



## Frog Olympics

These are instructions for 2 active “frog” games.

### Audience/Group Setting

Event setting or classroom setting. *Frog Jump* can be used with individuals or with small or large groups of participants. *Bugs for Me!* works better with a group of at least 10 individuals.

Targeted age range is visitors aged 4 and up.

### Goal

To be physically active while learning about amphibians.

### Objectives

By the end of this activity, participants will be able to:

- *Frog Jump*: Practice your jumping skills and see how far you can jump compared to a frog.
- *Bugs for Me!*: Play a game about frogs and their prey (insects).

### Big Idea/ Main Message

Frogs and toads have many fascinating physiological features that allow them to survive and thrive in their environment.

### Conservation Action/ Behavior Addressed

**Look, listen, and learn: educate yourself and your family about amphibians.**

With more than 6,000 frogs, toads, newts, salamanders, and caecilians worldwide, there’s a lot to learn. Pick up a book, hop around the Internet, or watch your favorite animal television show to educate yourself and your family about amphibians.

## FROG JUMP

### Background Information

Just like humans, frogs have big, strong muscles in their thighs. But, for their size, these muscles are immense! This allows frogs to jump much further relative to their small size than a human could. For example, the bullfrog can jump a distance of 10 times its body length. For an adult man that is 6 feet tall, this would be equal to jumping 60 feet in a single jump!

### Materials Needed

- 100 feet of rope, marked at 5-foot intervals.
- 3 signs to be placed at various points along the rope to show how far particular species of frogs can jump. The signs should state the name of the frog, their body length, their maximum jump length, and how many times their body length they can jump.
- Examples to use:
  - Bullfrog: length of frog = 20.3 cm; maximum jump = 213 cm (>10 times body length)
  - Leopard Frog: length of frog = 12.5 cm; maximum jump = 162.5 cm (13 times body length)

- length)
- South African Sharp-Nosed Frog (world record holder!): length of frog = 7.6 cm; maximum jump = 334 cm (44 times body length)

## **Staff**

This activity could be supervised by a volunteer/ staff, but with instructions, could run on its own.

## **Length of Activity**

5-10 minutes

## **Set up**

- Ahead of time: Prepare the rope and signs (possibly laminated) and any instructions for participants if the activity is going to be self-run.
- Day of: Lay out the rope (possibly secure it to the ground). Lay out the frog signs along one side of the rope showing how far certain frogs can jump (possibly secure to the ground). On the other side of the rope, create a "Start" line for people to jump from (as to not disturb the frog signs).

## **Procedures**

1. As a visitor(s) approaches the activity, ask them if they would like to see who is a better jumper (the visitor or a frog?).
2. Explain how it is very important for frogs to be able to jump quickly in order to escape predators and that jumping also helps them catch a meal in mid-air (insects).
3. Point out the frog signs on one side of the rope. Explain that this shows how far particular frogs could jump compared to their body length. Make comparisons about how far a human would have to jump to do the same.
4. Have each visitor approach the "start" line and practice their frog jumping. Compare how far they can jump (based on their size) compared to the various frogs.
5. You could also mark each visitor's jump with pegs or lengths of string. Find out which visitor could jump the furthest during your event!

## **Activity Extensions/Modifications**

If available, gather life size pictures of the various frogs featured in the frog signs. Use the pictures to demonstrate visually how many body lengths the frog can jump by copying the picture and laying them side-by-side along the rope.

## **BUGS FOR ME!**

### **Background Information**

Frogs and toads have good eyesight, which they depend on to catch moving insects. Insects that stay very still are usually passed over and not caught.

### **Materials Needed**

None

### **Staff**

One staff or volunteer needed to lead the game. If you are using this game during an event (and since you need a group of people to play the game), determine the times when the game will start and have signage relating this. Hopefully visitors will gather, wanting to play the game!

## Length of Activity

5-15 minutes

## Set up

- Ahead of time: None
- Day of: Sign to advertise game times (if needed)

## Procedures

1. This game is based on the game “Red Light, Green Light.”
2. Find an area large enough to play the game: a room or open area at least 30 ft in length.
3. Designate one person to be the frog or toad. The rest of the game participants are insects. The area that they are playing around is the pond where the frog and insects live.
4. The insects should all stand at one end of the playing area (lined up facing the other end), while the frog stands at the other end (~20-30 feet away from the insects).
5. The area behind the frog is considered the “safe” zone.
6. The idea behind the game is that the insects are trying to make it across the “pond” or playing field without being eaten by the frog. When the frog’s back is turned to the insects, they can quickly walk across the pond. When the frog turns around, they must immediately freeze in place. If the frog sees them move, they get eaten.
7. Once you explain the rules of the game have the frog turn around and count out loud “One-Two-Three, bugs for me!” Then the frog turns to face the insects (which can then be eaten if they move).
8. Any insects that get eaten during the course of the game must sit down and wait for the next round of play.

## Activity Extensions/Modifications

None

### National Science Education Standards

This activity is aligned to the K-8 Life Science Content Standards.

- Population & Ecosystems
- Diversity & Adaptations
- Form & Function
- Regulation & Behavior
- Evolution & Equilibrium
- Populations, Resources & Environment
- Systems, Order & Organization

*Note: Activity materials adapted from and used with permission of Adopt-A-Pond Curriculum and Toronto Zoo.*