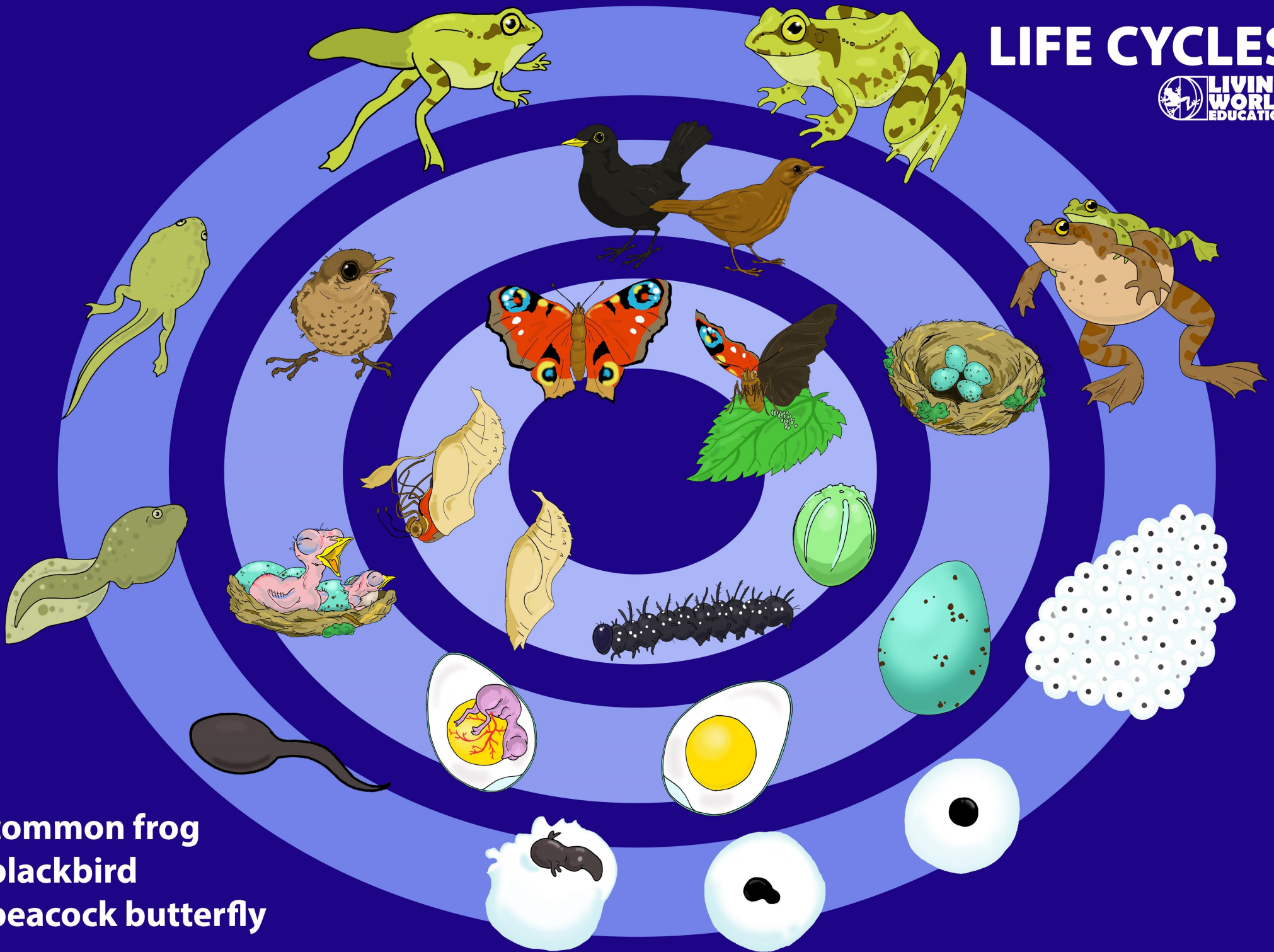


# LIFE CYCLES

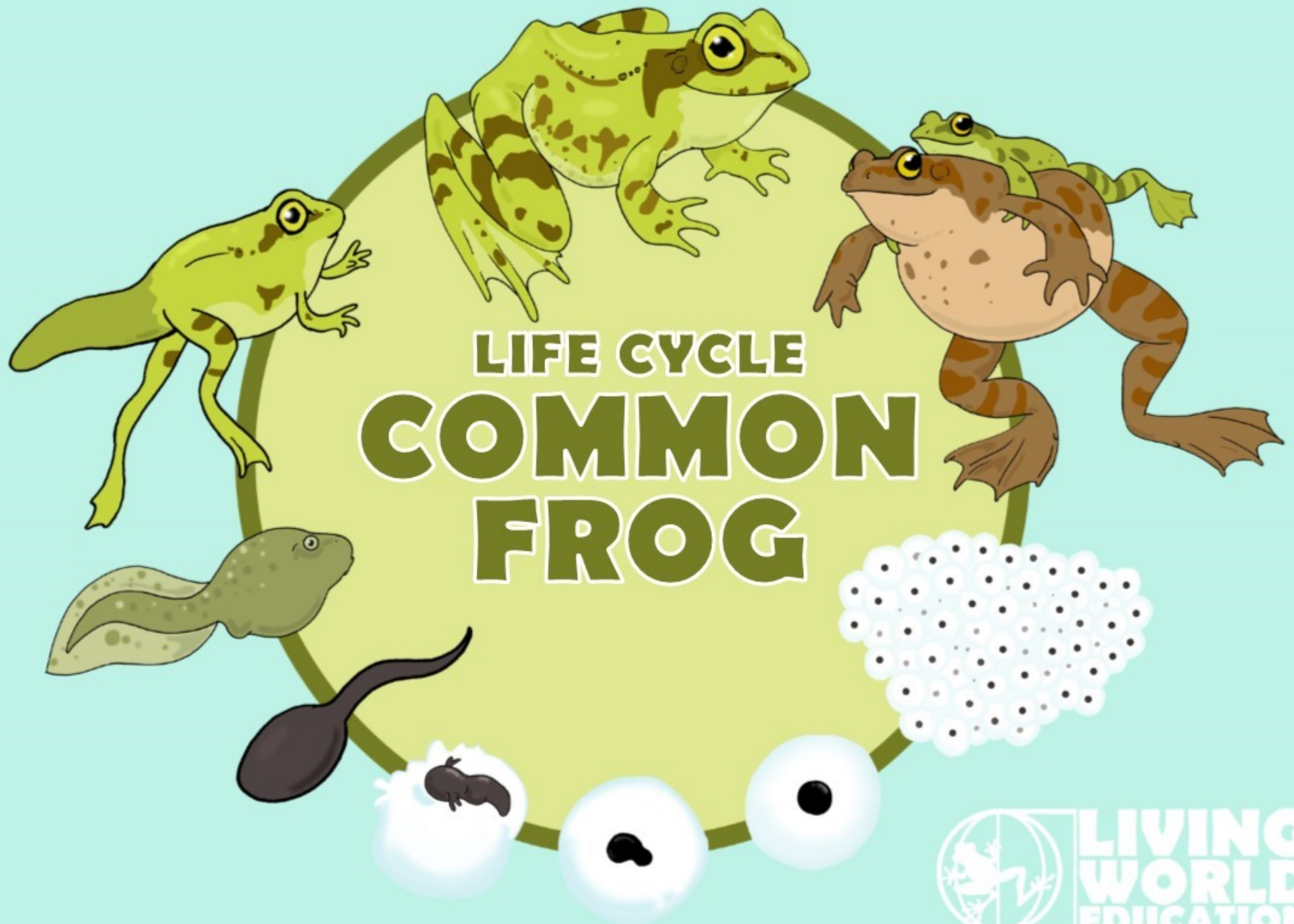


common frog  
blackbird  
peacock butterfly



# DOWNLOAD OUR FREE RESOURCE PACK

[www.livingworldeducation.com/biology](http://www.livingworldeducation.com/biology)





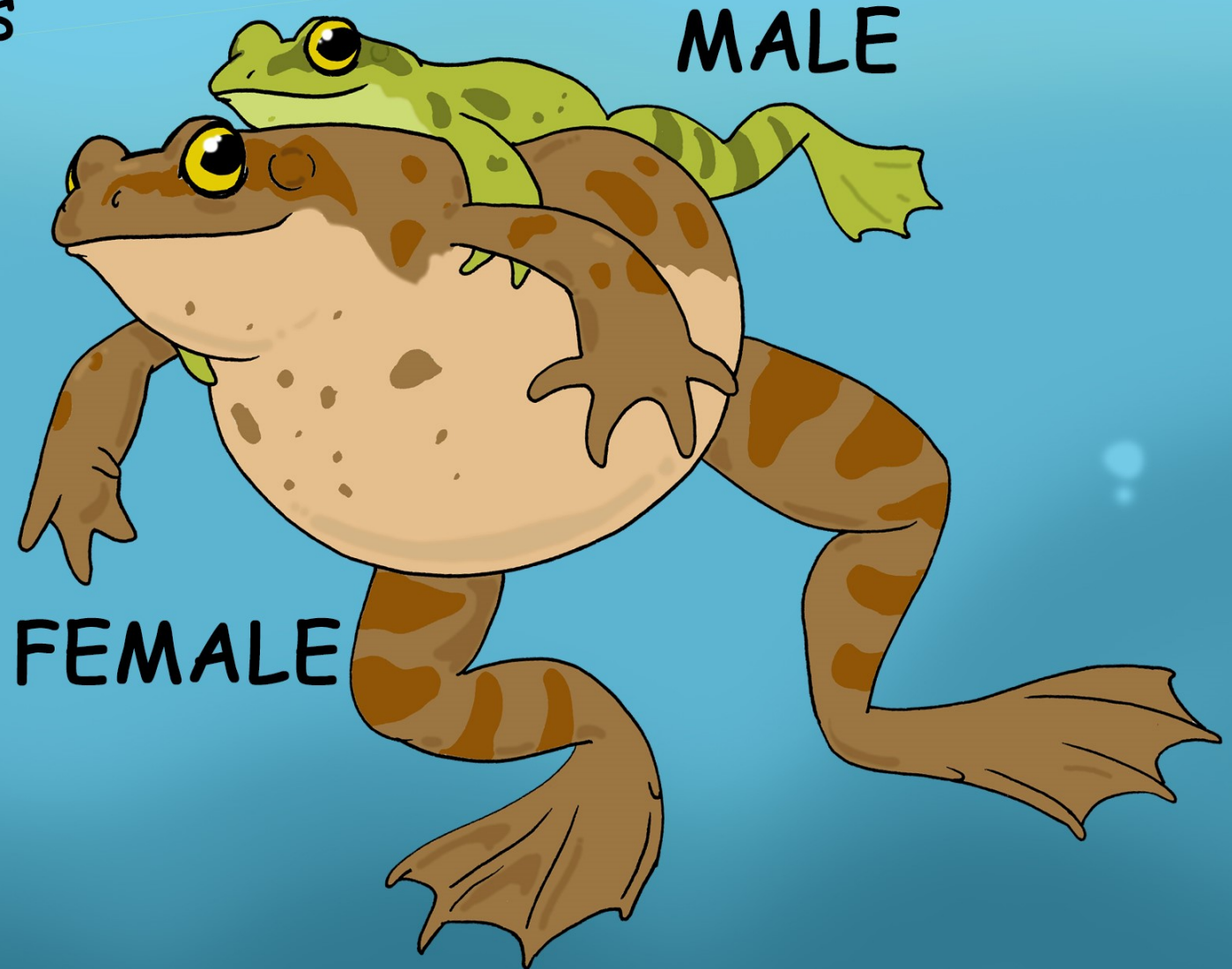
Frogs are **amphibians**. Their life cycle begins in water because they lay eggs without shells. On land, the jelly-like spawn would dry out. All amphibians have a stage of transformation from larvae to adults called **metamorphosis**.





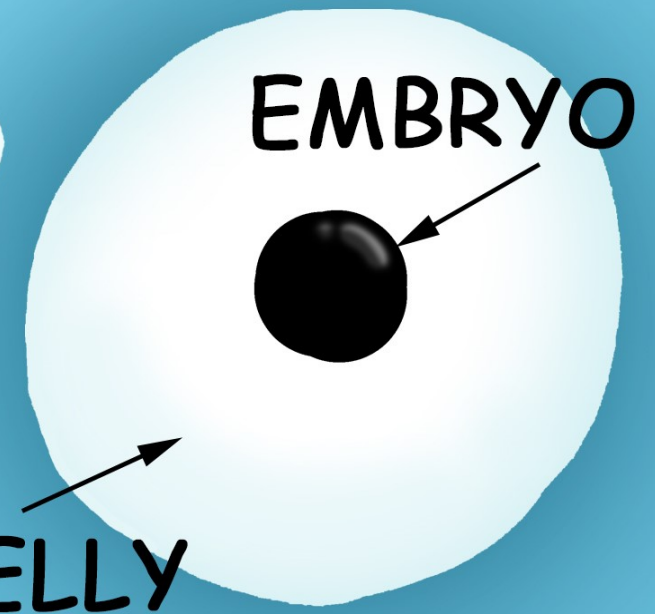
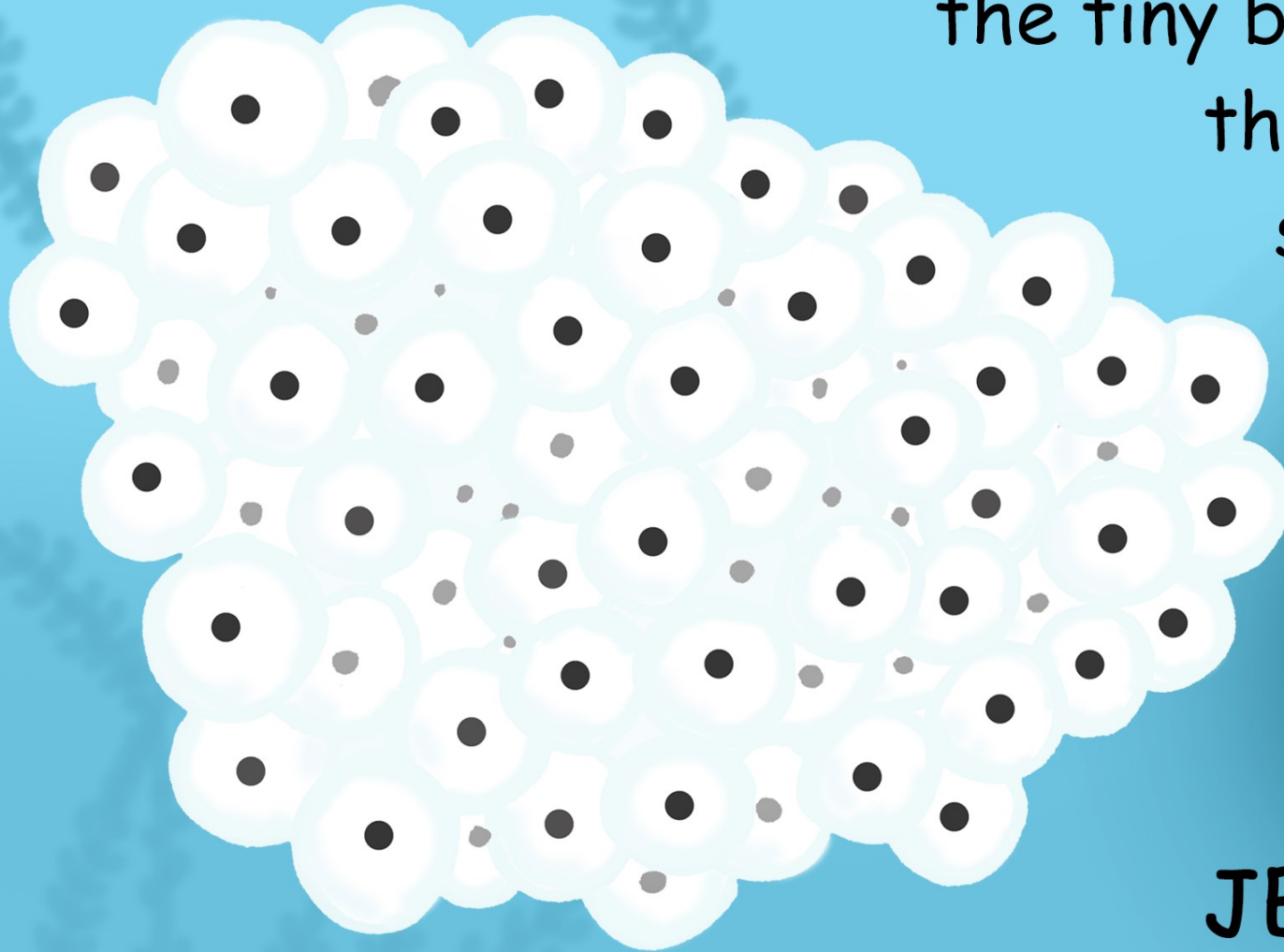
Adult frogs couple up with the male attracting a mate with a **croaking** call.

The male gives the female a squeeze and she releases her eggs.



The large cluster of eggs is called **frog spawn**.

As the jelly is transparent, it is possible to see the tiny black embryos at the centre of each see-through orb.



(nourishes and protects the embryo)





As the embryo develops, it is easy to see the forming of a **head** and a **tail**.  
The tadpole soon emerges, and continues to eat the jelly.

Oxygen from the water is absorbed by delicate, feathery **gills** (like a fish) which can be seen on either side of the body.

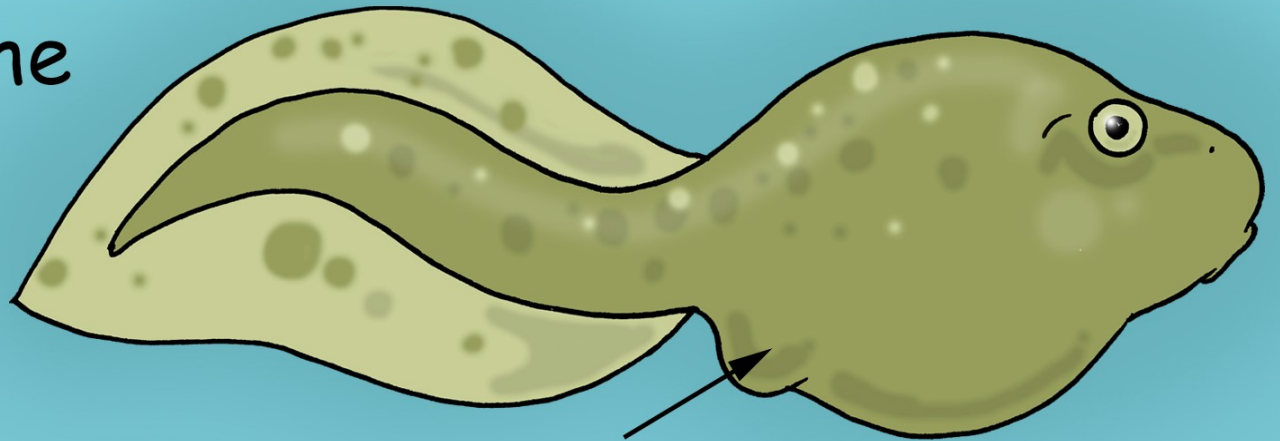


After a short while, the tadpoles become more defined with a glossy, dark body. It uses a **wiggly** tail to swim as it feeds on tiny creatures and plants called **algae**.



Now the tadpole has speckled skin, well developed eyes and a sucker mouth.

**Bumps** appear by the tail, indicating where legs will soon appear.

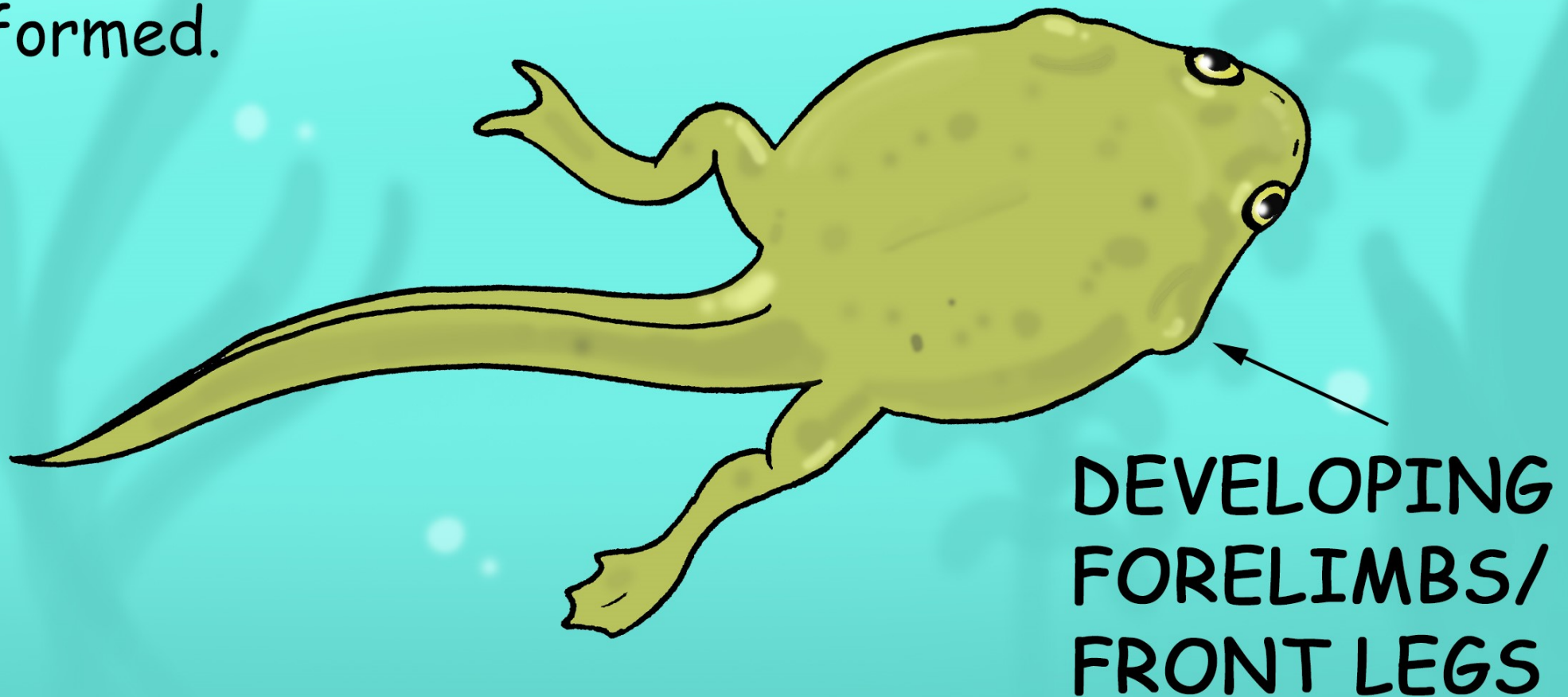


**SIGNS OF HIND LEG GROWTH**



Shortly after the development of back legs, it is possible to see bumps where forelimbs will soon emerge.

The head is starting to become more clearly formed.



The young **froglet** is in most ways like a tiny version of the adult, but for one obvious difference.

The tail, no longer used for movement, is **absorbed** into the body.





Metamorphosis takes a tiny, aquatic tadpole on a remarkable journey. It has developed a **skeleton, legs** and a totally different way of **breathing!**



Now try these...

# Tadpole Diary Log


## Sequence sorting activity

... in our activity pack!




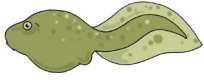




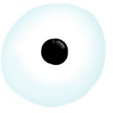

**TADPOLE DIARY** name

From spotting fresh spawn, take occasional observations and record them in the table. Add drawings to support your notes.

DAY	OBSERVATIONS	DRAWING

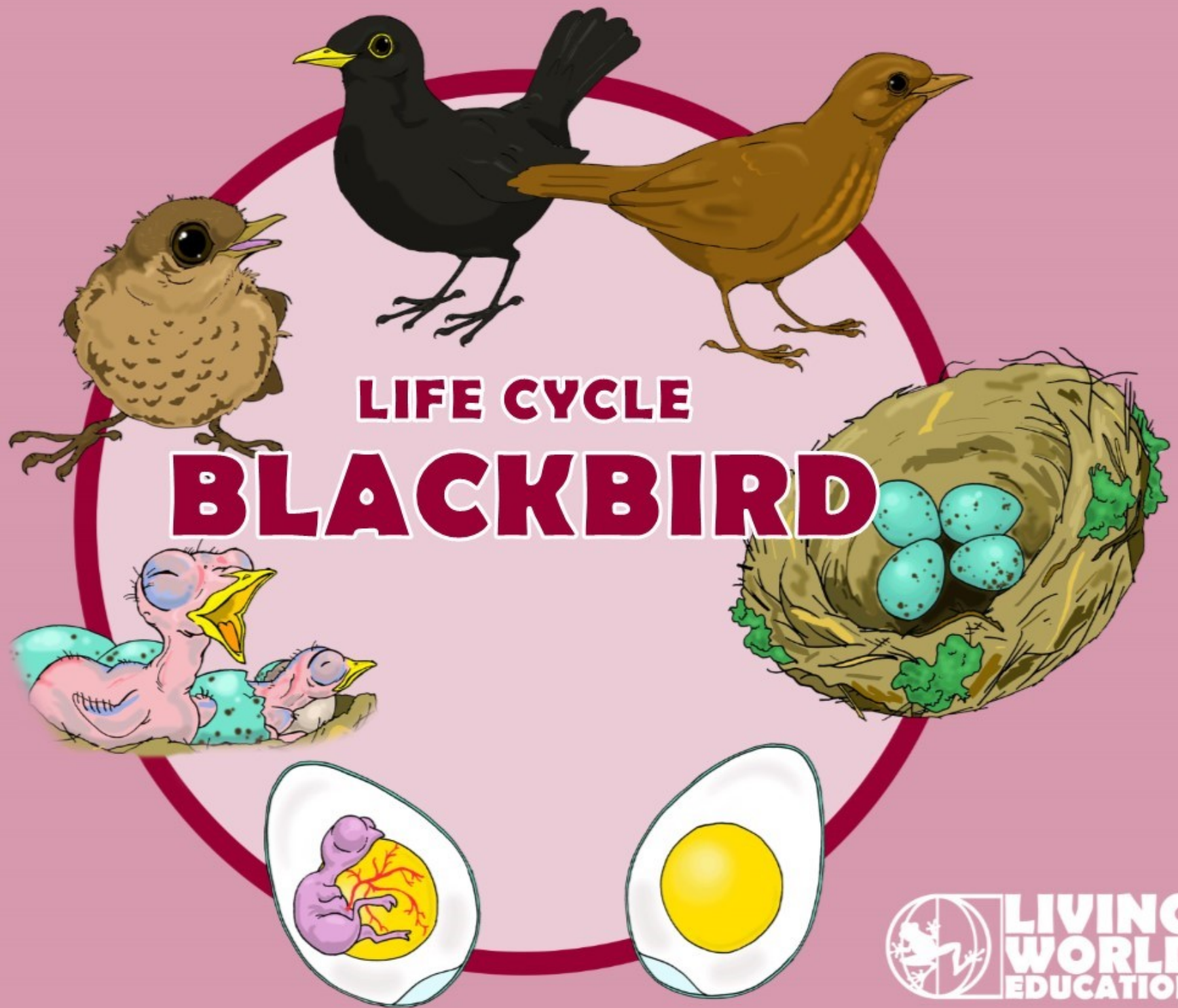
**FROG LIFE CYCLE SEQUENCING TASK** 

Order the frog life cycle stages and then explain what changes occur

Copyright Living World Education. Reproduction for educational purposes only. [www.livingworldeducation.com](http://www.livingworldeducation.com)

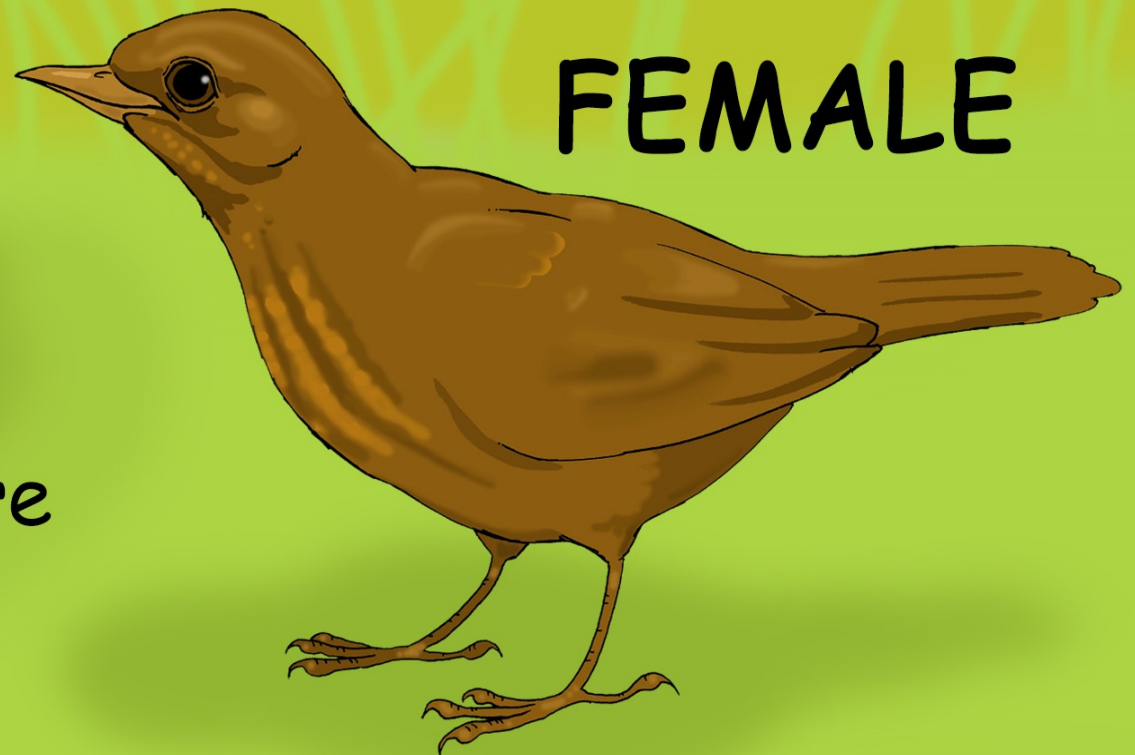




Only **male** blackbirds are actually **black**.  
He dances about and shows  
he is **fit** and **strong**.



**MALE**



**FEMALE**

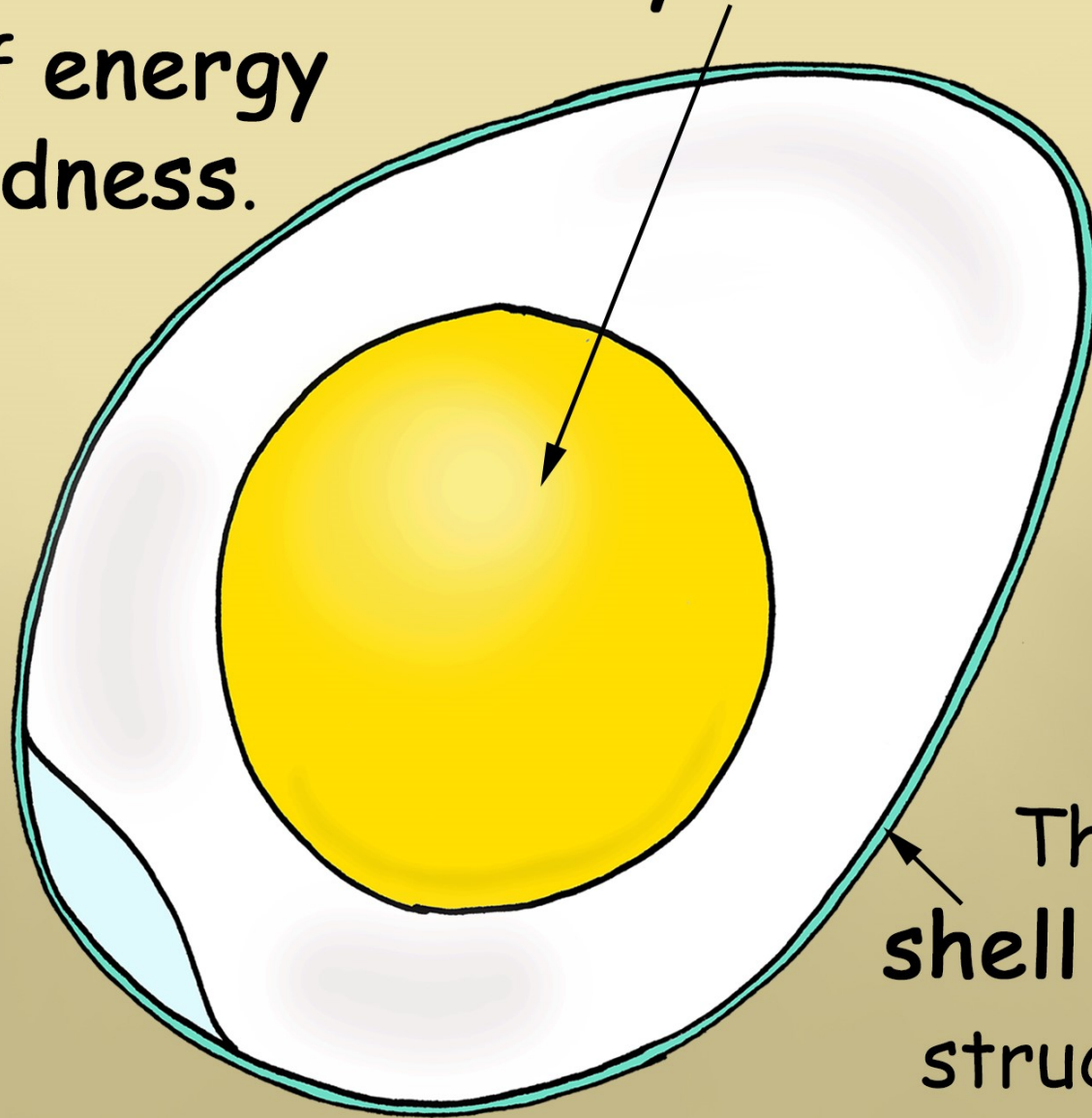
The **female** birds are  
**brown** in colour.



The nest is made from  
**straw, grass and twigs**  
and hidden away in  
**bushes or ivy.**



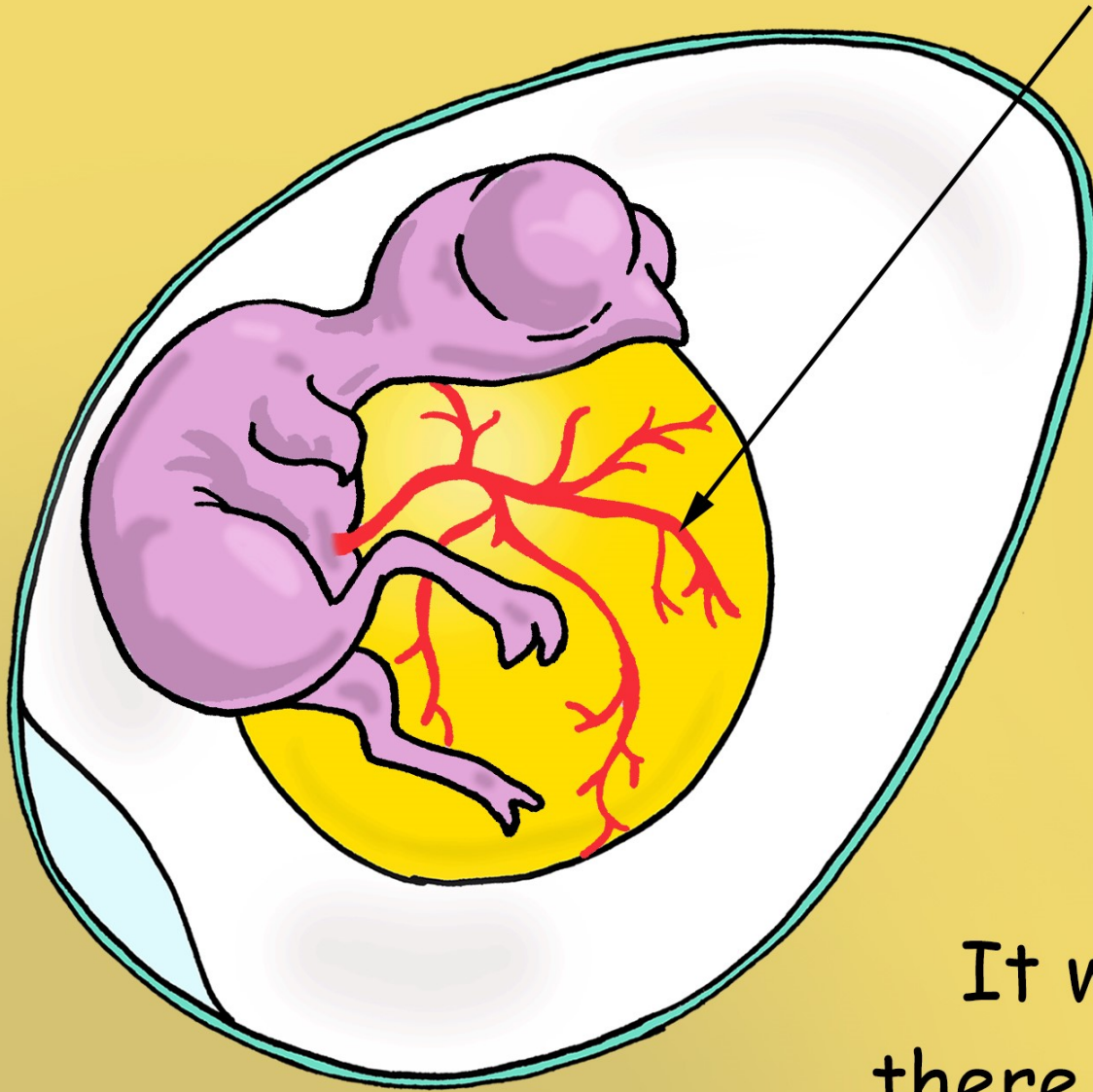
Within the egg is everything needed to build a new chick. The **yolk** is full of **energy** and **goodness**.



The hard outer **shell** protects the structures inside.



Blood vessels carry goodness  
to the chick as it  
develops.



Soon the chick will  
run out of food.  
It will also **grow** so big,  
there will be no room left!

The newly **hatched** chicks have yet to grow feathers, or even open their eyes. They constantly demand food from their parents.



This bump is an egg-tooth. It helps crack the egg shell.



Now covered in speckled feathers  
the young **fledgling** birds  
are ready to leave the nest!



Now try these...

# Looking After Eggs Activity Sheets

... in our activity pack!

NAME \_\_\_\_\_ DATE \_\_\_\_\_



### Looking After Eggs

Use your **observation skills** to describe how the male and female blackbird look alike and also, how they differ.

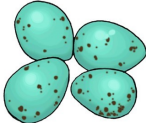
FEMALE FEATURES


FEATURES THEY SHARE

MALE FEATURES



The blackbird eggs are kept safe in a nest. **Draw** the nest around these eggs or **glue on** dry grass, straw and twigs to form your own cozy nest.



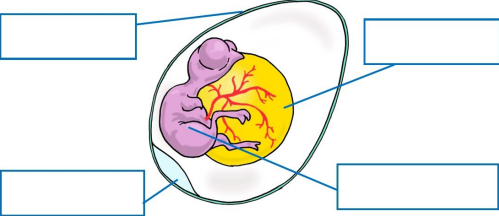
 LIVING WORLD EDUCATION

NAME \_\_\_\_\_ DATE \_\_\_\_\_

### Looking After Eggs

Use these words to label the diagram

SHELL YOLK DEVELOPING CHICK AIR SAC




Why do eggs have a large, yellow yolk?


\_\_\_\_\_

\_\_\_\_\_

This chick is very hungry!

Can you draw in the sort of food a baby bird would like to eat?



 LIVING WORLD EDUCATION

www.livingworldeducation.com





**LIFE CYCLE**  
**PEACOCK**  
**BUTTERFLY**

Female butterflies **lay eggs**  
on **nettles**, as the  
leaves are excellent  
food for the caterpillars.





The small clusters of **eggs**  
each contain a tiny  
**caterpillar**, which  
will soon **hatch** out.



**EGG CLOSE UP**



The caterpillar is the **larval stage** of the life cycle. Its long body is covered in spiky structures that make it unpleasant for predators to eat!





In order to grow, the caterpillar needs to eat many leaves. Once large enough, it goes into a new stage...



Within the **pupa**, or **chrysalis**, an amazing transformation is occurring...



After some time, the creature  
inside **emerges** - it now  
has a very different body!





The **adult** butterfly has now completed its transformation.



Using its colourful **wings**, it flies off in search of sweet nectar.

Now try these...

# Butterfly Symmetry Art Activity

# Caterpillars Cloze Worksheet

... in our activity pack!

