Discussion Questions 1

1. What trends do you notice in the above apparent angular height measurements?

2. Did the actual heights change?

3. From your graph, predict the apparent angular height of your partner at a distance of 30 tiles. Check your predictions by doing the measurement.

Discussion Questions 2

1. Suppose that you had a friend the same height as your lab partner. If you see them on the street, how would you figure out how far away they are using this method?

2. Suppose you used five different people at five different distances. How would this change your results?

3. Under what circumstances does this method work for measuring the distances to objects?

Measuring the Relative Distances of Galaxies

- Angular size of galaxy NGC 3627: _____

- Angular size of galaxy NGC 6643: _____

- Distance to NGC 3627: 36 million light-years

Question: What is the distance to NGC 6643?