

NAME _____

1. Identify at least three basic types of bridge **15pts** _____
a. _____ b. _____ c. _____

2. List and define at least 10 Bridge components **50pts** _____
a. _____ f. _____
b. _____ g. _____
c. _____ h. _____
d. _____ i. _____
e. _____ j. _____

3. Identify at least three basic truss designs. **15pts** _____
a. _____ b. _____ c. _____

4. Read SkillsUSA bridge building specifications and note:
a. Material to be used: _____
b. Max. Material cross section: _____
c. Max. Weight: _____
d. Min. Span: _____
e. Min. Width: _____
f. Max. Length of Substructure: _____
g. Max Height of Substructure: _____
h. Load block size: _____

5. Mass of bridge (weight) _____

6. Load held by bridge: _____

7. Efficiency = Maximum load / Mass of bridge. _____

8. Grade:
a. Sketch (min 2) **50pts** _____
b. Plans
i. Resemble sketch **25pts** _____
ii. Well dimensioned **25pts** _____
iii. Orthographic projections **25pts** _____
iv. Solid **25pts** _____

9. Construction:
a. Does it meet requirements **25pts** _____
b. Does it match the plans **20pts** _____
c. Quality of construction **25pts** _____

TOTAL pts _____ / **300**