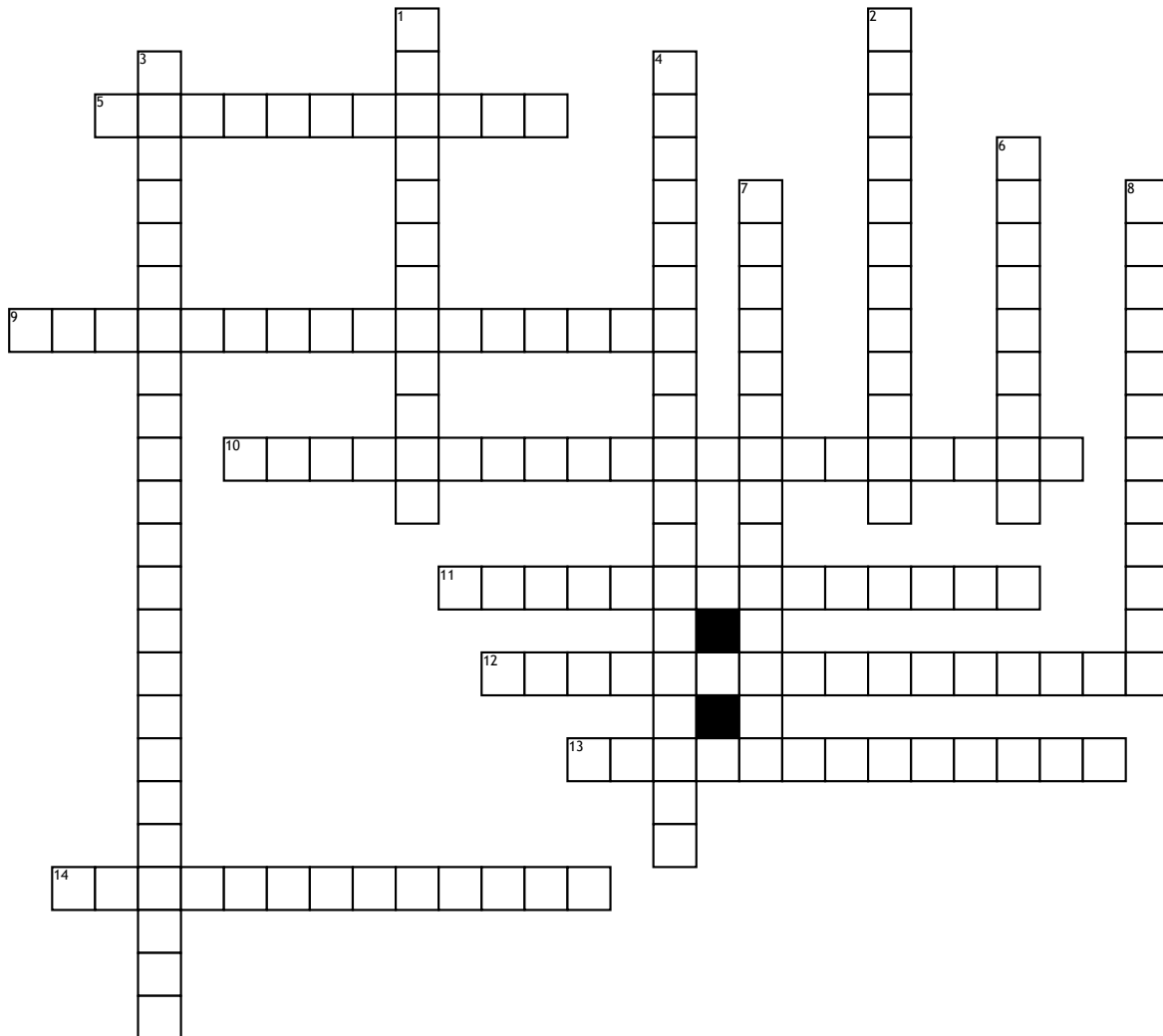


Name: _____

Date: _____

Civil 304 Mechanics of Materials



Across

5. Stress value where the stress-strain curve goes nonlinear

9. materials that exhibit little or no yielding before fracture

10. structural design determining the value of bending moment at a given point of a structural element

11. the stress value where a line drawn with slope E starting at .002 strain intersects the stress-strain curve

12. any material that can withstand large strains before fracture

13. ratio between axial strain in the latitude direction and axial strain in the longitude direction

14. failure load / failure area

Down

1. the response of a material to stress

2. structural design determining the value of shear force at a given point of a structural element

3. Another name for elongation

4. Defined as the ratio of tensile stress to tensile strain.

6. equation of the slope of linear part on the stress-strain graph times the axial strain

7. Largest stress on the stress-strain curve (top of the curve)

8. Force on a material divided by the material's cross-sectional area