

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 bridges design and give two examples of each (YouTube links for help):

a) Arch bridge <https://youtu.be/Ac6iqzSuTwQ>

b) Beam bridge <https://youtu.be/WFP8UF-zvHg>

c) Cable- Stayed bridge <https://youtu.be/PC5ED3oXXOo>

d) Cantilever bridge <https://youtu.be/1uFYgGrF31U>

e) Suspension bridge <https://youtu.be/caTaBeKUh-U>

f) Truss bridge <https://youtu.be/JtzArv2LQ7E> or <https://youtu.be/7FqteQu43qU>

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) Suspensions 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)

6. Do 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 are

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

8. Build a bridge using materials such as craft sticks, toothpicks, yarn, thread, and glue and insert a picture: <https://youtu.be/iCQ05BSGeiM> or <https://youtu.be/xlwBmrf6240> or <https://youtu.be/oXV1rX-PvR0>

9. Recite John 3:16, (insert a video), then tell how this verse describes Jesus role as a bridge between heaven and earth
