

Name: _____

BRIDGES

Use this worksheet to answer the questions from the Bridges Web Quest activity. This worksheet is worth up to 40 points.

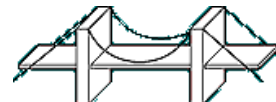
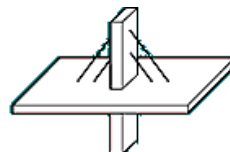
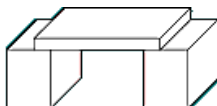
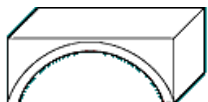
http://bms-et.org/bridges/bridges_webquest_process.htm

1 What kind of Engineer builds bridges?

2 points

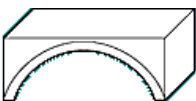
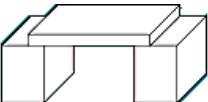
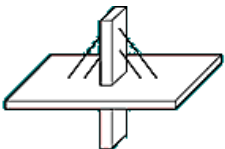
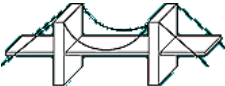
2 Name That Bridge

4 points



3 Bridge Strengths & Weaknesses

16 points

Bridge	Span	Construction Material	Advantages	Disadvantages
				
				
				
				

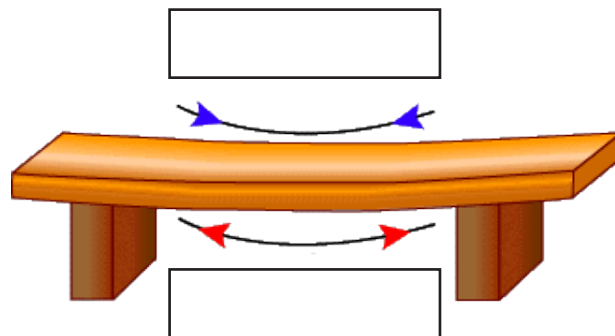
4 Forces on Bridges

4 points

Define the words and label the drawing.

Compression: _____

Tension: _____



BRIDGES

Make a drawing of the following types of trusses:

5 Sketch Truss Designs

6 points

Any Deck Truss →



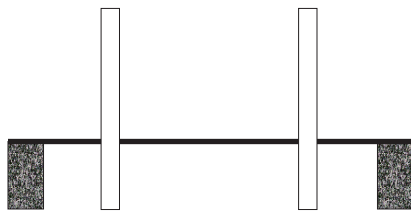
← Any Through Truss

Any Arch Type →



← Baltimore (Pratt) Truss

Wichert Truss →



← Any Suspension or Cable-Stayed

6 4 Describing Factors

4 points

Span: _____

Material: _____

Placement of Travel Surface: _____

Form: _____

7 Which Bridge...

4 points

Which type of bridge would be the best to use when spanning a distance of 5,000 feet or more? (circle one)

Arch Bridge Beam Bridge Suspension Bridge Cable-Stayed Bridge

Which type of bridge would be the best to use when spanning a distance of 120 feet across a highway? (circle one)

Arch Bridge Beam Bridge Suspension Bridge Cable-Stayed Bridge

Which type of bridge would be the best to use for a 1,000-foot span across a river busy with boat traffic? (circle one)

Arch Bridge Beam Bridge Suspension Bridge Cable-Stayed Bridge

Which type of bridge would be the best to use for a 700-foot span across a deep canyon gorge? (circle one)

Arch Bridge Beam Bridge Suspension Bridge Cable-Stayed Bridge