

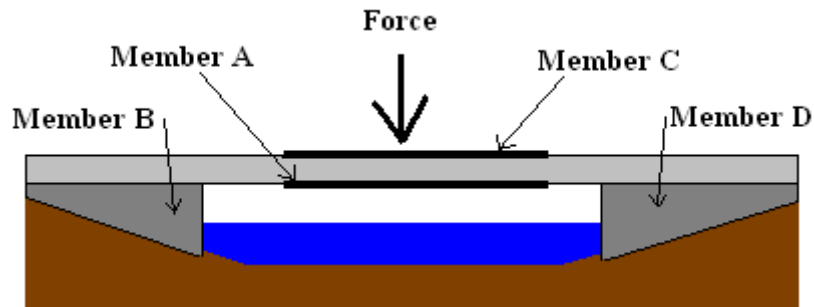
Bridge Types & Forces Worksheet **Answers**



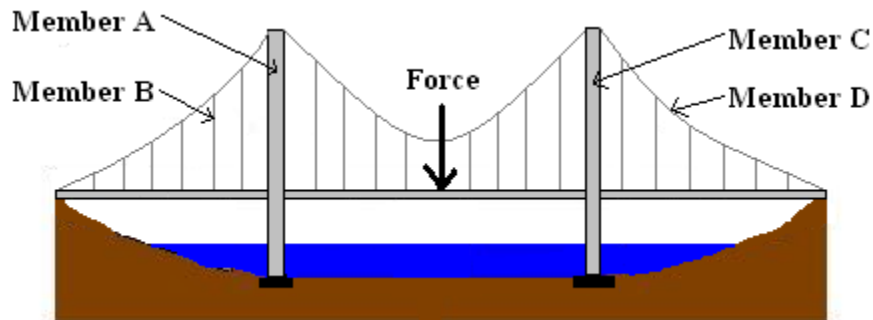
For each image below, identify the following:

- **Bridge type:** beam, arch, modern suspension or cable-stayed bridge
- **Which members have compressive forces acting on them**
- **Which members have tensile forces acting on them**

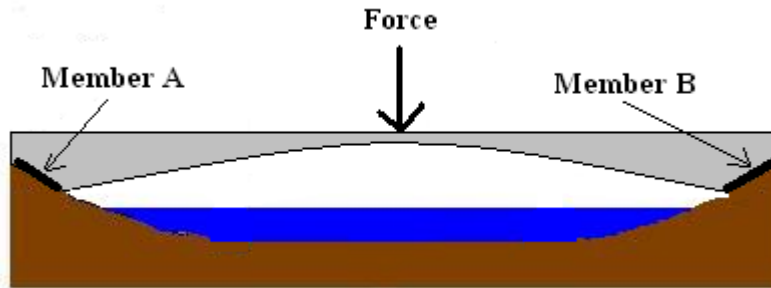
1. **Bridge type:** Beam bridge
Compressive forces are located in members: B & D (piers), C (top of beam)
Tensile forces are located in members: A (bottom of beam)



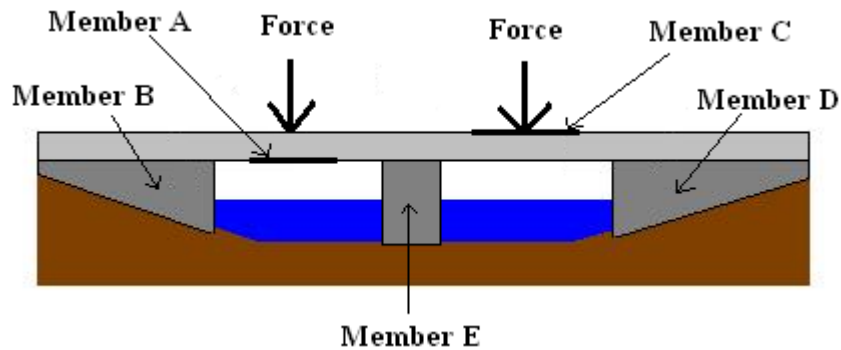
2. **Bridge type:** Modern suspension bridge
Compressive forces are located in members: A & C (towers)
Tensile forces are located in members: B & D (cables)



3. **Type of Bridge:** Arch bridge
Compressive forces are located in members: A & B (abutments)
Tensile forces are located in members: None



4. **Type of Bridge:** Beam bridge (2 spans)
Compressive forces are located in members: B, D & E (piers), C (top of beam)
Tensile forces are located in members: A (bottom of beam)



5. **Type of Bridge:** Cable-stayed bridge
Compressive forces are located in members: A & C (towers)
Tensile forces are located in members: B & D (cables)

