

Your body as a linear scale for plant species identification and description

In identification keys and species descriptions around the world, measurements are usually in the metric system, the universal system for scientific measurements. US students often do not have enough practice to easily remember the length of a mm, cm, or m due to the common use of the imperial system (inches, feet, yards, etc.).

This exercise and worksheet will help you develop a personal scale using your body height and hand measurements to help you quickly estimate, describe, and measure parts of plants without having a metric ruler or measuring tape with you.

Remember:

$$1 \text{ m} = 100 \text{ cm} = 1000 \text{ mm}$$

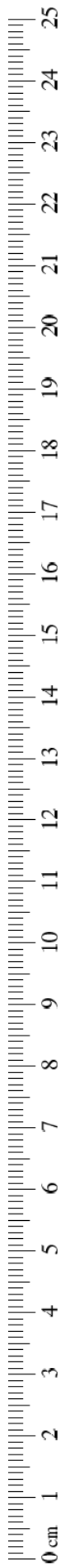
$$1 \text{ mm} = 0.1 \text{ cm} = 0.001 \text{ m}$$

$$1 \text{ inch (US, 1")} = 2.54 \text{ cm} = 25.4 \text{ mm} = 0.0254 \text{ m}$$

$$1 \text{ foot (US, 1')} = 12 \text{ inches} = 304.8 \text{ mm} = 30.4 \text{ cm} = 0.3048 \text{ m}$$

$$1 \text{ yard (US)} = 3 \text{ feet} = 914.4 \text{ mm} = 91.44 \text{ cm} = 0.9144 \text{ m}$$

Make sure to print/copy this page at 100% or the ruler will be inaccurate.



Your body as a linear scale: Worksheet

(hand this in to the teacher for grading)

Name: _____

Body:

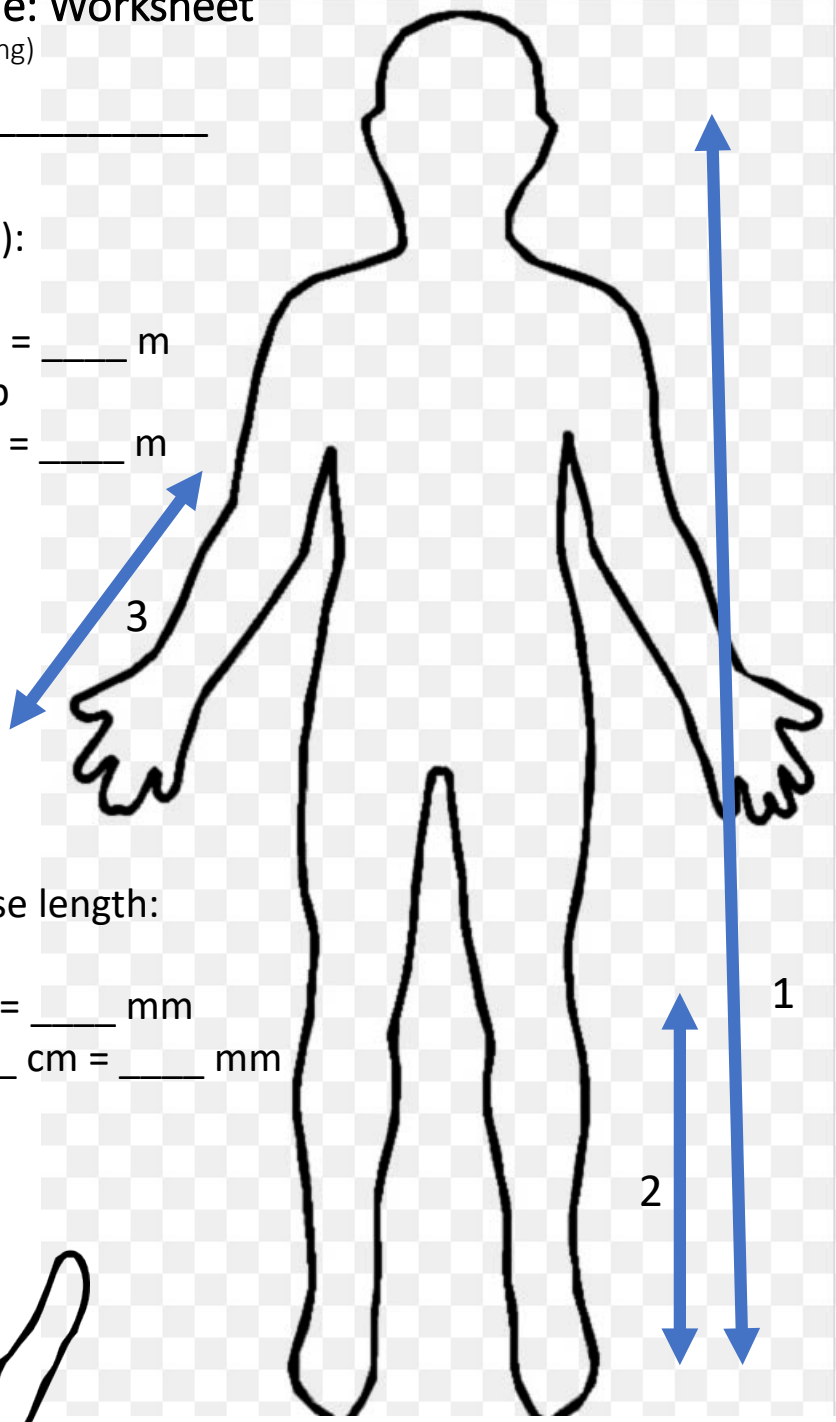
1. Ground to eyes (eye level):

_____ cm = _____ m

2. Ground to knee: _____ cm = _____ m

3. Elbow to middle finger tip

(bend your arm): _____ cm = _____ m



Hand:

4. Thumb length:

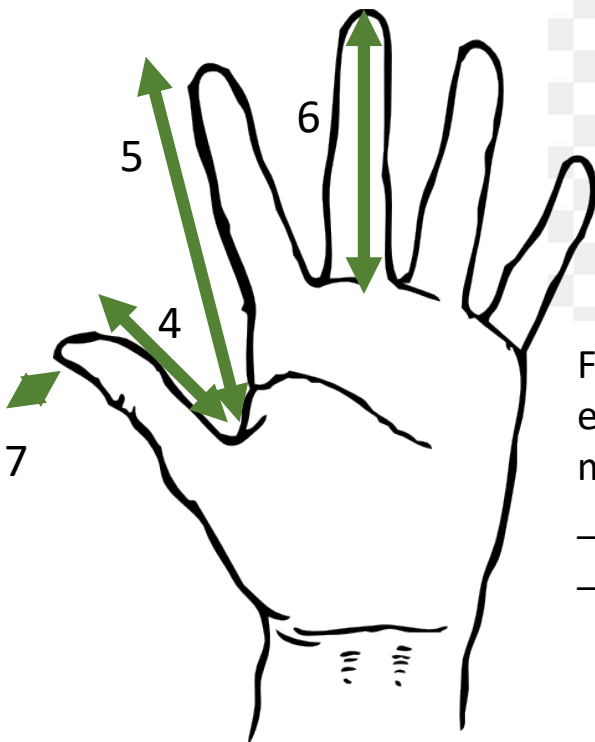
_____ cm = _____ mm

5. Index finger to thumb base length:

_____ cm/ _____ mm

6. Thumb length: _____ cm = _____ mm

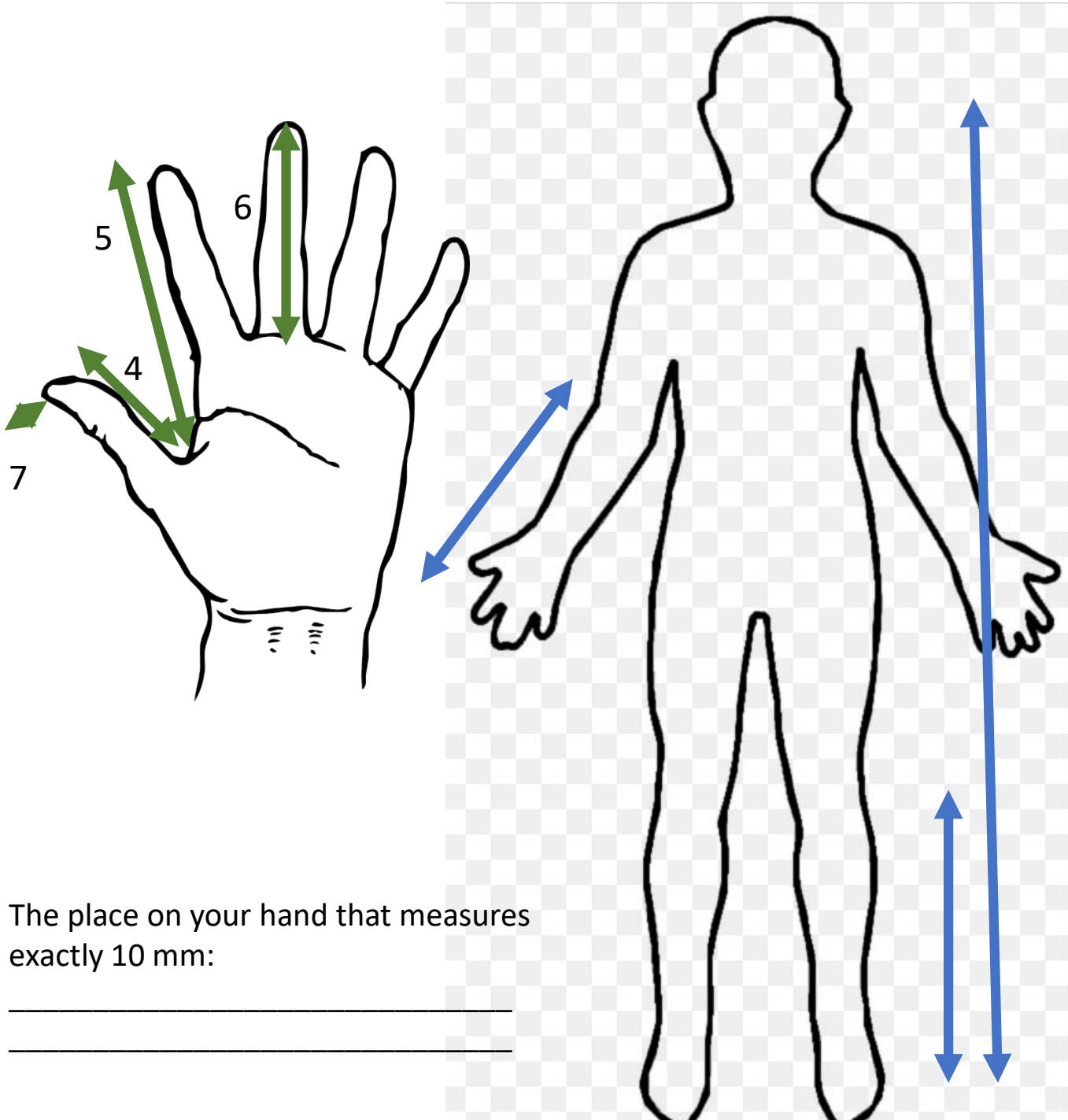
7. Width of thumb nail: _____ cm = _____ mm



Find a place on your hand that measures exactly 10 mm (describe place here and mark on hand figure):

Your body as a linear scale — Your own reminder sheet to keep:

Fill in the numbers next to the arrows with thick pen, photograph this page and keep the image on your phone and/or computer as a reference sheet.



The place on your hand that measures exactly 10 mm:
