

Autumn Rieger

“Bean Flick Math”

Wisconsin Model Academic Standards for Mathematics

D.4.4 Determine measurements directly by using standard tools to these suggested degrees of accuracy. Length to the nearest half-inch or nearest cm.

Objectives: Students will listen to the story Jack and the Beanstalk and then use their own “Magic Beans” to practice measuring the distance of a bean flick. Students will be able to measure distances to the nearest inch or foot. Students will be able to measure distances to the nearest inch or foot.

Materials:

- story: Jack and the Beanstalk
- dried beans (one per student)
- pencils
- rulers
- yardsticks or measuring tapes
- Student Recording Sheet

Amount of Time Needed: 45 minutes

Procedures:

Read Jack and the Beanstalk . After reading the story, tell students that in a few minutes they will each get a "magic" bean to practice their measurement skills.

Explain to students that they will be "flicking" a bean at their desks, recording estimates and actual measurements. (Students in pairs). Demonstrate how to "flick" a bean across the desk top in a controlled manner. Let students know that the beans *must* stay on their desk tops. Pass out the recording sheets and explain how they should be filled in. Students will estimate the distance that the bean traveled (inches) and record on their sheets. Then students will use a ruler to measure the actual distance and record on their sheets. Students can see how close their estimates were by finding the difference between the two measurements.

After students have completed 10 trials with the beans, the class may work somewhere in the classroom. This activity will give students an opportunity to estimate and measure longer distances. Students should make an observation, record an estimate, and then work together to measure the actual distance. The first group that gets from finish to start with the correct measurement wins.

Assessment: Collect students' recording sheets to determine if students have used appropriate units of measurement. Informally, teachers can ask students to move their bean about _____ inches (to see if students comprehend how long one inch is).

Bean Toss

Directions: Flick the bean carefully across the top of your desk. Estimate or guess how far it traveled. Take an actual measurement using a ruler or measuring tape.

Trial	Estimate	Actual	Difference
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			