Non Standard Unit of Measurements Lesson Plans EED 605

By Kim Andrews

Introduction

"Today, we're going to learn how to measure objects, but instead of using rulers, we'll use things like blocks and paper clips! How fun is that?"

When we measure, we want to know how long or tall something is. Instead of a ruler, let's use cubes! Let's see how long this pencil is using cubes.



Instructional Video





Here are two videos that will help you learn how use non standard of measurements.

Objectives:

Students will be able to identify and describe measurable attributes (length, weight, height) of a single object using vocabulary such as long/short, heavy/light, or tall/short.

MA19.K.16 Identify and describe measurable attributes (length, weight, height) of a single object using vocabulary such as *long/short*, *heavy/light*, or *tall/short*.

Key points

- Attributes: Understanding that objects can be measured in terms of length, weight, and height.
- Vocabulary: Learning terms such as long/short, heavy/light, and tall/short.
- Real-World Application: Identifying objects in their environment that correspond to these attributes.
- Comparison: Learning to compare two or more objects based on their measurable attributes.

Guided Practice

- Divide students into small groups and provide them with various objects (e.g., a book, a pencil, a toy).
- Direct each group to measure the length, weight, and height of their objects using classroom tools (ruler, balance scale, measuring tape).
- Students will work collaboratively, taking turns measuring and recording their findings.
- Pose scaffolded questions:
 - Which object is the longest?"
 - "Can you find something heavier than this book?"
- Monitor student performance by circulating the room, providing support and feedback.

Independent Practice

- Students will complete a in their math journal where they will measure their foot and write how many cubes long it is
- Choose three objects from the classroom/home.
- Measure and record the length, weight, and height.
- Write a sentence for each object using the vocabulary words learned (e.g., "The pencil is short," "The book is heavy").
- Students will play that game in the link provide <u>Measurement</u>
 <u>Game</u>

Early Finisher

- Provide materials for students who finish early to create a "Measurement Book" where they can illustrate and write about different objects they measure at home or in the classroom.
- Students will be able to go to <u>PBS KIDS- Math</u>
- Students will be able to go to <u>ABCYA</u>

Closing Statement

- Gather students for a quick discussion. Ask:
- "What did you learn about measuring today?"
- "Can you tell me one new word you learned?"

Assessments

Students will participate in a digital formative assessment using a Google Form where they will engage in a series of questions related to measuring objects around the classroom. They will be asked to categorize objects based on their attributes (length, weight, height) and provide examples using the vocabulary discussed in the lesson.

<u>Kahoot</u> <u>Google Forms- Non Standard unit of Measurements</u>

Narrative

Google Forms and Kahoot helped me make teaching decisions. This data showed that 13 of 17 students passed the google form assessment. Two students scored 80% and two 40%. For example, 88% of the class understood non-standard measurement but struggled to apply it to other items.

measurement but struggled to apply it to other items. This data helped me prioritize hands-on and differentiated education. To reinforce the topic for struggling kids, I added more manipulative and visual exercise.

Enrichment activities comparing non-standard measurements to standard units were given to students who understood the idea better. I used Google Forms and Kahoot to create a formative assessment of students' comprehension of non-standard units of measurement. Students measured objects using virtual non-standard units like photos and cubes in interactive exercises. This structure gave students and me immediate feedback on their progress.

To ensure students can measure and compare objects using non-standard units, the formative evaluation is used. Students will have achieved the goal when they accomplish digital tasks without prompting or support. Formative assessment data will determine my next steps—whether to rehash ideas for some students or introduce more advanced activities for others.

