
Beat the Heat
with
Urban Forestry

The most effective strategy we can use to reduce the urban heat island effect is the reintroduction of trees into our city . The planting and maintenance if trees in cities is called **Urban Forestry**.

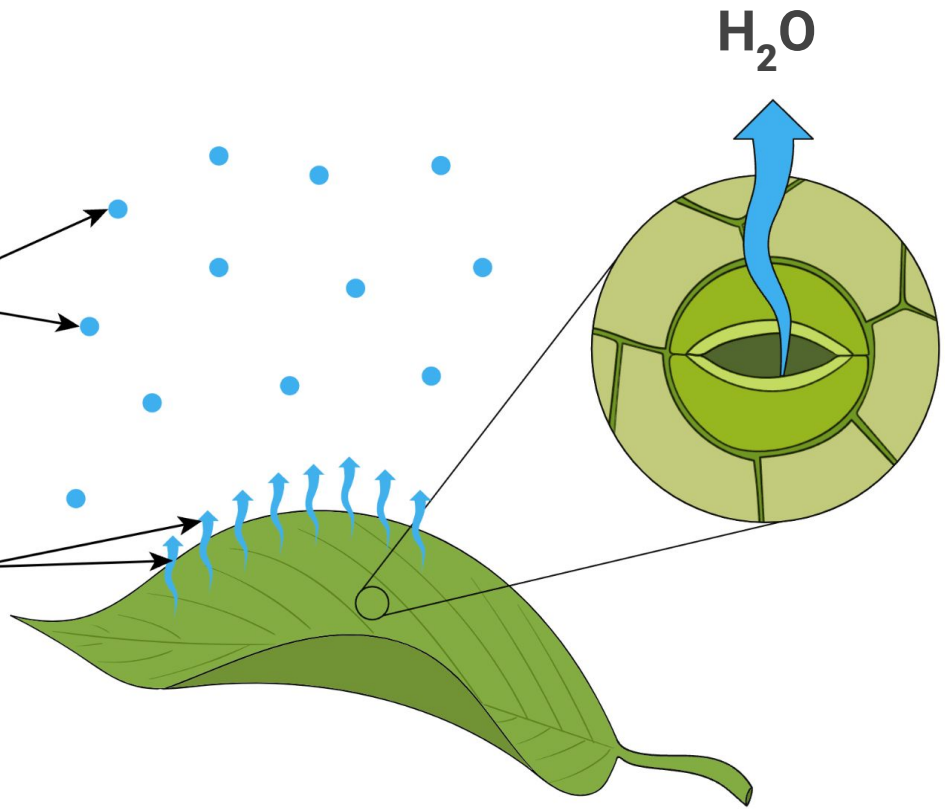
Have you ever planted or maintained a plant before?

Trees reduce the urban heat island effect by **shading** paving materials and buildings. This cools down sidewalks and roads and keeps building from having to use air conditioning. Trees also cool the air by evaporating water through their leaves through a process called **transpiration**.

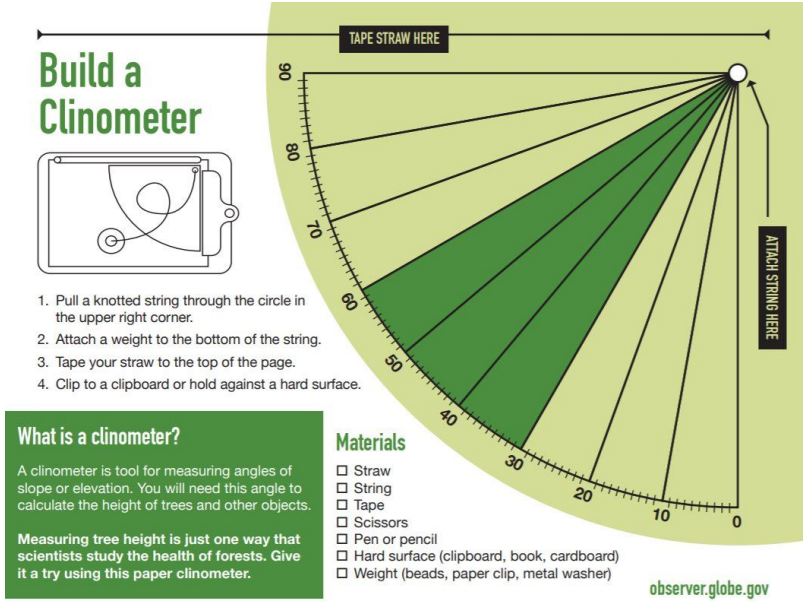
TRANSPIRATION

The evaporation of water vapor cools the air reducing UHI

Water molecules are evaporated off of the surface of the leaf

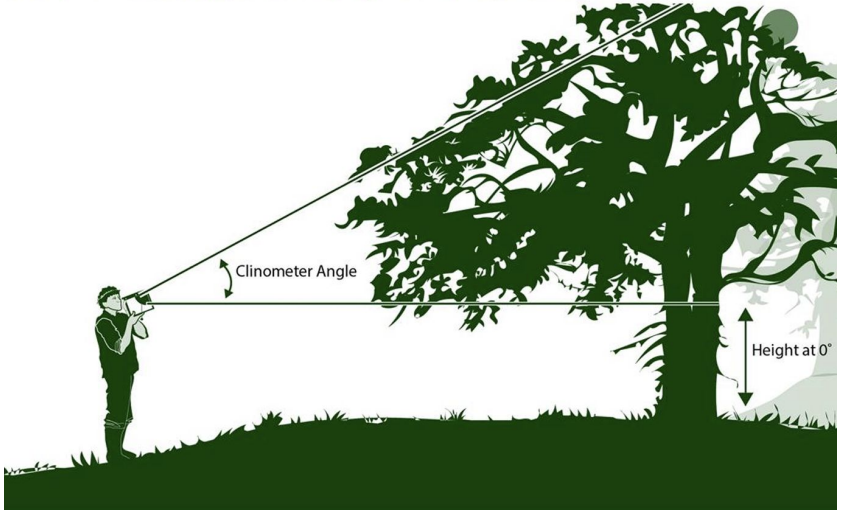


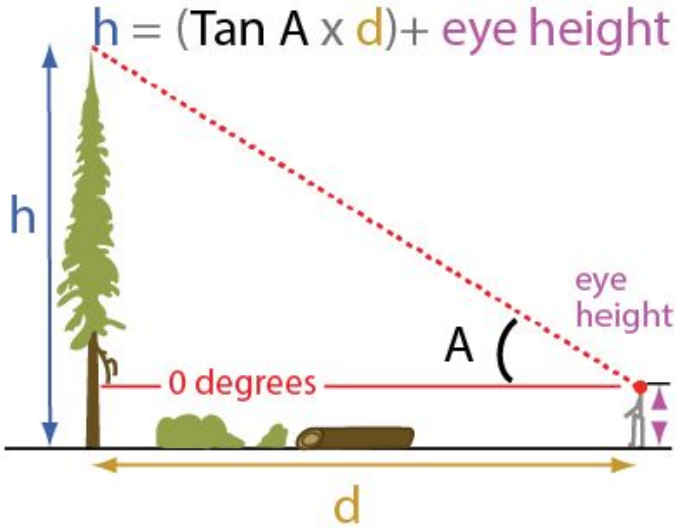
We can use the Neighborhood Science kit to determine the height of trees. The kit includes the materials needed to create a **clinometer**, a tool used to measure angles to determine an object's height.



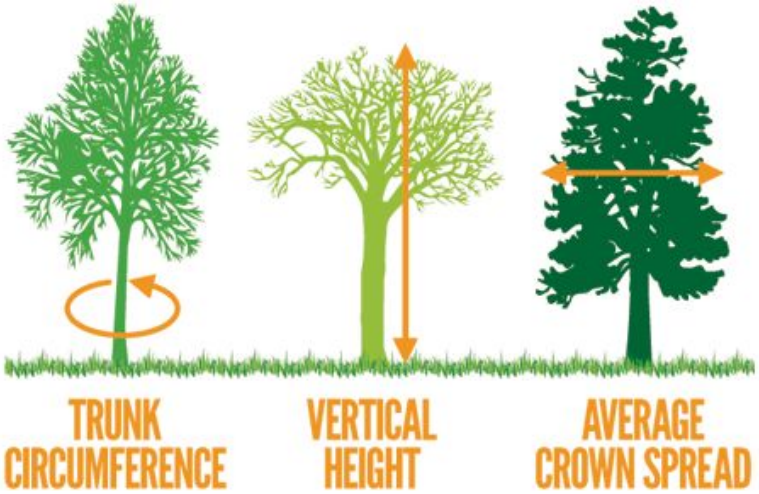
Walking to achieve a **clinometer angle of 45°** will mean the distance from your feet to the trunk of the tree (*+ the height from your feet to your eyes*) is exactly the height of the tree.

Measure Tree Height on a Slope: Stand by Tree Technique





You can also use the tape measure to determine other important measurements of a tree such a trunk circumference and crown spread. The kit's included Tree Finder book can help you determine the tree's species.



Trees are an essential element to our cities that can reduce heat and add beauty to our lives.