



Jump Like a Frog

Background: Just like humans, frogs have big, strong muscles in their thighs. For their size, however, these muscles are immense. This allows frogs to jump much farther relative to their small size than a human could. For example, the American bullfrog can jump a distance of 5 times its body length. For an adult man that is 6 feet tall, this would be equal to jumping 30 feet in a single jump.

- American Bullfrogs are 14 cm long and can jump up to 70 cm (>5 times body length)
- Leopard frogs are : 5.1–10.2 cm long and can jump 66.3–132.6 cm (13 times body length)
- South African Sharp-Nosed Frog are 6.5 cm long and can jump 286 cm (44 time body length)

Materials: Measuring tape

Instructions: Designate an area in your home or backyard as a frog habitat. Create a discussion around the reasons frogs need to jump so far. You can ask questions such as, “Why do you think frogs jump? Do you think jumping helps them survive? How? Do you think you can jump farther than a frog?” To find out, measure your height, then multiply that number times 5 to see how far you could jump if you were an American bullfrog. Lay out the measuring tape to that distance, and then see how far you are able to jump in comparison. When jumping, make sure you are jumping like a frog using a standing long jump - no running and jumping! Take turns so everyone can test their jumping abilities. Try doing some more math - how far could you jump if you were a leopard frog (height x 13 body lengths)? How far could you jump if you were a South African sharp-nosed frog (height x 44 body lengths)?