Unit A

Core course books needed:

- -Animal!
- -Nature Anatomy
- -Natural World
- -Wildlife Anatomy

Required unit books:

- -A Frog's Life by Irene Kelly
- -*Frogs by Gail Gibbons
- -*The Frog Alphabet Book by Jerry Palotta
- -*Salamander Dance by David Fitzsimmons (OPTIONAL but recommended! Use YouTube read aloud)
- -*The Salamander Room by Anne Mazer
- -*Out of School and Into Nature: The Anna Comstock Story by Suzanne Slade

(Books marked with an asterisk * are available as full read-alouds on YouTube as of March 2025.)

Supplies:

- -Sketchbook and colored pencils or crayons, + watercolors
- -Lotion
- -Paint and paper for handprints (optional)
- -Dish soap or bubble bath
- -Hand mixer

Parent prep:

-Make plans for which art suggestion you want to do in lesson 1, and

plan accordingly.

-Decide what you will put bubble foam in during lesson 2 and have it on hand. If you choose to do this activity, watch and ensure that small children do not lick or ingest any foam.

Optional library books (to enhance or expand the experience):

Nonfiction:

- -*The Secret Pool by Kimberly Ridley
- -Frogs (A Day in the Life): What Do Frogs, Toads, and Tadpoles Get Up to All Day? by Dr. Itzue W. Caviedes-Solis
- -Fanatical About Frogs by Owen Davey
- -Hip-Pocket Papa by Sandra Markle
- -The Frog Book by Steve Jenkins
- -*From Tadpole to Frog by Wendy Pfeffer (good for younger kids)

Fiction:

The Frog and Toad series by Arnold Lobel *Salamander Sky by Katy Farber

Supplies for going deeper:

-Reptiles and Amphibians: A Fully Illustrated, Authoritative and Easy-to-Use Guide (A Golden Guide from St. Martin's Press) by Hobart M. Smith

-Frogs!: Strange and Wonderful by Laurence Pringle

In this unit, no Going Deeper lessons are provided. But use the books listed above to take that plunge if desired! Learn more about individual types of frogs and toads in the amphibian Golden Guide (or other nature guide). Sketch your favorites. Journal about the ways they are similar and different. Or do a research project about a specific kind of frog or toad.

Unit A Overview

Lesson 1:

- Topics covered: characteristics of amphibians + frogs
- Picture books used: A Frog's Life
- Art: frog feet sketches + optional handprint art

Lesson 2:

- Topics covered: frog life cycle
- Picture books used: A Frog's Life and Frogs
- Art: life cycle sketches

Lesson 3:

- Topics covered: frogs and toads
- Picture books used: Frogs, The Frog Alphabet Book, and Out of School and Into Nature
- Art: sketch or paint a frog

Lesson 4:

- Topics covered: salamander life cycle + characteristics
- Picture books used: *The Salamander Room* and *Salamander Dance* (optional)
- Art: salamander room drawings

<u>Lesson 5</u>:

Creative movement prompt + field trip suggestion

This week we will be learning about the letter A, and amphibians! (Draw an A on a chalkboard or make visible for younger children.) A is for amphibians.

First what is an amphibian?

Explore

Explore Animal! pages 82-83

Discuss that amphibians:

- Usually lay eggs to reproduce
- Have moist skin.
- Spend part of, or a lot of their life in water
- Typically spend some part of life as a tadpole
- Are cold-blooded (cannot make their own warmth)
- They are the only vertebrate that changes form

Explore *Natural World* page 76 list the 3 kinds of amphibians.

The amphibians we will be focusing on today are frogs.

Read Aloud

Read A Frog's Life pages 1-25

Discussion points:

- Discuss frogs' moist skin as a key to their survival (and how they are able to live in 2 places page 8)
- Discuss sticky frog tongues

Look up videos on YouTube of frogs catching insects!

Explore

Some frogs live near water to stay moist, while others live in very wet places- like tree frogs in rain forests.

Read Animal! pages 84-85

Look at frog feet on *Natural World* page 76 and *A Frog's Life* page 18

- Discuss which frogs have which kind of feet. Discuss that this is based on where they live or how they live, or what they need to be able to do with their feet.
- Discuss the shape of your hands and feet, and how their shape and function is related to the things you need to do, or the ways you need to move.

Art

Frog feet exploration

Sketch the different kinds of frog feet in your sketchbook.

Optional art:

Have child/children paint their hands and make handprints on paper, or trace their hands and color the tracing.

Language Arts

(Have child answer verbally or in writing) What did you learn today that you didn't know before?

Which kind of frog feet would you want to have? Which kind of frog would you want to be?

Play

Experience frog life!

Put lotion on and have a conversation about how it would feel to be moist all of the time.

Eat like a frog place small snacks (that could not be choked on!) in front of you and your child on the ground or table. Try to reach out and "catch" your food as fast as possible, like a frog.

(Use speed when trying to grab snacks with the hands, but not when placing them in the mouth. Always use caution!)

Frog jump around your house.

Go outside and try to catch bugs. Frogs are fast - can you be as fast as a frog?

Letter Work (Younger Children)

Make a large A in child's sketchbook. Have child trace it with their finger three times.

Today we will continue learning about amphibians. What do you remember learning yesterday? What is an amphibian?

Read Aloud

Finish A Frog's Life (pages 26-37)

Discussion:

- The last part of this book began teaching us about the life cycle of frogs. A life cycle is the different stages something goes through in its life. Like you! First you were a baby, now you are a child, and you will grow into an adult.
- A frog starts as an egg, then hatches into a tadpole, then gradually becomes a frog.
 Now we will read a book that will teach us more about this life cycle.

Read Aloud

Read Frogs by Gail Gibbons

(Skip the frog versus toad section at the end. This will be covered tomorrow.)

Potential discussion points:

- When frog eggs are in a slimy mass, this protects them how?
- Discuss the different phases of growth that tadpoles go through, and how they look different during each one.
- Frog tongues are attached to the front of the mouth.
 Where is your tongue attached?

Feel free to look up videos of masses of frog eggs—it is fascinating to watch someone pick the entire thing up! You could also look up videos of frog eggs hatching, or time-lapses of tadpoles changing as they grow.

In addition to those video search ideas, we recommend the videos "Being a Poison Dart Frog Parent is HARD" and "Frog Defends Eggs from Wasps" by BBC Earth.

Explore/Language Arts

Using *Nature Anatomy* page 203 and *Natural World* page 101, talk through the frog life cycle again.

Have child explain the life cycle to you.

Search "frog life cycle" on YouTube and watch this happen.

Art

Sketch frog life cycle in sketchbook.

If this is too complicated, have child sketch a jelly mass of eggs floating in a pond.

Or encourage child to sketch a frog at any point in the life cycle and tell the story of what is happening in their picture—example: this tadpole is being eaten by a fish, or this frog is catching a bug, or this egg is hatching. Lots of creativity here!

Letter Work (Younger Children)

Write A five times in sketchbook.

Play

Using the bubble-nest frogs' foamy nests as inspiration, create a foamy sensory play experience for your child. You could also hide small toys in the foam (like the eggs are hidden in the nests) and encourage your child to find them.

Bubble Foam Recipe:

2 parts water1 part dish soap or bubble bath

(ex. 2 cups water + 1 cup dish soap)

Place water and soap or bubble bath in large bowl and mix with hand mixer until stiff. Pour into a large tote or container for sensory play.

Yesterday we learned about the life cycle of a frog. Do you remember the stages a frog goes through as it grows?

Today we will be learning about the difference between a frog and a toad.

Explore

Using *Frogs* (by Gail Gibbons) and *Nature Anatomy* page 202, discuss the differences between a frog and a toad.

Make a Venn diagram (two overlapping circles). Explain what a Venn diagram is, and that we use them to show how things are different and how they are similar. List similarities of frogs and toads in the middle section where the circles overlap, and list their differences in the respective circles.

Read about the common toad on *Animal!* pages 86-87

<u>Discussion points</u>:

 The common toad is slow moving and incapable of leaping like a frog

- The common toad doesn't act like a hunter but is a deadly predator
- Discuss what nuptial pads are for
- Like many toads, the common toad lives entirely on land except when spawning

Then explore different frogs and toads on pages 88-89 of *Animal!* and pages 194-195 of *Wildlife Anatomy*.

Look up more information or videos about any frogs or toads that intrigue your child. Watching Surinam toad babies hatch from the mother's back is fascinating!

Search YouTube to hear different frog and toad croaks/sounds.

Read Aloud

Read The Frog Alphabet Book

Explore

You have learned that not all frogs croak. Search "India dancing frogs"

on YouTube and watch their dances.

Art

Choose a frog or toad from A Frog's Life or Animal! pages 88-89 to sketch and watercolor paint in sketchbook.

Letter Work (Younger Children)

Make an A with rubber bands on pegboard.

Play

Be like the Indian dancing frogs and have a dance party! Play charades as part of your party and guess what the other person is trying to communicate with their body.

Historical Read Aloud

Read Out of School and Into Nature: The Anna Comstock Story

Discussion Points:

- What did Anna do that was revolutionary or different in her time?
- Did her approach make sense?
- How should we use her example to shape our family's homeschool experience?

We are continuing our amphibian unit today. What have you enjoyed learning so far?

Review: what are amphibians/what are the characteristics of an amphibian?

Today we will learn about salamanders and newts.

Explore

Read *Animal!* pages 90-93 and *Nature Anatomy* 152 and *Wildlife Anatomy* 192-193

Discussion:

- Discuss the physical and lifestyle differences you see between frogs/toads and newts/salamanders.
- Salamanders and newts look like lizards but are not.
 Lizards are reptiles. Discuss that salamanders' and newts' aquatic young and moist skin make them different from reptiles.

Look up "salamander BBC" or "salamander National Geographic" and find a video to see a salamander or newt.

Optional Read Aloud

Optional read aloud: Salamander Dance (use YouTube)

Read Aloud

Read The Salamander Room

Discussion:

- This book is fun, but it also teaches us what salamanders need to survive. What did the main character need to bring into his room to create an environment where the salamander could survive?
- What does that teach us about what salamanders need in their natural environment?

Art/Language Arts Salamander Room Design

Have child sketch their room, and draw in everything they would need to make it a "salamander room" where a salamander could live and survive. Color if desired.

Have child explain to you all the different parts of their drawing, and

why each part is essential in keeping a salamander alive.

Letter Work (Younger Children)

Write A five times in sketchbook.

Creative movement prompt/field trip suggestion

Suggested sounds: YouTube search "swamp sounds at night frogs" and use for this prompt.

Turn on soft sounds and read prompt, making sure to pause at intervals to allow your child to explore physically. Don't rush!

"Go ahead and lay on the floor. You are a floating frog egg. You are floating gently on the top of a pond. You drift and sway, safe inside your squishy egg. You feel cozy and protected as you float along. It is cool here in your egg, comfortable and safe.

You begin to grow bigger. You wiggle a little...you turn one way, and then another way. You are getting stronger. You start to move more, and more...soon you will be too big for this egg. You rest, and tomorrow it will be the day to go out into the world.

Your egg is too tight this morning. You twist and turn, and suddenly you are free of your little egg! You zip around the pond, exploring your new little tadpole tail. You can swim! You gulp water in and breathe this way. Feel the water slide smoothly past your gills and give you breath. You are hungry! It is hard work to break out of an egg. You find tiny things to eat in the pond and snatch them with your mouth. Swim fast and grab delicious bits with your mouth! You see a tasty bite ahead of you, swim fast and grab it gulp!

But you are still tiny - you have to watch out for things that want to eat a tasty tadpole. Suddenly a fish is coming after you! Swim away! Swim, swim, swim! Hide under a rock! Peek out - do you see that fish? You are safe, the fish is gone. That was close! Keep swimming.

After a while, you begin to sprout tiny legs. You kick your legs and swim with your tail. Feel your strange, new legs. Kick them, stretch them how do they feel?

Swim, swim, swim around the pond, eating and growing. Your legs grow bigger and bigger and stronger and stronger. One day, you are ready! You are ready to hop out of the pond and live on land. Hop out of the pond hop, hop! Look around at your new home. It is different up here. A fly buzzes past your ear. Let your tongue fly out to catch it! Yum. This is how you will catch your food now. Hop, hop, hop around, exploring this new place. You need to keep your skin wet, so hop back into the pond sometimes.

It is nighttime now. You sit on a lily pad and croak with the other frogs in the pond, and get ready to sleep in your swampy, wet home."

Field Trip Suggestion

Go see some amphibians! If you can access a local pond, or be out in nature as you do so, that would be ideal. (Do not touch any amphibians you find.)

If not, find a reptile and amphibian exhibit at your local zoo and go explore.

Pet stores like Petco often have frogs for sale that children can go see. Call your local pet store to see if they have any amphibians in stock, and go take a closer look!