



The Columbus Zoo and Aquarium endeavors to foster a lifelong connection with nature in children and adults by creating a meaningful link between people and wildlife. These activities are designed to be done either at home or at school. Before diving into the materials, here are some tips to help you plan:

These activities are structured around the 5E Lesson Plan model, commonly used in science education:

ENGAGE - Sparking interest in a topic

EXPLORE - Student-led investigation of concepts

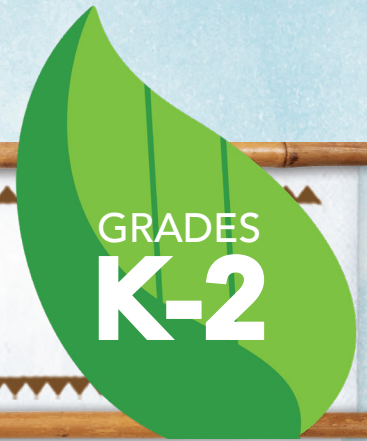
EXPLAIN - Clarification of concepts

EXTEND - Student-led application of concepts

EVALUATE - Opportunity to demonstrate understanding of concepts

This activity packet will guide students as they explore wildlife and wild places. We encourage parents and teachers to utilize all five activities chronologically to provide students a complete learning experience. These activities can be done in a day, or over a longer time span. It is ideal because the educator can tailor the timing around the needs of the learners.

Each section has a brief activity description and a list of materials needed. The instructions are written for the learner; however, we encourage adults to work closely with their students. (Be sure to supervise students when doing any outdoor activities.) Most importantly, we hope you have a fun and engaging experience!



LIFE CYCLES

5 STEPS TO A MEANINGFUL ZOO PROGRAM

DESCRIPTION OF ACTIVITY

ESTIMATED TIME

MATERIALS NEEDED

ENGAGE

Introduction to life cycles.

Read *The Very Hungry Caterpillar* by Eric Carle.

Stop after every page and talk with your adult about what you learned.

Sing the "*Frog Song*" or the "*Butterfly Ballad*."

20-30 minutes

The Very Hungry Caterpillar by Eric Carle

Copies of "*Butterfly Ballad*"

Copies of "*Frog Song*"

EXPLORE

Explore the similarities and differences in the life cycle of a frog.

Read *Ribbit* by Jorey Hurley.

Stop after every page and talk with your adult about what you learned.

Complete the "*Frog Life Cycle*" activity as you go.

20-30 minutes

Ribbit by Jorey Hurley

Copies of "*Frog Life Cycle*"

EXPLAIN

Explain that some baby animals look like their parents, others do not.

Sometimes babies look like their parents, other animals like frogs, look very different from their parents. As they grow, they change to look more like their parent.

Can you match baby animals to their parents?

30 minutes

"*Animal Babies Matching*" page



EXTEND

Extend activity by continuing previous activity.

Can you think of other animals that do or do not look like their parents? Think of one example of each, then draw them.

30 minutes

Drawing paper
Crayons/colored pencils

EVALUATE

Apply concepts by creating an animal family album.

Watch Columbus Zoo [baby elephant video](#).

Pick an animal and create a family album. Make sure to include a member of the family from each stage of the animal's life cycle.

45 minutes

Plenty of library books/ computers to research many different animals.

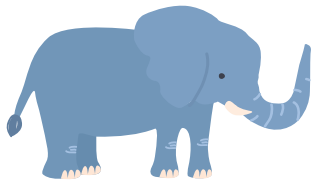
Drawing paper
Crayons/colored pencils



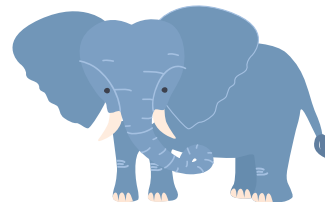
ANIMAL BABIES MATCHING PAGE

Can you match the baby animals to their parents?

BABY

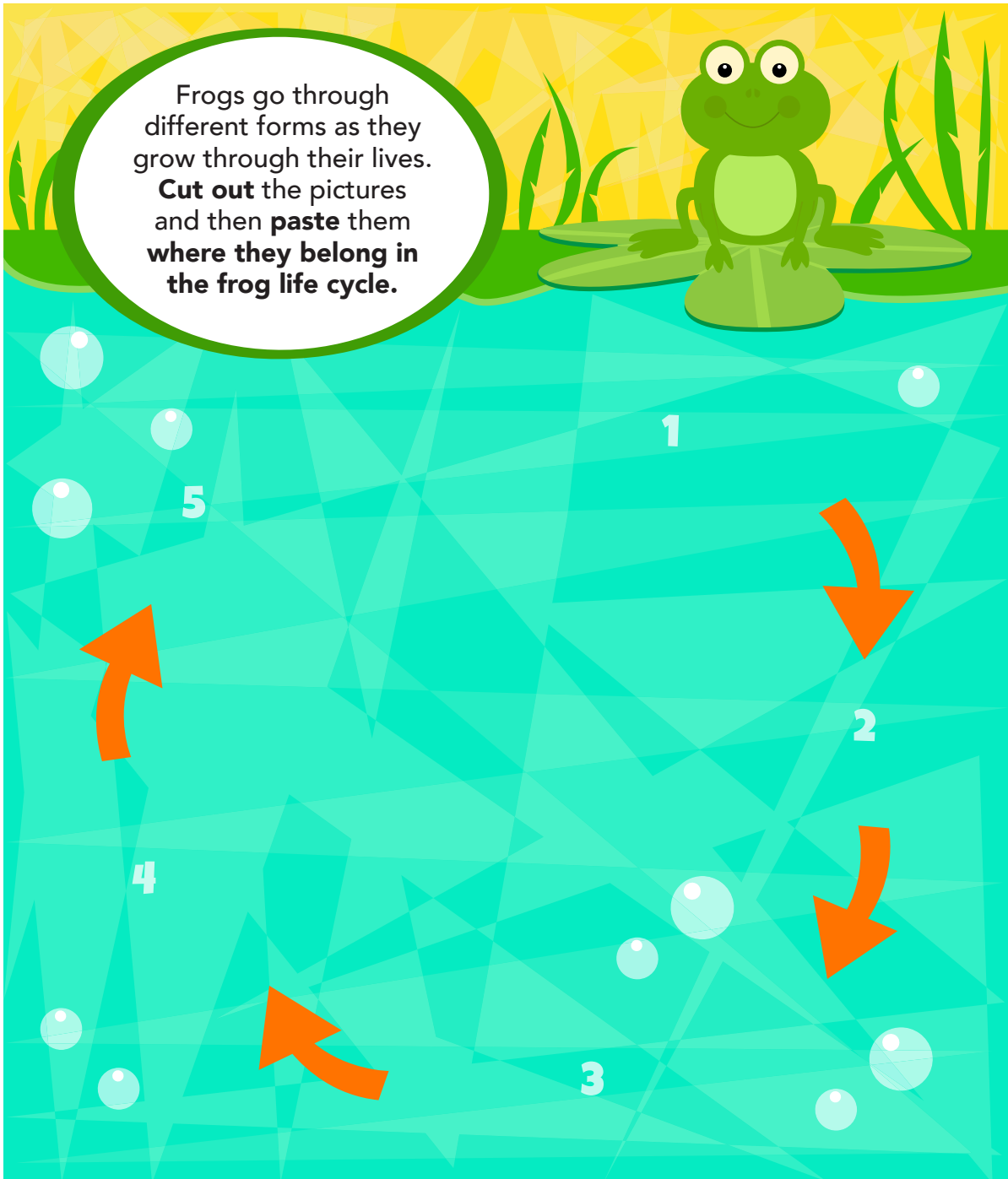


PARENT



FROG LIFE CYCLE

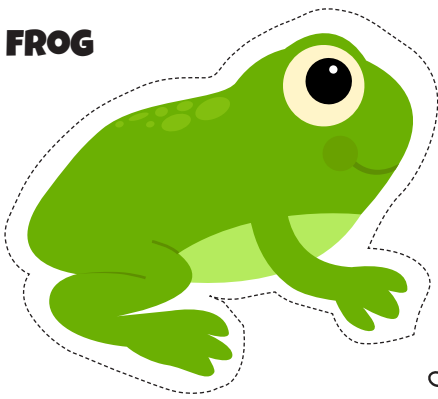
Frogs go through different forms as they grow through their lives. **Cut out** the pictures and then **paste** them where they belong in the frog life cycle.



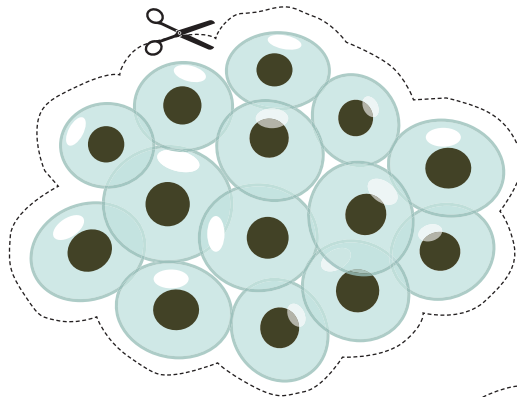
FROG LIFE CYCLE

Cut out the pictures below and then paste them where they belong in the frog life cycle chart.

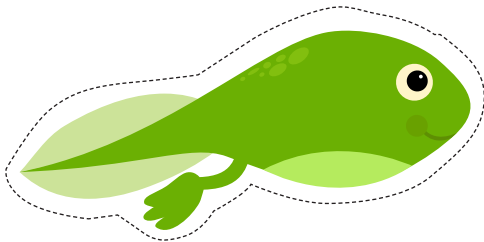
FROG



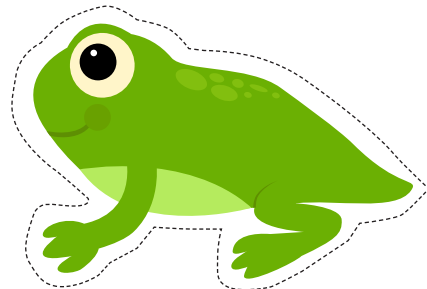
TADPOLE



EGG MASS



**TADPOLE
WITH LEGS**



FROGLET



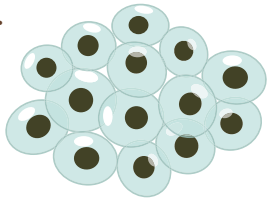
THE FROG SONG

GRADES
K-2

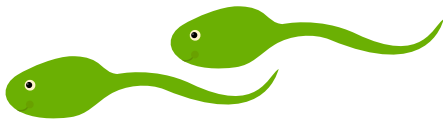
by Guy Belleranti

(SING TO THE TUNE OF "LONDON BRIDGE")

Lots of frogs in lots of eggs,
Lots of eggs, lots of eggs,
Lots of frogs in lots of eggs,
In the water.



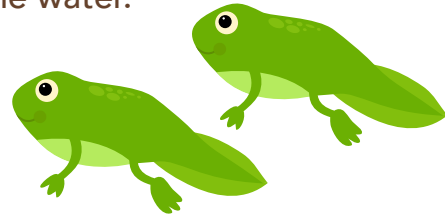
Tadpoles hatching from these eggs,
From these eggs, from these eggs,
Tadpoles hatching from these eggs,
In the water.



Tadpoles breathing through their gills,
Through their gills, through their gills,
Tadpoles breathing through their gills,
In the water.



Tadpoles swimming with their tails,
With their tails, with their tails,
Tadpoles swimming with their tails,
In the water.



Tadpoles growing lungs and legs,
Lungs and legs, lungs and legs,
Tadpoles growing lungs and legs,
In the water.

Tadpoles losing their long tails,
Their long tails, their long tails,
Tadpoles losing their long tails--
They hop and swim as frogs.





THE BUTTERFLY BALLAD

GRADES
K-2

by Guy Belleranti



“(SING TO THE TUNE OF “MARY HAD A LITTLE LAMB”)”

Butterfly starts as an egg,
As an egg, as an egg,
Butterfly starts as an egg,
Let’s see what happens next.

Caterpillar hatches out,
Hatches out, hatches out,
Caterpillar hatches out,
Let’s see what happens next.

Caterpillar gobbles leaves,
Gobbles leaves, gobbles leaves,
Caterpillar gobbles leaves,
Let’s see what happens next.

Caterpillar grows and sheds,
Grows and sheds, grows and sheds,
Caterpillar grows and sheds,
Let’s see what happens next.

It becomes a chrysalis,
Chrysalis, chrysalis,
It becomes a chrysalis,
Let’s see what happens next.

Butterfly comes out at last,
Out at last, out at last,
Butterfly comes out at last,
And then it flies away.



PICTURE BOOKS



***WHILE GRADE LEVELS ARE LISTED, ALL BOOKS ARE APPROPRIATE FOR ALL AGES.**

| PICTURE BOOK | AUTHOR | GRADES |
|--|-------------------------------------|------------|
| <i>The Very Hungry Caterpillar</i> | Eric Carle | K-2 |
| <i>Does a Kangaroo Have a Mother, Too?</i> | Eric Carle | 3-5 |
| <i>Ribbit</i> | Jorey Hurley | K-2 |
| <i>City Dog, Country Frog</i> | Mo Willems | 3-5 |
| <i>From Caterpillar to Butterfly</i> | Deborah Heiligman | K-2 |
| <i>The Carrot Seed</i> | Ruth Krauss | 3-5 |
| <i>First the Egg</i> | Laura Vaccaro Seeger | K-5 |
| <i>Ten Little Caterpillars</i> | Bill Martin, Jr. | 3-5 |
| <i>Fish is Fish</i> | Leo Lionni | K-2 |
| <i>Don't Worry Bear</i> | Greg E. Foley | 3-5 |
| <i>Because of an Acorn</i> | Lola and Adam Schaefer | K-2 |
| <i>Mommy Hugs</i> | Anne Gutman and George Hallensleben | K-2 |