

Adopt A Tree - Week 3



Measuring Height Part 1:

Using your meter stick, find the following heights:

- Height of granite pillar (b) _____ cm
- Shadow length of concrete pillar (c) _____ cm
- Shadow length of tree (a) _____ cm

Proportion: Plug the numbers above into the following formula:

Height of tree = [(shadow of tree) x (height of pillar)] ÷ shadow of pillar
or height of tree = (axb) ÷ c

Height of tree = (_____) x (_____) ÷ _____

Height of tree = _____ cm

Name: _____

Date: _____

Weather: _____

Time: _____

Location of Tree:

Measuring Height Part 2:

1. Stand at the base of the tree, and hold a ruler straight out in front of you in a vertical position.
2. With your partner guiding you, close one eye and walk backwards away from the tree.
3. Stop when the ruler and the tree appear to be the same size.
4. Using your meter stick, have your partner measure the distance between the tree and the ruler.
5. **Approximate height of the tree = _____ cm**
6. Switch places with your partner and measure again.
7. **Approximate height of the tree = _____ cm**

Sketch of Twigs and Buds with Description

Compare the heights that you calculated. Were they similar? Different? Explain.