

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Crazy Bridge EC: \_\_\_\_\_

# West Point Bridge Designer 2016

**Problem:** To design the cheapest working bridge at a height of 24 Meters. You may use no more than 120 members and no more than 50 joints.

More information about the contest can be found at <http://bridgecontest.usma.edu/index.htm>

**Assignment:** Define the following terms (100 points) and submit a working bridge that costs less than \$300,000 (100 points). Make sure your first and last names are in the file name! Send your working bridge file to [nickcornwell@mcps.org](mailto:nickcornwell@mcps.org) with "WPBD" in the subject line.

The first three terms can be found by using the Help pull-down list, Help topics, then type "carbon steel", double click on it, then double click again on materials. Copy the 3 definitions below.

1. Carbon steel

2. High-strength Low-alloy steel-

3. Quenched and tempered low-alloy steel-

The next four definitions can be found by using the help pull-down list, help topics, then type in "glossary" and double-click it.

4. Member-

5. Joint

6. Pier

7. Arch Abutments

8. (100 points) Save your bridge design as "yourname.bdc". Upload this file to Google Classroom. On Google Docs, write 100 words or more about your design process. What ideas worked? What problems did you have? Submit this summary with your design.