CONTENT:

DEVELOPING MEASUREMENT CONCEPTS

1. **EXPLORING CENTIMETERS, METERS, AND KILOMETERS**

Measurement tasks are much easier when you have something to use as a reference for units and subunits.
Find an object that is one centimeter in length (check the width of your pinkie finger). Now use this measure to find three additional objects that each measure approximately one centimeter.

MEASUREMENT (APPROXIMATE)	OBJECT
ONE CENTIMETER (REFERENCE)	Width of pinky finger
ONE CENTIMETER	Width of a slice of bread
ONE CENTIMETER	Marble ball
ONE CENTIMETER	Distance of outlet holes

Determine the length of your hand span in centimeters and use your hand span to approximate different measures such as the width of a desk or the height of a table. Check your estimates using a tape measure. You should practice until you feel confident that you can estimate short lengths in centimeters.

MEASUREMENT (CENTIMETERS)	OBJECT
20cm	HANDSPAN
90	WIDTH OF A DESK
74	HEIGHT OF A TABLE

Find a common object or body measurement that is about one meter long. (The height of a doorknob from the floor and measurements such as your waist, arm length, and distance from hip to floor are possibilities.) Use your referent measure to help identify three other objects that are each one meter long. Check by

measuring the objects. What is the ceiling height in meters in the room in which you are sitting? 2 meters and 75 cm

Determine the length of your normal walking pace in meters. Pace out the dimensions of a large room. How long is the room? 8 meters and 35 cm How wide? 4 meters and 80 cm

Use the length of your pace to determine a 100-meter distance (one tenth of a kilometer).1 minute and 25 sec Use this distance to estimate the length of 1 kilometer. If possible, walk that far. How long did it take you to walk 1 kilometer? 12 minutes