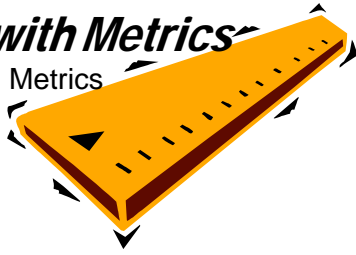


Growing with Metrics

Introduction to Metrics



Name: _____

Date: _____

Per: _____

Objectives:

- To Learn how to use a metric ruler
- To record measurements in cm.
- To track growth over the course of one school year
- To determine if there is a pattern or relationship between different body Parts

Materials:

- Metric tape measure
- Metric rulers
- Meter sticks
- String

Procedure:

You and your partner will measure various parts of your body using the metric system. Read these directions carefully so you know how to measure the following:

1. **Height**- Stand straight against the wall and have your partner place a ruler flat against the top of your head. Record your measurement in **cm**.
2. **Head circumference**- Keeping your head straight and eyes looking ahead, have your partner take the tape measure and measure above your eyebrows, continue above the tips of your ears and all the way around your head. Record in **cm**.
3. **Wrist circumference**- Lay your arm on the table and have your partner wrap the measuring tape around your wrist. Record in **cm**.
4. **Arm Span**- With your arms out stretched, have your partner take a piece of string and measure from the tip of your middle finger, across your back and to the tip of your middle finger on your other hand. Measure the string with your meter stick and record in **cm**.
5. **Foot Length**- Take your shoe off your right foot and measure from the back of your heel to the tip of your big toe. Record in **cm**.
6. **Hand span**- Place your RIGHT hand on the table, palms down. Stretch out your fingers as far apart as you can. Pick up your hand and have your partner slide a piece of string underneath with your pinky at one end and your thumb at the other. Record the length of the string in **cm**.
7. **Elbow to wrist**- Lay your forearm on the table, palms up, with your upper arm at a 90-degree angle. Measure from the crease on the inside of your elbow to the crease where your hand bends up at the wrist. Record in **cm**.

Data Table: Measurements of body parts in centimeters.

Body Parts	September cm	June cm	Difference cm
Height			
Head Circumference			
Wrist Circumference			
Arm Span			
Foot Length			
Hand Span			
Elbow to Wrist			

Analysis (September)

1. Looking at your data, what part and measurement was the longest?
_____ with _____ cm. Shortest? _____ with _____ cm

2. Are there any sets of number that are similar in length? Explain and provide examples.

3. Take your shoe off and place your foot on top of your forearm between your elbow and your wrist. Explain what happens?

4. Find someone who has the most measurements in common with you!

Analysis (June)

5. 1. Looking at your data, what part and measurement was the longest?
_____ with _____ cm. Shortest? _____ with _____ cm

6. Looking at your data, what part grew the most since Sept.? _____ with _____ cm. Were there any body parts that did change? Give examples:

Conclusion:

1. In this lab I learned
