**Race to the Top! Post-Activity Quiz**

1. **Why is it important for engineers to use models? (2 points)**
2. **List two shapes that are used by engineers to build towers. (2 points)**
3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. **Why are plans and sketches important in the engineering design process? (3 points)**
6. **What design worked best to reach the tallest height? Include the shapes used when stacking the Kapla blocks. (3 points)**
7. **List three factors engineers consider when building tall structures. (3 points)**
   1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Circle the correct answer: (1 point each)**

1. **What is a member?**
   1. A window or door in a structure
   2. A bolt or screw in a structure
   3. A beam or column of a structure
2. **What does weight-bearing mean?** 
   1. A structure that is able to support itself without assistance from other structures or supports.
   2. A structure that is able to support additional weight besides the weight of its members.
   3. A structure that is able to support bears.
3. **A structure that is able to support itself without assistance   
   from other structures or supports is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
   1. weight-bearing
   2. free-standing
   3. free weight