

Name: \_\_\_\_\_

Period: \_\_\_\_\_

Skyscraping

Phase 1-b

## ***HOW CAN IT REACH THE SKY?***

Driving Question: *How can a tall building be constructed safely in order to build it as tall as possible?*

Your Task: Using the web links on the IA Geometry website ([www.ia-geometry.weebly.com](http://www.ia-geometry.weebly.com)) and any other sources that you choose (Google and Wikipedia, for example), research the following topics as you continue planning your building. You may complete the boxes in any order, but each section must be verified and checked off before moving on to Write-Up – Part 1 (Problem Statement).

### **RADIAL SYMMETRY**

The “footprint” of a building means...

Radial symmetry is...

How does it help in the construction of a tall building? (Use the categories on the worksheet for Phase 1-a, then explain how it helps in that category.)

What are some examples in the buildings you have researched so far?

### **VERTICAL TAPERING**

Tapering means...

Given that definition, what does *vertical* tapering mean?

Why do you think it would help in constructing a tall building? (Your opinion here.)

What are some examples in the buildings you have researched so far?

**TUNED MASS DAMPER**

A tuned mass damper is...

How does it help in the construction of a tall building? (Use the categories on the worksheet for Phase 1-a, then explain how it helps in that category.)

What are some examples in the buildings you have researched so far?