

# A STEM in the Park

## Take Home Activity

# STEM

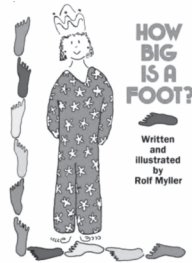
in the **PARK**™

Science, Technology, Engineering, and Mathematics

# STEM Reading at Home: "How Big is a Foot?"

### ***What You Need***

- String
- Yardstick or tape measure
- Ruler
- Scissors
- How Big is a Foot? book



### ***What To Do***

1. Find at the library or purchase the book, "How Big is A Foot", by Rolf Myller
2. Read the book aloud with your student.
3. After reading, remind your student that "The King took off his shoes and with his big feet walked carefully around the Queen". Explain that you and your child are going to figure out the length of three feet by using your feet.
4. Have your student hold the end of the string where the back of your heel touches the floor.
5. Place one foot right in front of the other for three steps, then freeze in place.
6. Have your child stretch the string so it reaches your big toe and then, you will cut the string.

***Continued on back***

## ***What To Do cont.***

7. Now do the same thing with another piece of string with your child's foot.
8. Using a yard stick or tape measure have students find where three feet is.
9. Ask them "Is this yard stick or tape measure saying the same thing our string is"?
10. Talk about how way back in history things really were measured by king's feet.
11. Explain how different cultures measured things in different ways such as with hands and arms. Sometimes people measured things in paces or steps.
12. Have your student measure one "foot" using their hands and feet and observe the difference between their foot, their hand and the ruler.
13. Discuss how anyone can make sure they are measuring things in a way that everyone understands.
14. Have your student draw a treasure map in your house or backyard. Have them tell you how many steps it will take to get to the treasure. Follow their directions to see if your steps match the number of steps your student estimated.
15. Ask your student what a better way to measure the distance to the treasure might be.

## ***The Science***

Both science and math education standards require students to develop an understanding of standard measurement. Weights and measures were some of the first tools that man invented. In the 18th century, England developed the first commonly used standard of measurement – the English or customary system that we use today in the United States. Ironically, England and most every other country in the world uses the metric system (developed in France) to measure and weigh things.

***This activity is brought to you by Partners in Education***

