Cyfalls  
Material Science  
Key  
1. Protons  
2. Hydrogen  
3. 10  
4. London Dispersion  
5. Ca  
6. Proton, Neutron  
7. The change in energy (in kJ/mole) of a neutral atom (in the gaseous phase) when an electron is added to the atom to form a negative ion  
8. 1s^2 2s^2 2p^6 3s^2 3p^6 3d^1 4s^2  
9. Enthalpy  
10. Stress over strain  
11. Calorie, Joule  
12. Hexagon or triangle  
13. Electrons  
14. 60  
15. Face Centered Cubic  
16. Body Centered Cubic  
17. SiHBr₃ has stronger London Dispersion forces  
18. It can exist in multiple forms/crystal structures  
19. 6.69 Å  
20. Acts as conductor to electrons of one spin orientation, but insulates against those of other spin orientations  
21. Piezoelectric effect  
22. Superconductors  
23. Amorphous  
24. Loss of magnetism  
25. 16P^3*sqrt{2}  
26. Magnetism  
27. Periodic  
28. Poise  
29. Clear  
30. 9%, accept anything from 7%-11%  
31. Liquid and superfluid  
32. Tungsten, Rhenium (W,Rh)  
33. Hydroplasticity  
34. Accept aP or a  
35. Principle Quantum Number  
36. 0.740 or \( \frac{5}{3\sqrt{2}} \)  
37. Bose-Einstein Statistics
38. Enhances durability and decreases environmental damage, increases lifespan.
39. Lasers amplify and emit light in general, while masers specifically do so for microwave radiation.
40. Concrete
41. Two or more homopolymer subunits linked by covalent bonds
42. Rotation through 120 degrees about [1 1 1]
43. Reciprocals
44. Negative Correlation
45. Ammonia
46. Americium (Am)
47. Solvent
48. Fermi-Dirac Distribution
49. Thermoplastics can be remelted and reshaped, while thermosetting plastics harden after melting and cannot be remelted.