**Race to the Top! Pre-Activity Quiz Answer Key**

**Fill in the blanks:**

1. **Why is it important for engineers to use models? (2 points)**

To save time and money to evaluate designs and structures.

1. **List two shapes that are used by engineers to build towers. (2 points)**
2. \_\_rectangles\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
3. \_\_triangles\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**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