

# Lesson Plan Readers Go "Ribbit": Fun with Frogs!

This lesson plan works very well with children preschool through second grade. The lesson lasts between 45 minutes to an hour, based on the number of books read. To orient the children to what it means to be a scientist, think scientifically and "do science," use the **A Scientist Is... and Scientific Method** handouts available at the end of this lesson plan.

Please consider <u>borrowing our frog STEM kit</u> for more fun activities and additional science information.

#### SING

Begin with your favorite welcome song.

#### **SCIENCE CHAT**

Begin a theme on frogs at circle time by freestyle asking the children what they know about frogs.

WHAT IS THE DIFFERENCE BETWEEN FROGS AND TOADS?		
FROGS HAVE:	TOADS HAVE:	
smooth or slimy skin	warty and dry skin	
strong, long legs	stubby bodies with short hind legs	
webbed hind feet	paratoid glands behind their eyes	
two bulging eyes	lay eggs in long chains	
lay eggs in clusters		
A group of frogs is called an <b>ARMY of frogs</b>	A group of toads is called a KNOT of toads	

If you are near a computer with speakers, introduce the children to these **sounds (.mp3 files) of different frog calls** from the University of Wisconsin Sea Grant Institute: <u>http://seagrant.wisc.edu/frogs/field\_ids.html</u>

For more information, please contact: Wisconsin Water Library | Phone: (608) 262-3069 | Email: <u>askwater@aqua.wisc.edu</u> <u>1 | P a g e</u>

PLAY – IS IT FACT OR FICTION?	
"All frogs can jump long distances."	FICTION: It's true that many frogs can jump with astonishing speed and power. Their strong back legs launch them forward and their short front legs act as shock absorbers as they come in for a landing. The best jumper, the southern cricket frog, can leap 36 times its body length in a single hop! However, some frogs cannot leap at all, and instead walk on the ground or climb in trees.
"Frogs can fly!"	<b>FACT:</b> Well, it's not exactly flying, but certain tree frogs in South America and Asia do get airborne. When a flying frog leaps between tree branches, it glides down gently with its toes outspread. The webbing between the toes catches the air and the frog sails as if carried by a parachute. The "flight" can cover more than 50 feet.
"All frogs are basically small and green."	<b>FICTION:</b> Frogs come in a wide range of sizes and a rainbow of colors. The goliath frog of West Africa is the size of a small dog, measuring about 15 inches from nose to rump. On the other end of the scale is Pyllophryne didactyla, the world's smallest frog, which is found in Brazil. This little frog is about the size of a firefly and could sit easily on top of a pencil eraser.
"Frogs can be dangerous to other animals and even to humans."	FACT: Many species of frogs produce a toxic, mucous- like substance on the surface of their skin. A predator that tastes this poison will spit out the frog, avoiding what would have been a bad tasting and dangerous meal. Some frogs from Central and South America are so toxic that handling them could be instantly fatal if their poison were to enter the bloodstream through even a minor scratch on the hand. The Choco Indians of Colombia use this toxin on the tips of poison darts they use for hunting.
"Toads cause warts!"	<b>FICTION:</b> You may have heard this before, but it's just not true. A toad's skin may be bumpy and warty-looking, but if you touch a toad, you will not get warts!
"Frogs can drink through their skin."	<b>FACT:</b> A frog's skin is not waterproof! In fact, frogs can absorb both oxygen and water through their skin. This quality makes frogs particularly vulnerable to pollutants in the air or water - they suffer from pollution even when they don't eat or drink it through their mouths.

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#### READ

Suggestions from the Wisconsin Water Librarians, but feel free to swap out with your own OR visit our subject specific reading list: <u>Frogs.</u>

READ: Jump Frog, Jump (1989) by Robert Kalan illustrated by Byron Barton

- READ: <u>*Red-Eyed Tree Frog (2006)*</u> by Joy Cowley photographs by Nic Bishop
- READ: <u>City Dog, Country Frog (2010)</u> by Mo Willems illustrated by Jon J Muth
- READ: Wide-Mouthed Frog (1996) by Keith Faulkner illustrated by Jonathan Lambert

#### SING

Use any song you like adapted to the theme of frogs. Here are two suggestions:

#### Two Little Frogs

#### (adapted from Two Little Blackbirds)

Two little froggies, sitting very still One named Jack, the other named Jill Jump away Jack! Jump away Jill! Come back Jack, come back Jill.

Two little froggies sitting on a stick One named slow, the other named quick Jump away slow! Jump away quick! Come back slow, come back quick!

Two little froggies sitting on a cloud, One named soft, the other named loud. Jump away soft! Jump away loud! Come back soft. Come back loud!

# 5 Little Speckled Frogs

Five green and speckled frogs Sat on a speckled log Eating some most delicious bugs (yum, yum!) [rub tummy] One jumped into the pool Where it was nice and cool, Then there were four green speckled frogs. (glub, glub)

4 green and speckled frogs...3 green and speckled frogs...2 green and speckled frogs...1 green and speckled frog...

#### **CRAFT IDEA: FROG NOISEMAKER**



#### Supplies

Green foam sheet, 8.5 by 11 Foamy Frog Template Noisemaker (found in party stores) Gems, foam flowers, etc - anything to decorate your frog with Scissors Glue

#### Instructions

Print out our foamy frog (template is found at the end of this lesson plan). Cut the frog out and trace onto green foam sheet. Carefully cut out green foam frog Using your scissors, cut out the small + indicated on the template Decorate frog to suit your fancy. Be sure to glue on eyes for best effect. Insert noisemaker into two + to form a tongue.

#### **CRAFT IDEA: ORIGAMI FROG**

## HOW TO MAKE AN ORIGAMI FROG From Wisconsin Water Library Adapted with permission from EEK (WDNR)

- Today's origami figures begin with the simple folds first creased centuries ago. Mastering the basic folds, the valley fold and frog base is the first step in creating origami.
- Just about any kind of paper can be used for origami: newspaper, typing paper, wrapping paper, recycled paper, foil-backed paper or traditional origami paper, which is brightly colored on one side and white on the other. Complicated figures require a thin, crisp paper for best results. Thicker papers hold creases better, giving a clean line to simple designs. For this frog origami, you'll need a 3 x 5 card (like a recipe card).
- The most important thing to remember in choosing paper is that the dimensions of the sheet should be exact. If you're starting with a square sheet, for instance, measure to be sure it's precisely square. Trim with scissors if necessary.
- Make your creases carefully, matching corners where indicated. You can get a good crease on folds by using your thumbnail, a spoon or any hard, smooth object.







## A SCIENTIST IS SOMEONE WHO...

Observes and wonders Asks questions Listens to ideas of others Conducts experiments Shares his/her ideas and discoveries Explores the world around him/her Uses tools to solve problems

# A SCIENTISTS SAYS...

I agree with you because... I disagree with you because... Why do you think that? So, what you're saying is... Can you tell me more? Can you give me an example? How could we test that? That reminds me of...



# DOES IT SINK OR FLOAT?

