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
   ![Diagram of Arch Bridge]

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)
   ![Diagram of Beam Bridge]

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)
   ![Diagram of Cable-stayed Bridge]