

Magic Wand Measuring

Purpose

Students will use different body parts as units of measure to discover the need for a fixed unit of measure.

Materials

For the teacher: five $\frac{1}{2}$ " dowel rods of different lengths, tag board signs labeled 1-5, five tables or desks, overhead projector, overhead transparency of Black Line Master (BLM) *Measuring Reporting Sheet*
For each student: copy of BLM *Magic Wand Measuring*

Activity

A. Pre-Activity Preparation

Lay a dowel rod and a tag board sign on each of five tables or desks (be sure there is room for a group of students to gather around the rods).

B. Introduction

1. Divide students into five groups.
2. Tell students that they are going to figure out different ways to measure these "magic wands."
3. Tell each group that they are to decide what part of the body they could use to measure the wands.
4. Take suggestions such as "hand," "finger," "foot," "tip of finger to elbow," etc.

C. Student Activity

1. Distribute copies of the BLM *Magic Wand Measuring*.
2. Have each student label the top of the recording sheet with his/her group's name.
3. Tell the students that one person from each group will use his/her body part to measure the magic wands.
4. Have students measure each wand at least twice and then record the measure on the recording sheet (e.g., five lengths of Susie's foot).

(continued)



**connecting
across the
curriculum**

English/ Language Arts

Read *How Big Is A Foot?* by Rolf Myller. Discuss how the carpenters could make sure the Queen's bed was the right size.



**EXTENDING
THE
ACTIVITY**

Discuss with students what the standard units of measure are (inch and foot) and where they think they came from.

**Standards Links
1.5.1, 1.5.2**

Activity (continued)

5. Direct students to wait for your direction before rotating to the next table.
6. Have each group select a new group member to measure the wand at the next table.
7. Repeat until each group has been to all of the tables.


D. Discussion


1. After groups have finished measuring, gather in front of the overhead projector to record results.
2. On the overhead transparency of the *BLM Measuring Reporting Sheet*, record each group's results.
3. Discuss why the results are different.
4. Tell the class that since the wands were measured with different body parts, the results were different.
5. Emphasize that the same (standard) unit of measure is necessary for measurements to be the same.

Questions for Review

Basic Concepts and Processes

During and after the activity, discuss the following questions with your students to gauge their understanding of the Standard Indicator:

 Why is your measurement for the wand different from the other group's measurement?

 How did you measure the wand?

 Why do we need a standard unit of measurement?

Group Name: _____

Magic Wand Measuring

MEASURING WITH BODY PARTS

Table Number	Measurement

Magic Wand Measuring

Teacher Directions

Provide each student group with a copy of the BLM *Magic Wand Measuring*. Have each group record its result for each wand. Review the findings as a class.

Answer Key

Students' answers will vary depending on the body part selected to measure each wand.

Measuring Reporting Sheet

MEASURING WITH BODY PARTS

Group	Wand 1	Wand 2	Wand 3	Wand 4	Wand 5

Measuring Reporting Sheet

Teacher Directions

Make an overhead transparency of this sheet for recording student results.

Answer Key

Not applicable.