Title of Book: What's Your Angle, Pythagoras?
Author: Julie Ellis
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Grade Levels for Recommended Use: Seventh Grade – Tenth Grade

(8.7)   Geometry and spatial reasoning. The student uses geometry to model and describe the physical world. The student is expected to:
        (C) use pictures or models to demonstrate the Pythagorean Theorem.

Brief Summary: In ancient Greece, the young and curious Pythagoras always found himself wondering about problems and poking his nose into everything in order to find a solution. One day, Pythagoras overhears two workmen arguing about a ladder that one of the workmen built that was too short to reach the 12-foot wall, even though the ladder was 12 feet long as well. From that moment on, Pythagoras begins his adventure to discover a special number pattern, the Pythagorean Theorem, as he stumbles upon a master builder's right triangle rope and some brightly colored tiles that he arranges around a right triangle. Pythagoras realizes he has figured out the secret to right triangles and uses this new discovery and shares it with the people he wanted to help all along! The workmen are able to build the correct size ladder using his new discovery and his father can now travel a faster route as a merchant, all because of Pythagoras's curiosity! Pythagoras just needed to see things from the right angle!
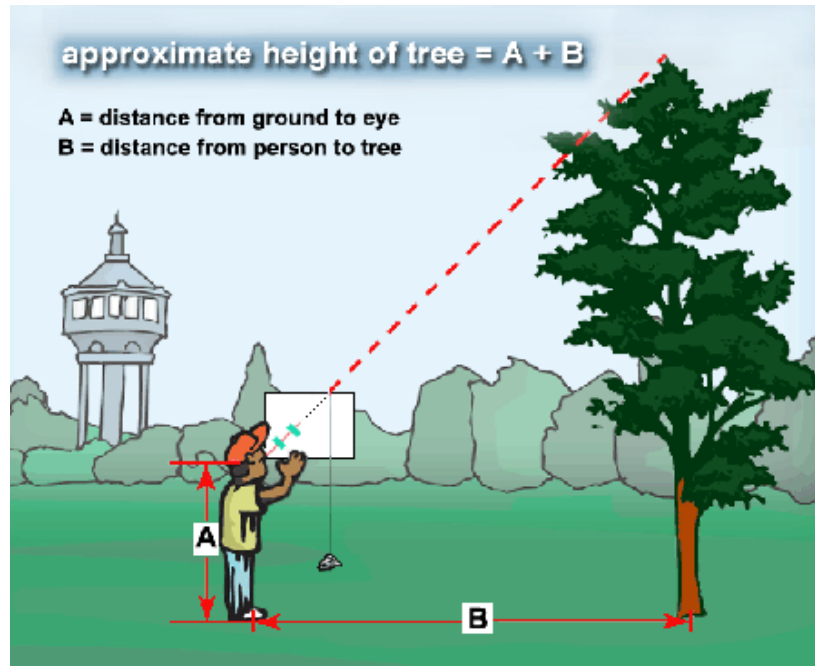
Suggested Activity: Solve this real world problem:

- **The infield in a baseball is a square, 90 feet on a side. The catcher, who plays behind home plate, has to throw the ball to second base if a runner is trying to steal. How far is it from home plate to second base?**

Materials needed: Trundle wheel and Clinometer

Calculate measurements to determine heights of buildings

approximate height of tree = A + B

A = distance from ground to eye
B = distance from person to tree

A

B

CLINOMETER

INVICTA
EDUCATION

Adapted by Dr. Faye Bruun (2018)