**Hypsometer**
Using the cardboard, straw, string, copy of grid, and weight create a Hypsometer. Note as you use the Hypsometer by sighting the ceiling of the room or the top of a tree that the string remains perpendicular to the ground and various triangles are formed.

1. Draw a picture of yourself holding the hypsometer sighting the top of a tree outside. Mark in any lines and triangles formed by the string, the edges of the hypsometer and the ground and the tree. Make conjectures about these triangles and how they can be used to calculate (approximately) the height of the tree.

2. You are given the task of approximating the height of a mountain (Mt. Mikusa). The problem is you cannot get within 100 yards of the mountain as it has a very steep canyon running completely around it. You brought your hypsometer along and you are standing more than 100 yards from the mountain base. How can you approximate the height of this mountain?