**Unit 2 Vocabulary List**

**Compression Force:**

**Tension Force:**

**Shear Force**

**Torsion Force:**

**Bending Force:**

**Deflection:**

**Live Load:**

**Dead Load:**

**Columns:**  a structural element that transmits, through [compression](http://en.wikipedia.org/wiki/Compression_%28physical%29), the weight of the structure above to other structural elements below. Usually run the entire length of the structure

**Girders:** Girder is the term used to denote the main horizontal support of a structure which supports smaller beams. Usually have an I or Z shaped cross section and are the main horizontal supports in a structure.

**Beams:** Beams generally carry [vertical](http://en.wikipedia.org/wiki/Vertical_direction) [gravitational](http://en.wikipedia.org/wiki/Gravitational) [forces](http://en.wikipedia.org/wiki/Force). The loads carried by a beam are transferred to [columns](http://en.wikipedia.org/wiki/Column) and girders. Usually have an I shaped cross section.

**Braces**: diagonal supports which can intersect. Cross bracing can increase a building’s capability to withstand seismic forces from an earthquake. Cross bracing is usually seen with two diagonal supports placed in an X shaped manner; these supports compression and [tension](http://en.wikipedia.org/wiki/Tension_%28physics%29) forces.

**Triangles:**

**Arches:**

**Abutment:**

**Deck:**

**Piers:**

**Span:**

**Arch Bridge:**

**Beam/Truss Bridge:**

**Suspension Bridge:**