



GLOBE
Observer

Choose your protocol:



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GLOBE Trees



Observations:

0

Badges Earned:



Trees
Observer

New Trees Observation

Review / Send My Trees
Observations

My Map





Before using the Trees app, we ask that you take a few minutes to learn how to measure and catalog trees.



Next





Things to consider when selecting a tree



The tree should be **over 5 meters (15 feet) tall**.

When possible, take measurements of **isolated** trees.

If trees are in a grouping, take measurements of the **tallest tree** in that group.

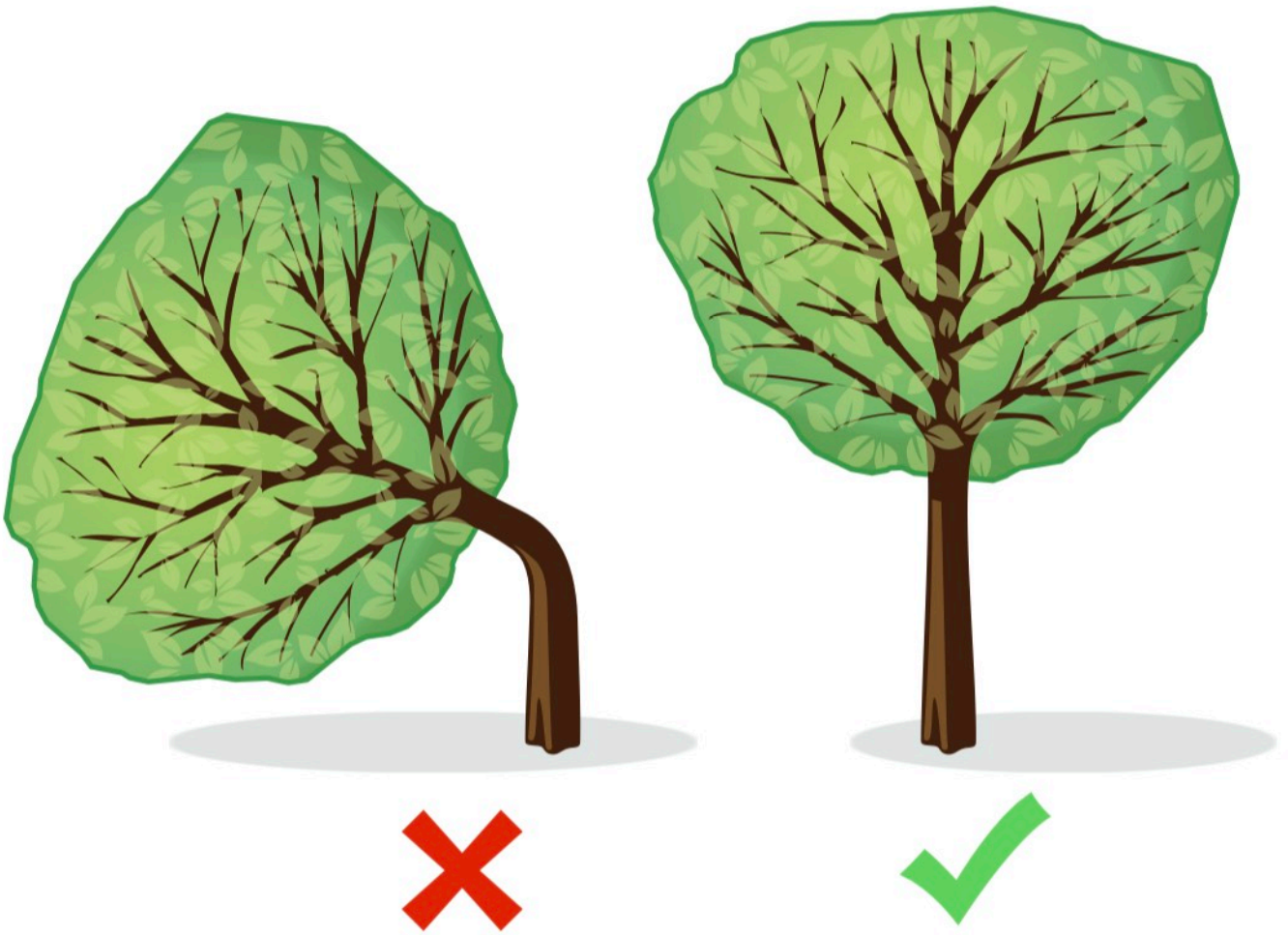
Next



Selecting a Tree

When selecting a tree, try to find one that is straight, and that you will be able to clearly and safely see the top.

You can use the comments box at the end of your observation to tell us more about the tree or site if desired.



Next

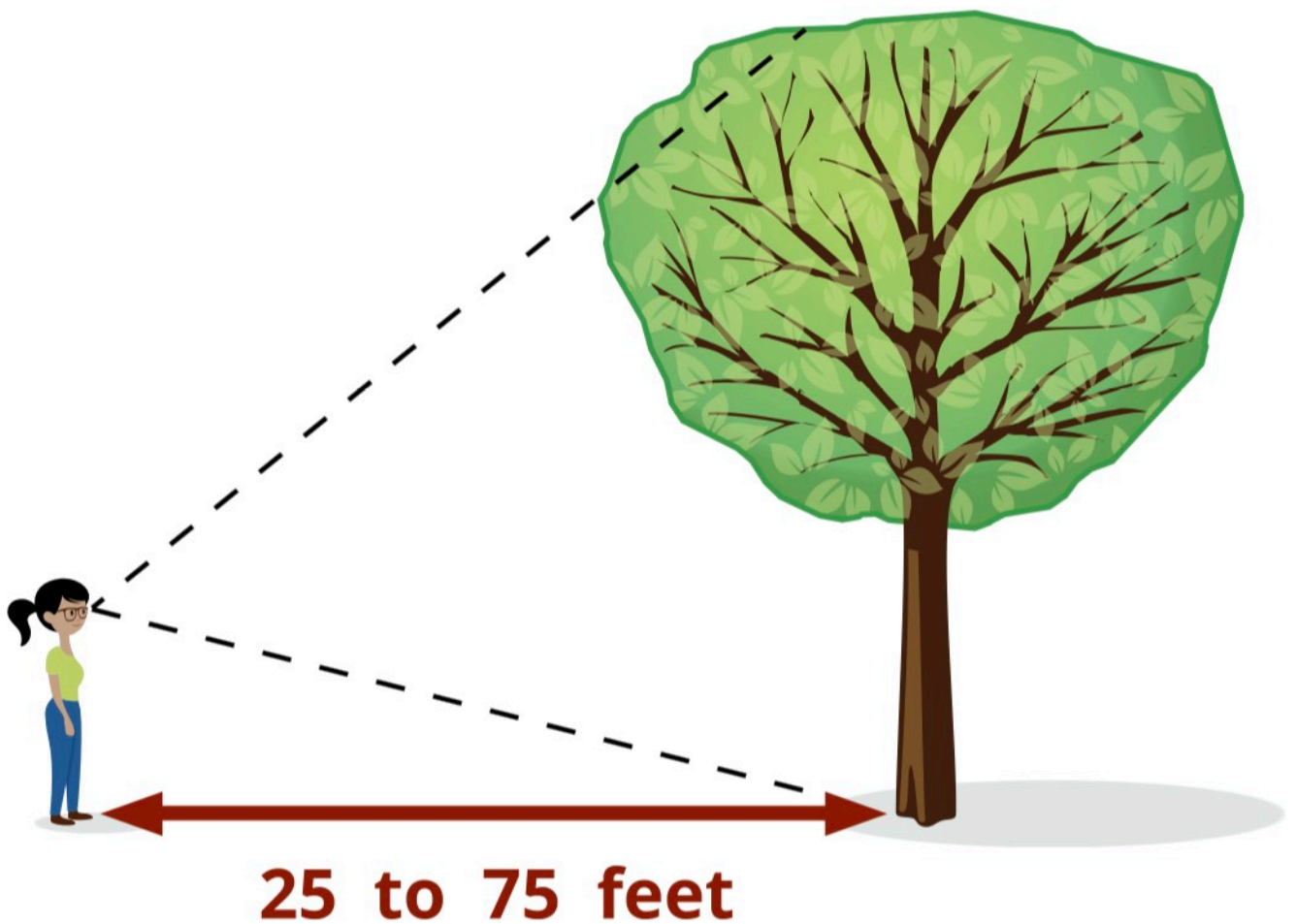




Finding the best viewing distance

You will need to find a location where **you can clearly see the base and top of the tree** – and can walk in a straight line to the base.

We recommend a distance of **7 to 25 meters (25 to 75 feet)**.



Next





Measuring Angles



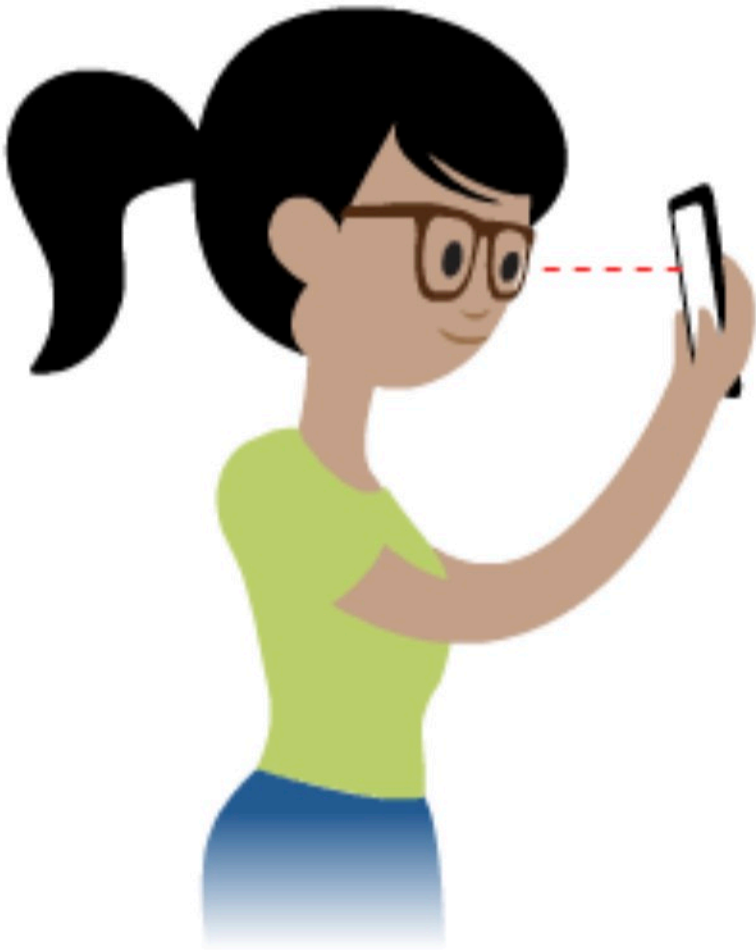
Holding the phone at eye level, you will measure the angle to the base of the tree.

Next





Photograph



You will then be prompted to photograph your tree.

Touch anywhere to capture your image.

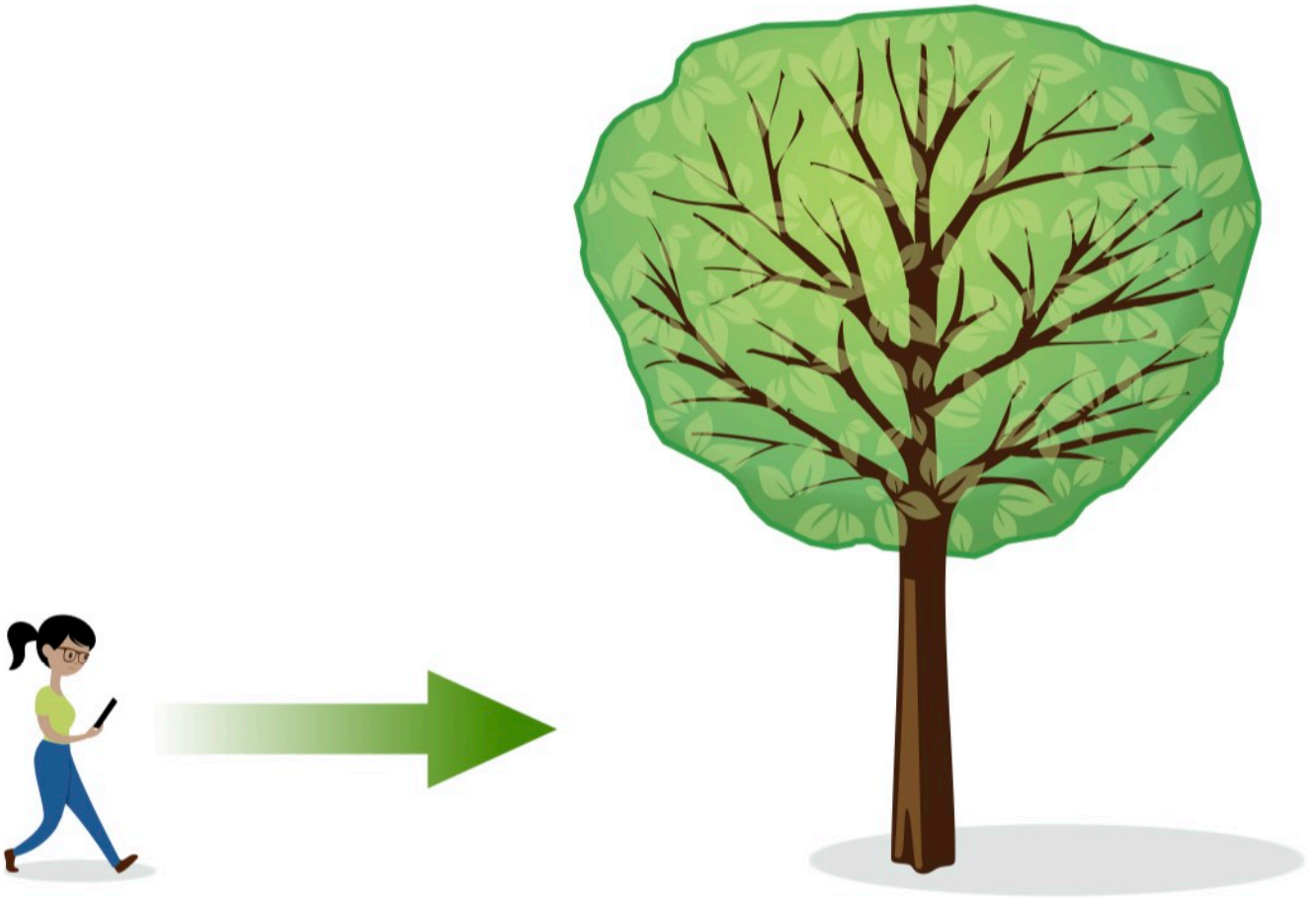
Next





Walk to the Tree -- Counting Steps

Using a natural stride, walk to the base of the tree, counting your steps.



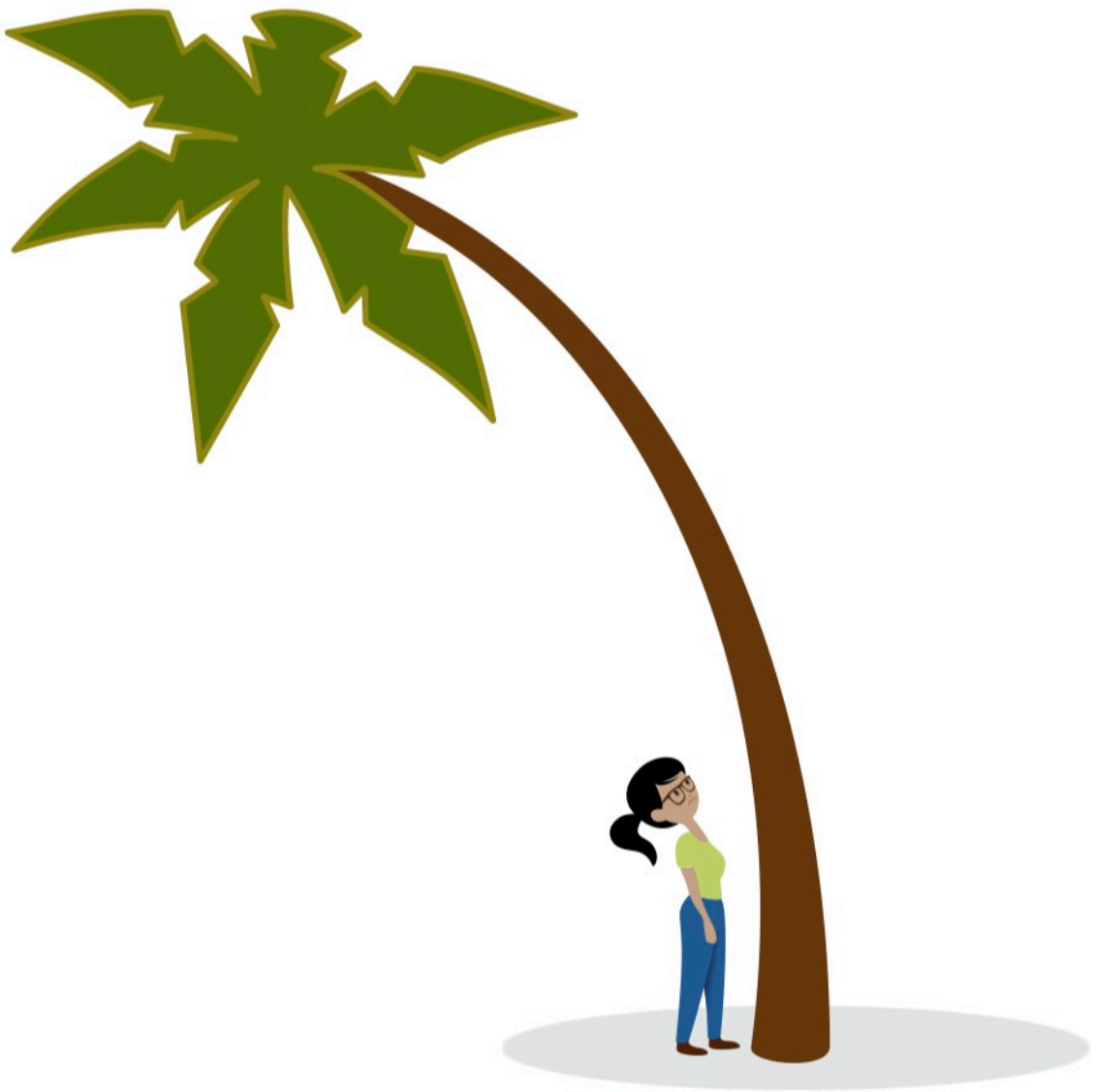
The app will prompt you to enter that number. (It's okay to input fractional numbers like 10.5 steps)

Next



Check your Location

Look up to be sure you are standing under the highest point of the tree. If the tallest point you measured is not at the base, you may need to select a different tree.



Next



Measure your location

While standing next to the tree, the app will prompt you to take a location measurement.

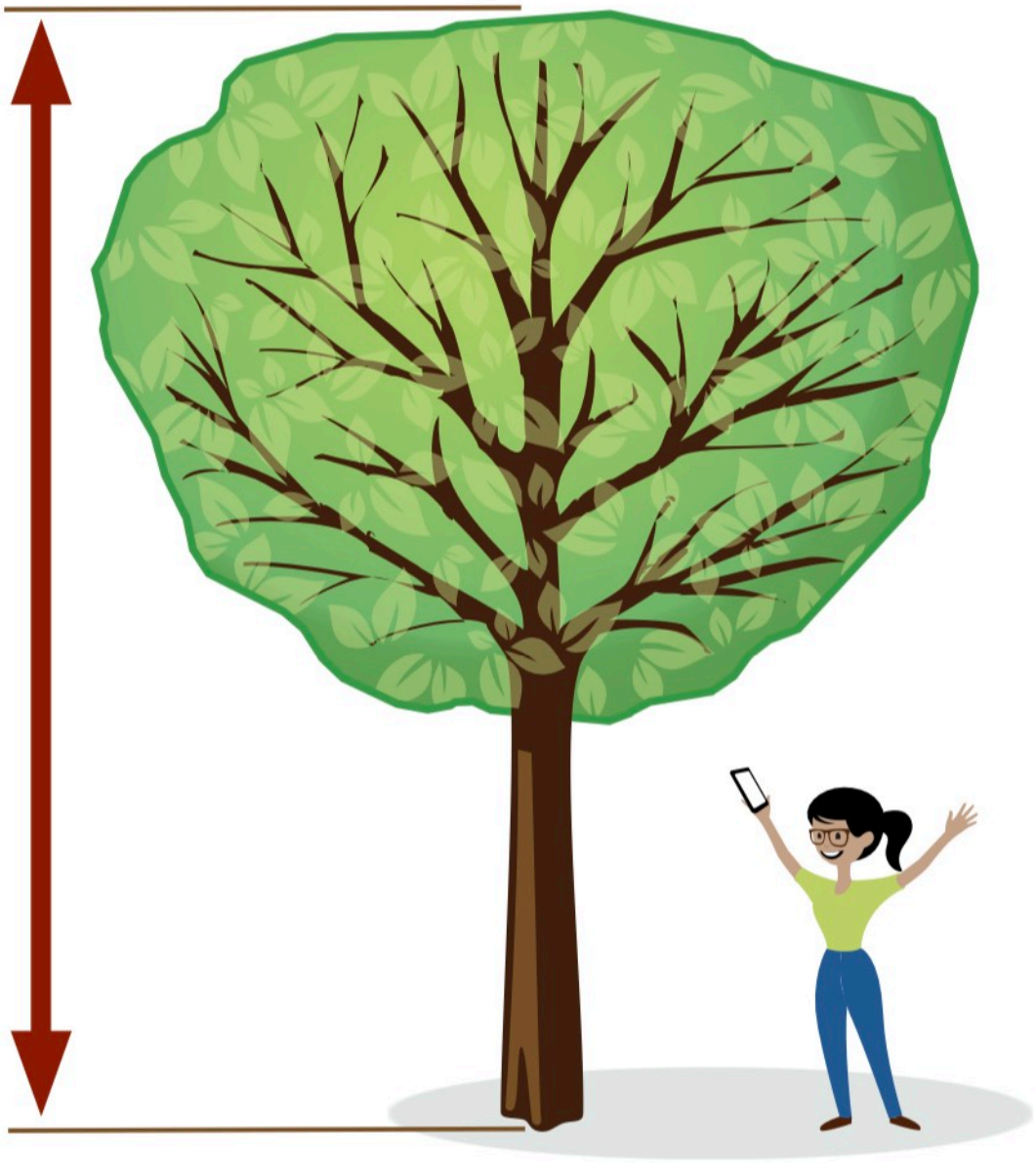


Next



Success!

Combining all of these measurements, we can estimate the tree's height.



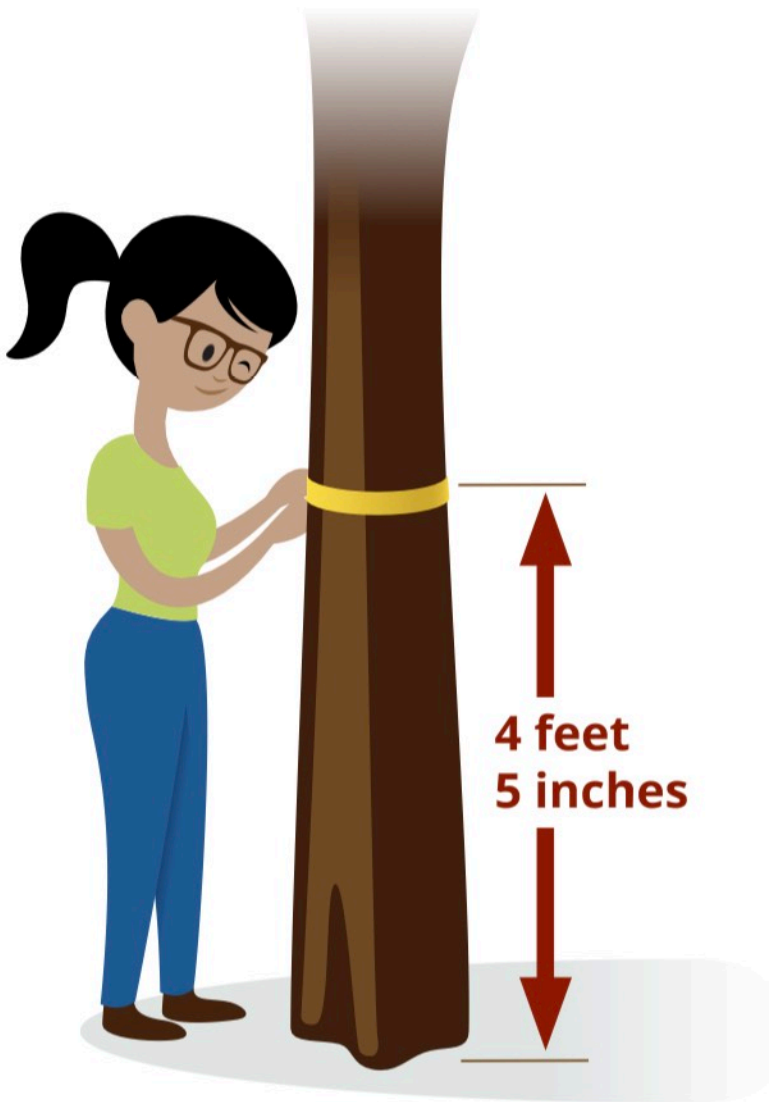
Next



Measure your tree's circumference (optional)

Wrap a tape measure around the tree about 4 feet 5 inches from the base (about chest height).

Measure the circumference (the distance around) the tree's trunk. Then enter the measurement into the app.



Next





In your last step, we will show you a summary of your observation, allow you to make adjustments if needed, and add comments. Once you are satisfied, select “finish,” and the observation will be saved to your phone.

On the final screen, click “send observations now” to do a final review and submit the data to GLOBE. You can also see a map showing all of your tree observations.

Your observation is complete



Next





The tree height measured with this app is calculated using the basic geometry of triangles. The angles measured and the length of your steps all contribute to errors which can impact accuracy. Careful observations should lead to results that are accurate to about 10% or better. Don't be surprised if the tree height is not the same over multiple measurements.

[Learn more about the calculations used with this tool.](#)

Improving Accuracy

We also give you an option to improve the accuracy of the calculations after each measurement by modifying the data entered. For example, instead of counting steps, you could use a tape measure to get an exact distance to the tree or to record your phone's height. You could also double check your stride length (the distance from the back of your heel to the tip of your toe while you walk). You could hold your phone on a tripod to very accurately measure angles.

Next





Congratulations!
You've earned your Tree Observer Badge.



That's all you need to know for measuring Tree Height! Thank you for taking the time to learn - now start measuring trees!

If you'd like to learn more, visit the [GLOBE Observer website](#).

If you still have any questions, [contact us](#).

Next

