STEM 101
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Name: _____
Period: _____

UNIT: MEASUREMENT

# MEASURE & SORT!

## GOAL:

You will measure and compare the lengths of everyday classroom items. Then, you'll sort and analyze the data to look for patterns and relationships between objects.

## MATERIALS:

- ✓ Ruler (with **centimeters** and **inches**)
- ✓ (Optional) Digital or plastic **caliper** for precise measuring
- ✓ Small objects: pencil, eraser, spoon, stick, crayon, cube
- ✓ Measurement Recording Chart

## STUDENT DIRECTIONS:

**Step 1: Measure Your Objects**

1. Pick one object at a time.
2. Use your **ruler** (or caliper) to measure:
    - **Length** (the longest side)
    - **Width** (the shorter side, if needed)
3. Record both measurements in **centimeters (cm)** and **inches (in)** in your chart.
    - Measure to the **nearest tenth** (e.g., 5.2 cm or 2.1 in)
    - Ask your teacher for help if you're unsure how to read the ruler!

**Step 2: Complete the Measurement Chart**

Use a chart like this to keep your data organized:

| Object | Length (cm) | Length (in) | Width (cm) | Width (in) |
|---|---|---|---|---|
| Pencil | | | | |
| Eraser | | | | |
| Spoon | | | | |
| Stick | | | | |
| Crayon | | | | |
| Cube | | | | |

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**Step 3: Sort the Objects**

1. Now look at your chart.
2. Use your **length (cm)** column to **rank** your objects:
    - Line them up **from shortest to longest**.
3. If two items are the same length, place them side by side.

**Analyze & Record:**

Answer the following questions:

- Which object is the longest? _____
- Which is the shortest? _____
- Did any two objects have the same length? ☐ Yes ☐ No

  If yes, which ones? _____
- What surprised you about your measurements or sorting?

  _____

  _____

**STANDARDS ALIGNMENT**

**NGSS:** 2-PS1-1 **STEL:** STEL 3A, STEL 4A, STEL 8A, STEL 11A **CCSS:** CCSS.MATH.CONTENT.2.MD.A.1, CCSS.MATH.CONTENT.2.MD.A.2, CCSS.MATH.CONTENT.2.MD.D.10, CCSS.MATH.PRACTICE.MP5, CCSS.MATH.PRACTICE.MP6