

# West Point Bridge Design Project

Use the following criteria to create your bridge on your own using West Point Bridge. When you have completed your bridge you must identify which type of bridge it resembles, or which it is closest to resembling, using the images provided below.

## Bridge Building Criteria:

1. A 44m span at 24m height
2. No templates
3. Usage of triangles as trusses to increase rigidity
4. Use of all three types of building materials
5. Use of hollow and solid bar
6. Different thicknesses of materials throughout design
7. Under budget of \$375,000
8. Identified structural design that most closely represents their design

## Grading Criteria:

- |  |       |
|--|-------|
| 1. Bridge dimension requirements                             | 5pts  |
| 3. Use of hollow or solid bars                               | 5pts  |
| 4. Use of different thicknesses                              | 5pts  |
| 2. Use of all building materials (All 3 types of steel beam) | 10pts |
| 5. Budget- 2pts @ each \$5,000 over                          | 20pts |
| 6. Identified bridge design                                  | 5pts  |
| Total.   | 50pts |

When you have completed all of the components of the assignment, you may print your final design.

Write the following on the page you print out:

1. Name
2. Class Period
3. Bridge Type



Pratt



Parker



K-Truss



Howe



Camelback



Warren



Fink



Double Intersection Pratt



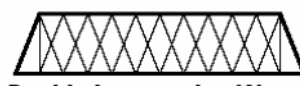
Warren (with Verticals)



Bowstring



Baltimore



Double Intersection Warren



Waddell "A" Truss



Pennsylvania



Lattice