



## Height of a Tree

### Aim:

To measure the approximate height of a variety of trees

### Objective:

- To find a variety of trees to measure their heights (on the school grounds or local park)
- To encourage **maths** in the outdoors with students, with estimation, measuring and recording activities, as well as **physical activity** and **tree identification**

### Equipment:

- ✓ Print off of Height-Age-of-Tree Student Activity Sheet per group (laminated if possible)  
<https://leafireland.org/resources/>
- ✓ Clipboards (optional)
- ✓ Pencils/Pens
- ✓ Camera/Tablet to record activity

### Methodology:

1. Give out the Height-Age-of-Tree Student Activity Sheet. They can work in small groups of 3-4
2. Before they begin, ask the students to estimate the height of a tree (discuss 3 feet = 1 metre). Ask them all to measure three footsteps with their feet and that equals approx. 1 metre.
3. Let them break into their groups and carry out the activity, following the instructions on the Activity Sheet and to record their results.

4. Bring the group back together to give their results. Were their estimations correct or close?

5. Ask some questions, such as:
- **How come these trees are tall and thin?** When growing in a group, trees will grow up towards the light more quickly.
  - **How come this tree growing out in the open is tall but wider?** When given the space, a tree will grow to its optimum height and width.

### Notes:

- ✓ The measurements do not need to be exact. Estimations will do – it is more important to have fun outdoors while doing this activity.
- ✓ See Heights of Trees Support Sheet Insert 1 for an idea of the different rates of growth of trees.
- ✓ You can refer to the fact that you will all look a bit silly doing this activity, but that is fun too.
- ✓ This activity can also be connected to Tree Identification (leaf, twig). See other LEAF Ireland Resources.

### Other measuring methods – could be suitable for Secondary School students:

As this activity is based on basic triangulation, there are more advanced methods, which could be appropriate to use with secondary school students.



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