

1st Grade Math: Find Length in Units

In this lesson, we will learn how to **find the length of objects using units of measurement**. We will focus on using standard units (like centimeters and inches) and non-standard units (like paper clips or blocks) to measure lengths.

Objectives

- Understand what units of measurement are.
- Use different units to find the length of various objects.
- Practice measuring and recording lengths accurately.

Key Concepts

1. Units of Measurement:

- a. **Standard Units:** These are universally accepted units used for measuring length. Examples include centimeters (cm), inches (in), and meters (m).
- b. **Non-Standard Units:** These are everyday objects we can use to measure length, such as paper clips, blocks, or even our own hands and feet.

2. Measuring Length:

- a. To find the length of an object, you will place your chosen unit of measurement next to it and count how many units it takes to cover the object completely.

Steps to Find Length in Units

Using Standard Units:

1. **Choose Your Measuring Tool:** Select a ruler or measuring tape marked with centimeters or inches.
2. **Align the Tool:** Place the end of the ruler at the starting edge of the object you are measuring.
3. **Read the Measurement:** Look at where the other end of the object lines up on the ruler. This number is the length of the object in your chosen unit (e.g., "The pencil is 10 cm long").

Using Non-Standard Units:

1. **Choose Your Non-Standard Unit:** Decide what object you will use (e.g., paper clips, blocks).

2. **Line Up the Units:** Place your non-standard units end to end along the length of the object.
3. **Count the Units:** Count how many units it takes to cover the length of the object completely.
4. **Record Your Measurement:** Write down the length of the object using the unit you chose (e.g., "The book is 7 paper clips long").

Example Activities

Activity 1: Measuring with a Ruler

- **Materials:** Ruler, pencil, and notebook.
- **Task:**
 - Measure the length of a pencil using centimeters.
 - Write down the length you find.

Activity 2: Measuring with Non-Standard Units

- **Materials:** Paper clips or blocks.
- **Task:**
 - Choose an object in the classroom (like a desk or a book).
 - Use paper clips to measure the length of the object.
 - Count and record how many paper clips long the object is.

Activity 3: Measuring Your Hand

- **Materials:** A piece of string or a piece of paper.
- **Task:**
 - Measure your hand using your own hand as the unit.
 - Count how many "hands" long your hand is.

Vocabulary

- **Length:** The measurement of something from end to end.
- **Unit:** A standard quantity used for measurement (like cm, in, paper clips, etc.).
- **Measure:** To determine the size, length, or amount of something.

Conclusion

Finding length in units helps us understand how to measure objects accurately. Whether using standard tools like rulers or everyday items like paper clips, measuring is a valuable skill. Encourage students to explore their surroundings and measure various objects using different units!