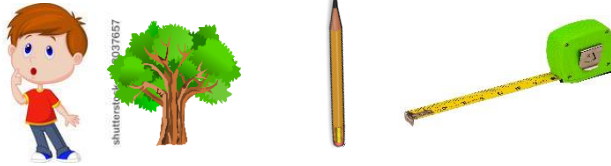


Hello Trees Resource Sheet

What to do outdoors All Year Measure the height of a tree



You will need



- a friend,
- a tree with lots of reasonably level space around it,
- a pencil,
- a tape measure.



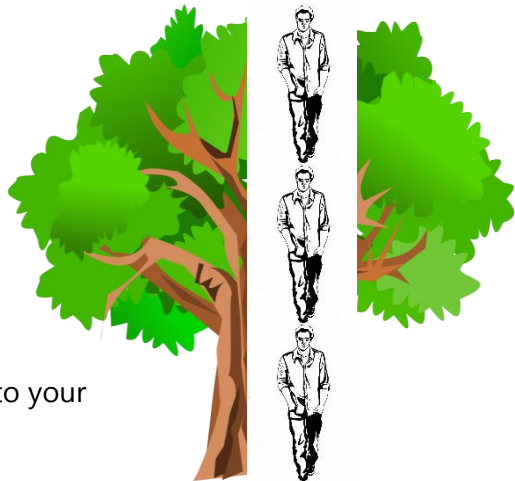
Let's guess how high the tree is.

With your friend look at the tree and decide how many men one above the other you would need to reach from the bottom to the top of the tree.

A tall man is about 2 meters tall.

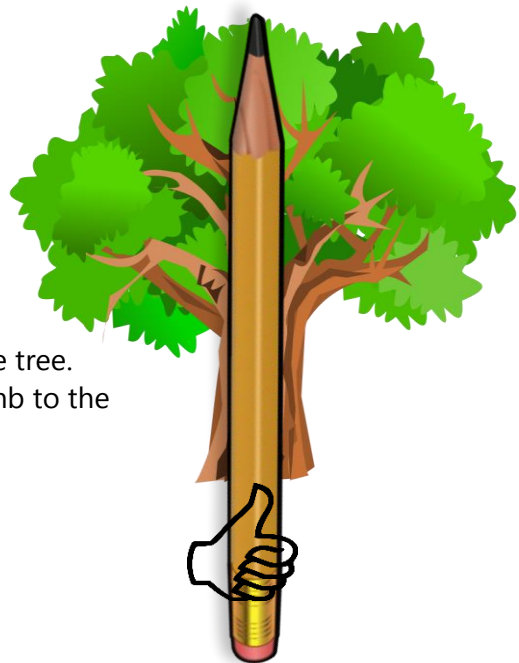
If you estimate 3 men, one above the other, then the tree is about 6 meters high.

Remember your estimate so that you can compare it to your measurement.



Now, you are going to measure the tree by imagining that it is lying on its side so that you can measure it along the ground rather than having to reach up to its top.

1. Stand well away from the tree.
2. Close one eye.
3. Hold the pencil out in front of you.
4. Look through your open eye and line up the pencil and the tree.
5. Move so that the tip of the pencil is level with the top of the tree.
6. Move your hand holding the pencil until the tip of your thumb is level with the base of the tree.
7. It is as if the pencil from the top of your thumb to the tip of the pencil, is the tree.
8. Hold steady!



Hello Trees Resource Sheet

What to do outdoors All Year Measure the height of a tree



9. Now you are going to lay your pencil-tree on its side.
10. Rotate the pencil until it is pointing sideways (parallel with the ground).
11. Make sure your thumb is still level with the base of the tree.
12. The tip of the pencil marks the spot where the top of the tree would be if it was lying on its side. That spot is where you want your friend to stand.
13. The distance from the bottom of the tree to the spot where your friend will stand, is the height of the tree.
14. Hold steady with your thumb at the base of the tree and the pencil level.
15. Sign to your friend where you want them to stand (where you see the point of the pencil).
16. When they are in the right spot, join your friend.
17. Mark the spot with a stone (or whatever else is handy).
18. Join your friend in measuring the distance from that spot to the base of the tree.
19. That distance will be the height of the tree.



How did your measurement compare with your estimate?

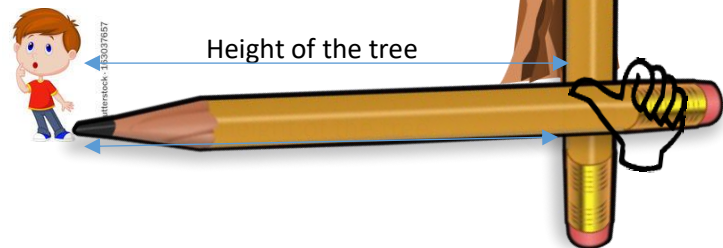


Now swap with your friend and you do the running around to where you are told to go. Your friend can do the squinting at the tree past the pencil, then lay the pencil on its side.



Are your measurements the same?
Will you try it all again from a different position?

Whatever you do, have fun!
Enjoy being outdoors,
Have a good look at everything
around you, and see what you
can discover.



And don't forget to go to the [Hello Trees Facebook page](#) to tell us how you got on.

And visit the [Hello Trees website](#) for masses more fun things to do and discover outdoors.