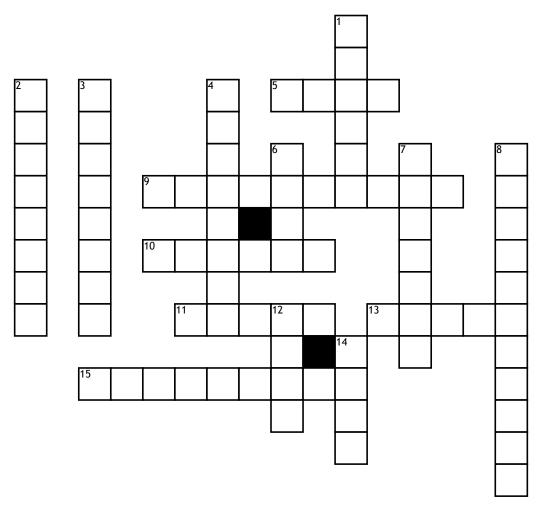
Bridge Building Vocabulary



Across

- **5.** weight distribution throughout a structure
- **9.** a projecting structure supported only at one end, like a shelf bracket or a diving board
- 10. to change shape
- **11.** a rigid frame composed of short, straight pieces joined to form a series of triangles or other stable shapes
- **13.** any action that tends to maintain or alter the position of a structure

15. forces are spread out over a greater area, so that no one spot has to bear the brunt of the concentrated force

Down

- **1.** ability to resist collapse and deformation
- **2.** what happens when tension overcomes an object's ability to handle tension
- **3.** what happens when the force of compression overcomes an object's ability to handle compression

- **4.** forces are moved from an area of weakness to an area of strength, an area designed to handle the forces.
- **6.** a vertical supporting structure, such as a pillar
- **7.** A force which acts to expand or lengthen the thing it is acting on
- **8.** a force which acts to compress or shorten the thing it is acting on
- **12.** the distance between two bridge supports, whether they are columns, towers or the wall of a canyon
- **14.** a rigid, usually horizontal, structural element

Word Bank

PIER DEFORM STABLE BUCKLING TRANSFER
SNAPPING BEAM COMPRESSION TENSION LOAD
DISSIPATE FORCE CANTILEVER TRUSS SPAN