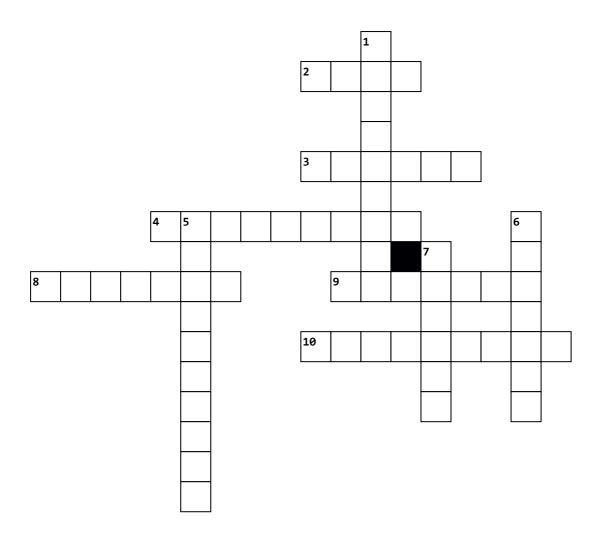
## **Unsymmetrical Bending**



## Across

**2.** Loads, What type of loads are applied at an angle to the principal axis of a beam?

**3.** Considerations, What factors are involved in beam design, including material selection and safety margins?

**4.** Axis, What is the axis of a beam where bending occurs without twisting or warping?

**8.** Axis, What is the axis of a beam under bending where no longitudinal stress exists?

**9.** Modulus, What geometric property is used to calculate bending stress in a beam?

**10.** Beams, What type of beams have identical geometry and material properties about the central axis?

## Down

**1.** Components, In which industry is bending analysis applied to design aircraft wings and fuselages?

**5.** Applications, In which industries is beam bending analysis used for practical design?

**6.** Stresses, In which sections do stresses occur when a beam has an irregular cross-section under bending?

**7.** Distribution Analysis, What process determines how stress varies across a beam's cross-section under load?