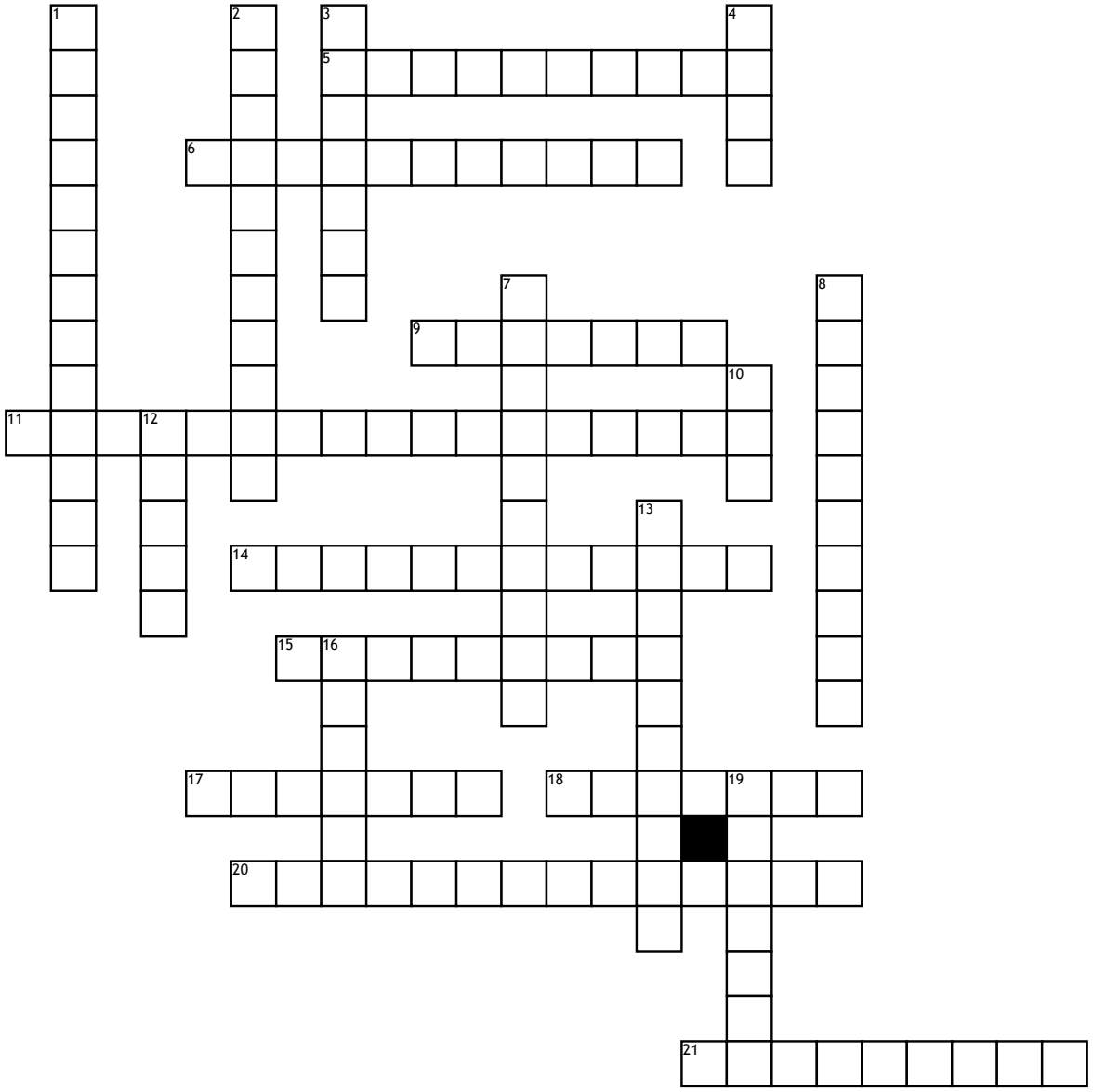
Materials Crossword Puzzle



Across

5. The Modulus of _____ is the area under the elastic portion of the curve.
6. In an "I" beam, this is in the same place as the centroid
9. This is the ratio of the lateral and longitudinal strains
11. At this limit the stress is the same as the strain.
14. This modulus is the ratio of shear stress to shear strain.
15. The Modulus of _____ is the area under the entire curve.
17. This is the first region of a stress-strain curve.
18. These materials are stronger and can withstand higher stresses.
20. This is the largest amount of stress a material will undergo before it begins to fail.
21. This occurs at the point of zero shear

Down

1. At the nuetral axis, this is at its maximum.
2. The engineering failure stress is the point that is calculated, but the _____ stress is the actual point.
3. These materials are easily broken.
4. The bending stress has this value at the outer fibers of a beam.
7. This point on the stress-strain curve is where the curve flattens out before reaching strain hardening.
8. Percent _____ is the amount that a material changes in length compared to its original length.
10. This machine was used to apply forces to rods until they ruptured (abreviation)
12. _____ moment of inertia is used to calculate an object's ability to resist torsion
13. The Modulus of _____ is represented by the letter "E"
16. The 0.2% _____ method is a way to measure the yield point on a curve.
19. The moment of _____ is a body's tendency to resist angular acceleration.