



Pathfinder's Name

Bridges

1. Define the following terms:

a. Bridge

b. Aqueduct

c. Falsework

d. Compression force

e. Tension force

f. Bascule bridge

g. Covered bridge

- ❑ 2. Describe these six main types of bridge design and give two examples of each:
 - a. Arch bridge
 - 1. _____
 - 2. _____
 - b. Beam bridge
 - 1. _____
 - 2. _____
 - c. Cable-stayed bridge
 - 1. _____
 - 2. _____
 - d. Cantilever bridge
 - 1. _____
 - 2. _____
 - e. Suspension bridge
 - 1. _____
 - 2. _____
 - f. Truss bridge
 - 1. _____
 - 2. _____
- ❑ 3. Discover the distance each of the following bridge designs can span:
 - a. Arch bridge
 - b. Beam bridge
 - c. Cable-stayed bridge
 - d. Cantilever bridge
 - e. Suspension bridge
 - f. Truss bridge
- ❑ 4. Name the bridge design that can span the longest distance.

- 5. Draw or illustrate the basic design of each of the following bridge types:
 - a. Beam bridge
 - b. Arch bridge
 - c. Suspension bridge
 - d. Covered bridge
 - e. Truss bridge
 - f. Cable-stayed bridge (fan shape)
 - g. Cantilever bridge
 - h. Bascule bridge
 - i. Cable-stayed bridge (harp shape)

Date completed _____

- 6. Do the following activities:
 - a. Watch a video about bridges.
 - b. Make a list of at least eight notable bridges OR name two bridges that you have crossed and tell what design they are.

Date completed _____

- 7. Make a video/multimedia presentation or scrapbook presentation about bridge(s) you have seen.

Date completed _____

- 8. Build a bridge using materials such as craft sticks, toothpicks, yarn, thread, and glue.

Date completed _____

- 9. Recite John 3:16, then tell how this verse describes Jesus' role as a bridge between heaven and earth.

Date completed _____