Amphibian Week 2023 Education Activities

Celebrate Amphibian Week 2023 by bringing the wonderful world of amphibians into your classroom or learning space! Amphibians are a class of animals that have 4 legs, are ectothermic (cold-blooded), and lack scales. Amphibian species include caecilians, frogs, toads, salamanders, and newts.

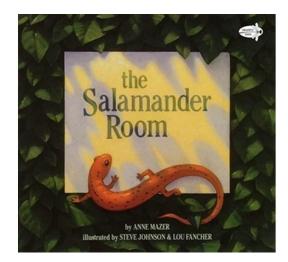


Early Childhood (PreK-2nd Grade)

- 1. Combine art and math with this Frog on a Log activity for preschoolers.
- 2. <u>Make a frog sensory bin</u> with plastic frogs, stones, plants, and more!
- **3.** Sing along to the Toad, Frog, Pollywog! Amphibians Kids Song. Check out the <u>video</u> <u>here</u>.
- 4. Compare and contrast amphibians and reptiles with <u>these Association Montessori</u> <u>International enrichment vocabulary cards</u> that are available in English, Spanish, Korean, and other languages. You can find a second set of amphibian cards at <u>this link</u>. In addition, you can find <u>reptile cards here</u>.
- 5. Color an amphibian!
 - a. Bullfrog coloring sheet
 - b. California newt coloring sheet
 - c. Mountain yellow-legged frog coloring sheet
 - d. Salamander coloring pages
 - e. <u>Caecilian coloring page</u>
- 6. Learn about the lifecycle of a frog and <u>make your own lifecycle</u> out of dough and on a phenology wheel.
- Read *The Salamander Room* by Anne Mazer to learn about the lifecycle of salamanders. <u>Color your own salamander lifecycle</u>. <u>Use these free printables</u> from Homeschool Share to teach about salamanders and to use with the book.
- 8. <u>Watch this video</u> about the life and anatomy of a frog. The right side of the website has lesson plan resources and discussion questions.
- 9. See if you can jump further than a frog with this frog jump activity.







Upper Elementary (3rd-5th Grade)

- 1. Learn about the differences between amphibians and reptiles and use Venn diagrams to sort characteristics of the two groups with <u>this activity</u>.
- 2. Use the <u>DK Findout! interactive website</u> to learn more about amphibians.
- **3.** Learn about salamanders through coloring pages, crosswords, and more with <u>this</u> <u>Salamander Activity Book</u> by The Wandering Herpetologist.
- 4. Learn about spotted salamander with this quick video by Maryland SeaGrant.
- Learn about and explore different habitat needs of local salamander species. Head outside and investigate habitat suitability and determine ways to improve habitat for local salamanders. Click here for the <u>lesson plan</u> and <u>here</u> for the worksheet.
- 6. Learn local frog calls and test your skills with the <u>USGS Frog Quiz website</u>. Learn about frog calls in Illinois and create your own "Frog Chorus" with this lesson plan from Illinois. Similarly, <u>check out PARC's Frog Talk lesson plan</u> for an activity to make frog and toad calls from Maryland. Head outside and conduct a frog call survey with <u>Virginia's Frog Call activity</u>.
- 7. <u>Make an 'Amphibian Ally' t-shir</u>t! Check out the directions and supply list on the 2021 Amphibian Week page.
- 8. Explore how some frogs can freeze. Set up and experiment where students place water in a container, maple syrup in a container, and different mixes of water and maple syrup. Have them make predictions on what will happen with each of the liquids after being placed in the freezer overnight. Examine the liquids the next day and write down results. Compare results to predictions. Watch the <u>Frosicles: Frozen but Still Alive video</u> and compare how the maple syrup might be similar to the frog's blood.
- 9. Have you heard about caecilians? Check out this Caecilian Cotillion song on YouTube!
- **10.** Explore how invasive bullfrogs impact western frog species with <u>this Bullfrog Bullies</u> <u>activity</u> found in the Aquatic Invasive Species of the Mid-Atlantic Education Guide.
- **11.** Read the graphic novel Our Neighbors, Frog and Toad: the Environmental Importance of Amphibians in the Cordillera Vilcanota <u>in English</u> or <u>in Spanish</u>.





Middle School (6th-8th Grade)

- 1. Read the Amphibian Adventures: Beyond the Vernal Pool graphic novel found here.
- Check out the connections between frog declines and climate change with <u>this activity</u> from the National Science Teaching Association (NSTA): Ectotherm ER: Frogs Under the Weather Connecting Amphibian Decline to Climate Change.
- **3.** Learn about and explore different habitat needs of local salamander species. Head outside and investigate habitat suitability and determine ways to improve habitat for local salamanders. Click here for the <u>lesson plan</u> and <u>here</u> for the worksheet.
- 4. Learn about marbled salamanders and their amazing migration as well as threats they face along the way through <u>this hands-on simulation</u>. Marbled salamander pictures can be <u>found here</u>, and the station cards can be <u>found here</u>.
- Learn local frog calls and test your skills with the <u>USGS Frog Quiz website</u>. Learn about frog calls in Illinois and create your own "Frog Chorus" with this lesson plan from Illinois. Similarly, <u>check out PARC's Frog Talk lesson plan</u> for an activity to make frog and toad calls from Maryland. Head outside and conduct a frog call survey with <u>Virginia's Frog Call activity</u>.
- 6. <u>Make an 'Amphibian Ally' t-shir</u>t! Check out the directions and supply list on the 2021 Amphibian Week page.
- **7.** Learn about different kinds of animal crossings engineered to help protect wildlife and design your own salamander crossing with <u>this engineering activity</u>.
- 8. Learn about declining species of frogs through this Vanishing Frogs lesson plan.
- 9. <u>Make a treefrog house</u>.

High School (9th-12th Grade)

- 1. Use the Maryland SeaGrant <u>Salamander Symbiosis activity</u> to explore the following driving question: *How is a changing climate related to fragile ecosystems like vernal pools, and how does that relationship impact biodiversity and, in particular, the spotted salamander*?
- 2. Explore the origin of tetrapods and learn to describe how transitional fossils provide evidence of common ancestry between major groups of animals with <u>this lesson plan</u> and <u>video</u>.
- Learn local frog calls and test your skills with the <u>USGS Frog Quiz website</u>. Learn about frog calls in Illinois and create your own "Frog Chorus" with this lesson plan from Illinois. Similarly, <u>check out PARC's Frog Talk lesson plan</u> for an activity to make frog and toad calls from Maryland. Head outside and conduct a frog call survey with <u>Virginia's Frog Call activity</u>.
- Make an 'Amphibian Ally' t-shirt! Check out the directions and supply list on the 2021 Amphibian Week page.
- **5.** Learn about different kinds of animal crossings engineered to help protect wildlife and design your own salamander crossing with <u>this engineering activity</u>.
- Explore Using the Eastern Hellbender Salamander in a High School Genetics & Ecological Conservation with <u>this activity</u> published in The American Biology Teacher. Additional resources can be <u>found here</u>.





Reference Guides

- Peterson First Guide To Reptiles And Amphibians by Robert C. Stebbins, Roger Tory Peterson, Roger Conant
- Peterson Field Guide To Western Reptiles & Amphibians, Fourth Edition by Robert C. Stebbins, Samuel M. McGinnis
- Peterson Field Guide To Reptiles And Amphibians Eastern & Central North America by Robert Powell, Roger Conant, Joseph T. Collins
- National Geographic Pocket Guide to Reptiles and Amphibians of North America by Catherine H. Howell
- The Frogs and Toads of North America: A Comprehensive Guide to Their Identification, Behavior, and Calls by Lang Elliott, Carl Gerhardt, and Carlos Davidson
- <u>Amphibians of Ohio Field Guide</u> (PDF)

Things to Know

- Help prevent the spread of disease <u>by disinfecting boots and other equipment</u> when heading to sites with amphibians. Watch <u>this video</u> for more information.
- Read about the Problems with Buying Frogs and Tadpoles for Wild Release here.
- Learn about Frog-Safe Guidelines for Raising Tadpoles in the Classroom here.
- Learn about field ethics and etiquette when searching for reptiles and amphibians outdoors <u>here</u>.

Title	Author	Fiction or Nonfiction	Subject	Grade Band
A Frog's Dangerous Home	Mary Ellen Klukow	Fiction	Animal habitat changes	Gr 1-3
Amazing Amphibians	Lisa J. Amstutz	Nonfiction	Introduction,Pict ure	Gr 2-4
Amphibian (Eyewitness Book)	Barry Clarke	Nonfiction	Introduction, Anatomy	Gr 3-5
Amphibians and Reptiles (Compare/Contrast Book)	Katharine Hall	Nonfiction	Compare and contrast	Gr 1-2
Axolotl! Fun Facts about the World's coolest Salamander	Susan Mason	Nonfiction	Info/Picture book	K-5
Big Night for Salamanders	Sarah Marwil Lamstein	Fiction	Migration, Spotted salamander	K-4
Everything You Need to Know About Frogs and Other Slippery Creatures	DК	Nonfiction	Frogs, adaptations	Gr 2-5

Amphibian Books





Fanatical About Frogs	Owen Davey	Nonfiction	Frogs, adaptations	K-4
Frog and Toad All Year	Arnold Lobel	Fiction	Picture Book	K-3
Frog on a Log	Kes Gray	Fiction	Rhyming book	к
Frogs (Pond Animals)	Meg Gaertner	Nonfiction	Life cycle	Gr 1-2
Frogs and Toads	Joanne Mattern	Nonfiction	Compare and contrast	Gr 2-4
Frogs, Toads and Turtles	Diane L Burns	Nonfiction	Introduction,fact s,tips	K-5
Frogs! Strange and Wonderful	Laurence Pringle	Nonfiction	Picture Book	Gr 2-5
Henry and the Bullfrog: A Tale of Kindness	Angela Castillo	Fiction	Empathy	K-3
How a Frog Grows	рк	Nonfiction	Introduction,Life Cycle	к
How does a tadpole grow?	Eric Carle	Nonfiction	Picture Book/life cycle	к
am Frog	Rebecca McDonald	Fiction	Importance to environment	K-3
The Life Cycle of a Frog	Bobbie Kalman, Kathryn Smithyman	Nonfiction	Life cycle	K-3
National Geographic: Explore my World Frogs	Marfe Delano	Nonfiction	Frog Growth	K-2
Night of the Spadefoot Toads	Bill Harley	Fiction	Lifecycle	Gr 3-7
Salamander Dance	David Fitzsimmons	Fiction	Life cycle, migration	K-2
Salamander Season	Jennifer Keats Curtis & J. Adam Frederick	Fiction	Migration, Spotted salamander	K-3
Salamanders of the Southeast	Joe Mitchell, Whit Gibbons	Nonfiction	Salamander diversity	Gr 9- adult
Shady Streams, Slippery Salamanders	Jason Patrick Love, Joyce Turley	Fiction		K-3
Smithsonian Handbooks: Reptiles and Amphibians	Mark O'Shea , Tim Halliday, David A. Dickey	Nonfiction	Field guide	Gr 3- adult
Snakes, Salamanders and Lizards	Diane L Burns	Nonfiction	Introduction,fact s,tips	K-5
Stinky Cecil in Operation Pond Rescue	Paige Braddock	Fiction	Toad	Gr 3-4





Sunscreen, Frogsicles, and Other Amazing Amphibian Adaptations	Laura Perdew	Nonfiction	Adaptations, Biomimicry	К-3
Taíno Tales: The Legend of Coquí	Vicky Weber	Fiction	Frog, Folklore	K-5
The Great Smoky Mountain Salamander Ball	Lisa Horstman	Fiction		K-3
The Frog Price hops to it (After Happily Ever After)	Tony Bradman	Fiction	Introduction,Life cycle	Gr 3-6
The Green Frogs: A Korean Folktale	Yumi Heo	Fiction	Folklore	PreK-3
The Hidden Life of a Toad	Doug Weschler	Nonfiction	Picture book	K-3
The Life Cycle of Amphibians	Darlene R Stille	Nonfiction	Introduction	3-6
The Salamander Room	Anne Mazer	Fiction	Habitat	K-3
The Secret Pool	Kimberly Ridley	Fiction	Vernal pools	3-4
The Snake and the Salamander	Alvin R Breisch	Nonfiction	Amphibian diversity	Gr 9- adult
The Wild Lives of Reptiles and Amphibians: A Young Herpetologist's Guide	Michael Smith	Nonfiction	Amphibian & reptile diversity	Gr 3-8



