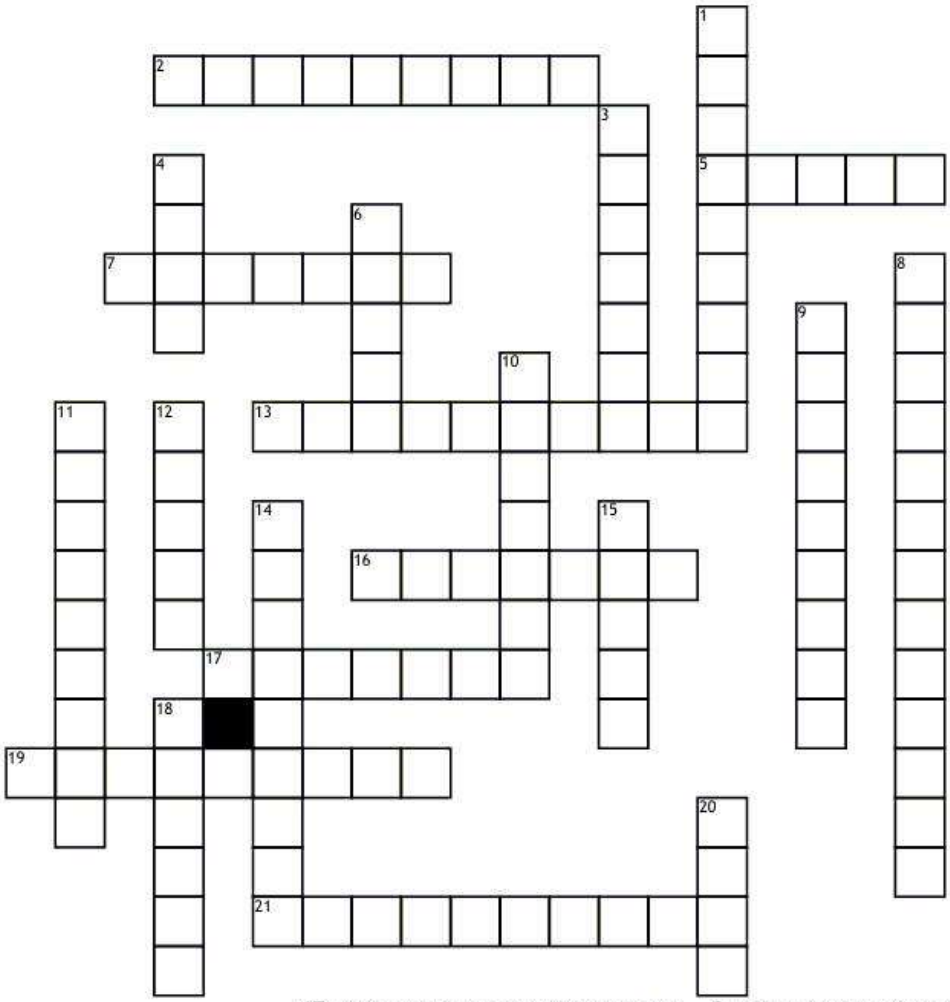
EMM 3 (816x1083x16M jpeg)

Material Science Puzzle



Across

2. Ability of a material to undergo permanent deformation through cross-section reductions and elongation without fracture.

5. Category of materials that consists of aluminum, copper, steel (iron alloy), nickel, and titanium

7. Irreversible deformation of the form or dimension of a solid body under stress.

13. A materials scientist uses his/her combined knowledge of physics, chemistry and _____ to exploit property-structure combinations for practical use.

16. Ability of a material to break, snap, crack or fail easily when subjected to external loads.

17. Category of materials that includes clay, silica glass, alumina, and quartz

19. Some polymers can be _____ to 1000% the original length

21. In our lab we used a _____ to represent polymers.

Down

1. Material Science is a branch of science that focuses on materials; interdisciplinary field composed of physics and _____.

3. Category of materials that includes PVC, teflon, various plastics, adhesives, and kevlar

4. Mrs. Schneider had a single _____ to represent ceramics.

6. Polymers are _____weight.

8. The example of a composite in our lab was a _____.

9. Able to withstand great strain without tearing or cracking

10. Reversible deformation of the form or dimensions of a solid body under stress.

11. Category of materials that includes wood, carbon fiber resins, and concrete

12. Polymers are _____ to corrosive chemical environments

14. Our example of a metal was a _____.

15. A mixtures of two or more metal and nonmetal elements (for example, steel) is called an _____

18. Metals have a _____ melting point.

20. Metals are _____ strength