What are frogs and toads?

Frogs and toads are both types of amphibians. Amphibians are a kind of animal that lives the first part of their lives in the water, but their bodies grow and change into adults that can live on land. They need a moist or wet environment to survive and can also absorb water and even breathe through their thin skin. Frogs and toads are amphibians that have no tail and short, stubby bodies. Frogs have long back legs with webbed feet for jumping and swimming. They also have smooth, wet skin. Toads are a type of frog that has thick warty skin, smaller legs and no webbed feet. You may have heard frogs and toads making noise at night, or even seen some near a pond or stream!

Let’s Read

Find a comfortable spot and read about frogs and toads! Here are some ideas to get you started:

- *The Fascinating World of Frogs and Toads* by Angels Julivert
- *National Geographic Kids: Frogs!* by Elizabeth Carney
- *Amazing Frogs and Toads* by Barry Clarke
- *Frogs* by Nic Bishop
- *From Tadpole to Frog* by Kathleen Weidner Zoehfeld
- *Life Cycle of a Bullfrog* by Jason Cooper
- *Noisy Frog Sing-Along* by John Himmelman
- *Tree Frog Hears a Sound* by Rebecca Johnson

You can download digital copies of these books for free from openlibrary.org. Here is how!

1. Go to openlibrary.org.
2. Click the blue “sign up” button on the top right to create a free account. You will be sent a confirmation email.
3. Sign in.
4. Type the book title and author into the search bar.
5. Find your book and click the blue “borrow” button.
6. Don’t forget to return your book when you are finished reading it!

Keep going!

Set up an online reading group with some of your friends. You can read the same book, then talk about what you learned, or you can read different books and share cool frog and toad facts.
Fantastic Frog Calls

Why do frogs croak? Animals make all kinds of sounds for many reasons. Making sounds is how animals communicate with each other, just like we talk to each other to communicate as humans. Frogs and toads can make amazing sounds known as “frog calls.” Some sound like croaking while others can sound like chirping or screeching. Frogs have two types of calls: an alarm call to tell other frogs that a predator is nearby and territory calls made by males to tell female frogs where they are. You can even use frog calls to tell frogs apart!

Before you start, you should have:
• A comb
• A rubber band
• A plastic cup
• 2 marbles or coins
• A balloon or water balloon
• String
• A phone, computer or tablet with internet access

1. Using a phone/computer/tablet, go to:

2. Listen to some frog calls:
   Did they all sound the same?
   Were they loud or quiet?
   Did they sound like other kinds of animals?
   Do you think you have heard a frog call outside before?

3. Use the following supplies you have gathered to mimic these Oklahoma frogs:
   • Boreal chorus frog: Run your fingernail over the teeth of the comb.
   • Eastern cricket frog: Click the marbles or coins together at least 10 times.
   • Green frog: Stretch out the rubber band between your fingers or over the plastic cup and pluck it.
   • Pickerel frog: Blow up the balloon and run your finger over it in a zig-zag pattern.
   • Bullfrog: Poke a hole in the plastic cup and thread the string through the hole. To stop the string from coming out, tie a knot near the end. Make the string wet and run your fingers down the string starting inside the cup.

4. Listen to more frog calls and try to use the supplies in different ways to mimic them.
   • Did any of the frog calls you made with the supplies sound like the recordings? Which ones?
   • Can you think of another way you could make the same sounds as a frog call?

Keep going!

Head outside near water or a forest and see if you can hear any frogs. Try different times of day, too!

More information on frog calls
https://thefroglady.wordpress.com/2019/03/01/oklahoma-frogs-and-toads/
https://animaldiversity.org/collections/frog_calls/

For more activities visit samnoblemuseum.ou.edu/samnoblehome
A House for Toad

Where do frogs and toads live? Since they are amphibians, frogs and toads need to keep cool and moist, so they usually live around ponds, lakes and other bodies of water. Frogs live in and very close to water because their skin is thin and can dry out quickly. Toads however, have thicker skin that can better hold moisture. Toads usually burrow in the ground in shady areas during the day to escape the heat instead of staying directly in water. If you live in an area around a stream or pond, you may see toads or frogs in your backyard!

Before you start, you should have:
- A small clay pot or plastic container (the clay pot will stay cooler in the summer)
- Non-toxic, washable paints
- Paint brushes
- A quiet place outside in the shade to put the pot

Get started:
1. Paint the outside of the container with your favorite colors and designs.
2. Allow the paint to dry before taking the container outside.
3. Find a place outside with plenty of shade.
4. Place the container on its side on the ground, so that the opening is facing outward and it is easy for a toad to hop into.
5. Place some dead leaves and a little bit of soil inside the pot. Now you have a toad house!
6. Check on your pot once each day to see if a toad has moved in. After sunrise and sunset are the best times to check! If you see a toad, make observations about what it is doing.
7. Try to guess what type of toad it is by going to the following website and looking under the heading “True Toad Family – Bufonidae”:

Keep going!
There are some ways you can attract toads to your area:

Keep a shallow dish of water at ground level for toads to soak in. Make sure you place a stone in the water dish so that the toads can get out.

Keep a little area of fallen leaves and twigs around your toad house. Toads like to hide under leaf litter.
Frog “Eggs-periment”

What is the lifecycle of a frog or toad? Frogs and toads have a four-step life cycle: eggs, tadpoles, froglets and adult frogs. They are types of animals that undergo “metamorphosis.” Metamorphosis is a process of growing up from a baby to an adult where an animal changes in big ways. Instead of just growing into bigger versions of a baby, like we humans do, they will grow different body parts and almost completely change their appearance.

An adult frog or toad will lay its eggs in water. Tadpoles, which look like little fish with no fins, hatch from the eggs and live in the water. Once a tadpole grows its legs and loses its tail, it is called a froglet. Metamorphosis occurs during the change from tadpole to froglet. The froglet will begin to live on land and will grow bigger until it becomes an adult frog. Adult frogs will lay more eggs and continue the cycle. Frogs and toads lay eggs that are squishy, like blobs of jelly, and are very fragile. They do not have hard shells to protect them and retain moisture like the eggs of a bird or reptile. Let’s find out what would happen to different kinds of eggs if left out of the water!


Robin Eggs: https://upload.wikimedia.org/wikipedia/commons/8/8f/American_Robin_Eggs_in_Nest.jpg

Frog Eggs: https://dr282zn36sxxg.cloudfront.net/datastreams/f-d%3A355e5ce89ed813d203f1e6170381e1b4e9ba69fba5b261a844c6915%2BIMAGE_THUMB_POSTCARD_TINY%2BIMAGE_THUMB_POSTCARD_TINY.1

Before you start, you should have:
- 1 chicken egg
- 1 package pearl tapioca or 1 package water beads (to mimic frog eggs)
- A small pot
- Tongs
- A spoon
- 2 bowls of water
- A watch or timer
- An adult to help

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Get started:
1. With an adult’s help, boil the chicken egg for 15 minutes.
2. After boiling, remove the egg with tongs and place it into a bowl of water.
3. Using the same pot, add a handful tapioca and boil for 15 minutes.
4. After boiling, place the tapioca into another bowl of water.
5. Let both the egg and tapioca cool until safe to touch. Feel both types of “eggs.”
   (If you are using water beads, place them in a bowl of warm water for 6 hours. Then feel them.)
   • What are the differences between how the eggs feel after sitting in the water?
6. Carefully pour the water out of both bowls and let them sit for 2 hours. Then feel the 2 types of eggs again.
   • What happened when the eggs were left out of the water for 2 hours? How did they feel?
7. Let the eggs sit overnight and feel them again.
   • What happened when the eggs were left out of the water for a day? How did they feel?
8. Put the chicken egg in the refrigerator for 4 days. If you are using tapioca, put it in the refrigerator for 4 days. If you are using water beads, keep the water beads outside the refrigerator for 4 days.
9. Check on your eggs after 4 days.
   • What happened when the eggs were left out of water for 4 days? How did they feel?
   • After doing the experiment, why do you think frogs lay their eggs in water?

Keep going!
Keep a journal of what your eggs look like during the experiment. Draw pictures of the eggs each day and put the date at the top of the page. You can also write down any changes to the eggs that you notice.

More information on frog lifecycles

https://ufwildlife.ifas.ufl.edu/frogs/eggs.shtml

https://www.earthrangers.com/omg_animals/life-cycle-of-a-frog/
Let’s Play: Pond Obstacle Course

How do frogs and toads move? Frogs and toads both move on four legs and can hop. However, there are some differences in the ways they can move. Frogs have powerful back legs that allow them to jump long distances to escape from predators. Toads have shorter legs for hopping and walking, and avoid predators by hiding underground for most of the day. Frogs also have webbed back feet for swimming in water. Toads do not have webbed feet because they do not swim very often.

Before you start, you should have:
• An indoor or outdoor space with room to move
• Outdoor space: sidewalk chalk or paper and pencil
• Indoor space: paper and pencil
• Optional: a partner

Get started:
This can be an indoor or outdoor activity, but it's best done outside!

Outside: Use your chalk to make an obstacle course on the sidewalk. You can draw lily pads to jump on and around, logs to hop or skip over and a stream to swim through. Pick at least five different obstacles to start. Get creative and then follow your course all the way to the finish line!

Or…
If you don’t have chalk, write down your obstacle course directions on a piece of paper. Pick at least five different obstacles to start. You can hop to the nearest tree, make frog calls, find a place for a toad to live, jump over logs and more. Get creative and then follow your course all the way to the finish line!

Inside: Look around your indoor space and see what obstacles you could create. Write down your obstacle course directions on a piece of paper. Pick at least five different obstacles to start. You can hop to the next room, make frog calls, jump from lily pad to lily pad (pillows or pieces of paper), jump over logs (toys) and more. Get creative and then follow your course all the way to the finish line!

Keep going!
Make an obstacle course for a partner and see if they can complete it. You can also time each other or race!

For an added challenge, make an obstacle course for either a frog or a toad. For example, a toad may hop, but not jump like a frog would. A frog may swim, but a toad will most often not.

For more activities visit samnoblemuseum.ou.edu/samnoblehome

More information on frog and toad behavior
https://www.froglife.org/info-advice/frequently-asked-questions/frogs-and-toads-behaviour/
https://www.exploratorium.edu/frogs/mainstory/frogstory2.html