

Measurement Mania

Summary

Students will get many opportunities to practice their measurement skills.

Main Core Tie

Mathematics Grade 2

[Strand: MEASUREMENT AND DATA \(2.MD\) Standard 2.MD.1](#)

Additional Core Ties

Mathematics Grade 2

[Strand: MEASUREMENT AND DATA \(2.MD\) Standard 2.MD.3](#)

Materials

- [Measurement Mania Recording Sheets](#) (pdf)
Manipulatives to match questions on recording sheet
Writing utensil
Objects to be measured. See [Possible Objects to Measure chart](#) (pdf)

Additional Resources

Books

- *Corduroy*
, by Dan Freeman; ISBN 0670241334
- *Measuring Penny*
, by Loreen Leedy; ISBN 0-8050-5360-3
- *A Pig Is Big*
, by Douglas Florian; ISBN 0-688-17126-5
- *The Grouchy Ladybug*
, by Eric Carle; ISBN 0064434508
- *Super Saturday Sand Castle*
, by Stuart Murphy; ISBN 0-06-446720-1
- *Room For Ripley*
, by Stuart Murphy; ISBN 0-06-027620-7
- *Racing Around*
, by Stuart Murphy; ISBN 0-06-028913-9
- *How Tall, How Short, How Faraway*
, by David A. Adler; ISBN 0823416321

Background for Teachers

Measurement allows us to quantify objects, enabling us to compare them. We can determine the height, length, weight, depth, area, temperature, volume, perimeter, area, or capacity of an object. We can predict these things and then check our estimates. Measurement can be done using standard or nonstandard units.

We use measurements almost daily--either estimates or actual measurements.

Intended Learning Outcomes

1. Demonstrate a positive learning attitude.
5. Understand basic concepts and skills.

6. Communicate clearly in oral, artistic, written, and nonverbal form.

Instructional Procedures

Invitation to Learn

Read a book about the object you are going to measure. For example, read a nonfiction book on apples when you are measuring apples.

Read a fiction book on the topic. For example, read *Corduroy* on the day you are measuring teddy bears.

Read a story with measurement as its theme such as *Measuring Penny* by Loreen Leedy.

Instructional Procedures

Before the lesson, prepare the *Measurement Mania Recording Sheet*. Choose questions and measuring techniques that 'fit' with the object. For example don't choose a weight question for a paper teddy bear, or a capacity question for an apple. Choose nine questions that will require your students to use techniques you want them to practice. Remember that students need multiple exposures to these techniques to become proficient.

Set up the classroom or center with the manipulatives your students will need.

Do a quick review of what is required for each question. You can have students estimate all nine answers first and then check them, or estimate and check each question one at a time. Having students use colored pencil or crayon can help with those students who want to change their estimates after they know the answer.

Strategies for Diverse Learners

For Learners with Special Needs

Have students skip the estimations until they have had plenty of practice with measuring.

Have students work with a partner who can review the directions.

Visit students at each station to review procedures.

Eliminate a couple of questions for students who take more time.

Use the student's object for the example at the beginning. Let that student make their estimations as you go.

Make a separate recording sheet for that student. Make most of the questions a review. Let them practice things they have had exposure to. Then add one or two questions that will introduce them to new ways of measuring.

Extensions

Integration

Bring in objects to measure that you are studying in other curriculum areas (e.g., measure rocks, plants, students, etc.). The setup of the recording sheet lends itself to many different objects. Pick almost any subject to integrate with this measurement activity.

Writing Connections

Have students write about and describe their objects. This is a great time to talk about adjectives. For example, certain measurement objects lend themselves to creative writing. Students can write a story about the monster or teddy bear they create.

Family Connections

Have students 'teach' their family how to measure with nonstandard units.

Have students order and compare some of their toys (like stuffed animals). Have them chart or graph the information. Tell them the comparison you want them to make (e.g., size, height, weight, length, etc.).

Make a recording sheet for homework. Have students answer all questions about a specific object like the Kool-Aid® pitcher, Dad's shoe, the kitchen table, or the sink. This is a great place

to include capacity using water. Students get to practice with parent supervision and you don't have 25 wet students or wet carpet in the classroom.
Have students find and list ten things from home that are about the same length. Remind them to make a guess first, then check.

Assessment Plan

Keep recording sheets throughout the year. Check to see if the student's measurement estimates are improving.

Compare answers of students when they are measuring very similar items. Watch students who get very different answers the next time they measure. Review concepts and give them practice. Observe, observe, observe. Measuring is hands on; watch how your students handle the tasks on the recording sheet.

Have students journal about measurement.

What is measurement?

Why do we have standard measurements?

How do you choose what to measure with?

Authors

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