

TIMOTHY GOES TO SCHOOL by Rosemary Wells

Students in Timothy's class began to measure on the second day of school. We want to have our students continually measure using the metric system. We should not be concerned about conversion from the English to the Metric System during the elementary grades.

We also want to encourage them to learn to estimate first and then actually measure to see how close they come to being correct. They won't be able to estimate, however, until they have done some real measuring. Let them start the way Timothy and his classmates did by measuring familiar objects in their classroom. When you feel they are ready, have them bring in their favorite stuffed animal!

MATERIALS: metric rule or tape, classroom objects, stuffed animal

ACTIVITY: see attached sheet and adjust it for your age level student

SOURCE: "Metrics, Me?" Workshop given by Julie Yulo-Medeiros, CSEAC Convention 1991.

STANDARDS:

BSL: 1.3, 1.6, 1.8, 2.1, 2.2, 3.1, 3.3, 6.3, 9.7, 12.2, 12.4
NCTM: 1a, 1d, 4d, 10a, 10b, 10c
SCS: A1, H2

WEBSITES:

Measurement Resources: Elementary School Lessons & Materials for Teachers The lessons and materials available here come from a variety of sites and organizations. Some include offers for video or software, and some are lesson plans. Where the originals are Claris or Acrobat (PDF) documents, we have for the most part converted them to HTML, leaving a link back to the parent page from which you can download the formatted version.

http://mathforum.org/paths/measurement/e.measlessons.html

Discovery Channel Education Website: There are three lesson plan groupings - K-5, 6-8, and 9-12. All students will identify with their favorite stuffed animal, and this site will offer ideas for all age groups.

http://school.discovery.com/lessonplans/programs/metricworld/

Wells, Rosemary. <u>Timothy Goes to School</u>. Dial Books for Young Readers, 1981. ISBN#0-8037-0021-0.

I'M STUFFED!

NAME

DATE

DIRECTIONS: Estimate and then measure to the nearest centimeter/millimeter.

Height	Estimate	Measure	Difference
Waist			
Neck			
Head			
Arm			×
Leg			
Mass in grams			·

QUESTIONS:

1. What was your closest estimation?

2. Put your groups stuffed animals in order from largest head circumference to smallest. Record results.

3. Make a table recording the mass (weight) of each stuffed animal in your group. Then make a graph showing the different masses from the lightest to the heaviest on graph paper. Be sure to label your graph.

4. Write a descriptive paragraph about your stuffed animal so that someone could pick it out of a pile. Don't tell what kind of animal it is. Use words to tell about measurements, color, texture, personality.

JYM/91

Some Metric Equivalents

1 liter of water weighs 1 kilogram, so 1 cubic meter — 1000 liters — of water weighs 1000 kilograms or 1 metric ton.



A US cent weighs exactly 2.5 g, while the nickel weighs exactly 5 g.



A doorknob is typically



about 1 m high.

The diameter of a CD or DVD is 12 cm.