

How do the arrows on the diagram help you as a reader?

**P**

What do you think would be different if this was a diagram of a reptile life cycle?



Answers:

1. Frogspawn clumps, toadspawn is in long ribbons
2. 7 to 9 days
3. 14 weeks
4. In its tail
5. Their species

S: Their eggs are different, born with lungs/gills, live in variety of habitats/near water

V: Observe

S: They emerge as tadpoles

E: They show you which direction the life cycle moves in

P: Accept predictions that talk about the growing stages taking place inside the egg and the reptile being born fully-formed.