

1. What is the smallest unit of matter? (atom)
2. What are the three subatomic particles that make up an atom? (proton, neutron, electron)
3. Which subatomic particle has a negative charge? (electron)
4. What is the difference between a proton and neutron? (proton + neutron 0 neutral)
5. Where are electrons located within an atom? (Orbiting the nucleus)
6. What subatomic particles can be found in the nucleus? (protons & neutrons)
7. What is the charge of the nucleus? (positive)
8. If an atom gains an electron, what is its charge? (negative)
9. What subatomic particle is positively charged? (proton)
10. What kind of charge does a neutron have? (trick question: neutrons are neutral)
11. What kind of bond is formed when electrons are transferred from one atom to another? (ionic)
12. What is formed when an atom gains or loses an electron? (ion)
13. Name one of the four primary elements essential for life. (carbon, hydrogen, nitrogen, oxygen)
14. When 2 hydrogen atoms bind to an oxygen atom, what molecule is formed? (water)
15. In a water molecule, what kind of bond is formed between the hydrogen and oxygen atoms? (covalent)
16. Water is a polar molecule meaning there is an uneven distribution of electrons. Which part of a water molecule has a slight negative charge? (oxygen)
17. When two atoms share electrons, what kind of bond is formed? (covalent)
18. If an atom of Na loses an electron and a Cl atom gains an electron, what type of bond will be formed between the two atoms? (ionic)
19. When one water molecule binds to another water molecule, what kind of bond is formed? (hydrogen)
20. Water molecules are "sticky". What property allows them to bind easily to one another? (cohesion)
21. Water is able to travel through the roots and up to the very top of a tree because of what two properties? (cohesion and adhesion)
22. The tendency of unlike molecules to stick to one another is called what? (adhesion)
23. In a polar molecule, which subatomic particle is not shared equally? (electron)
24. What does -phobic mean/refer to? (afraid/repel)
25. What does -philic mean/refer to? (loving)
26. What does hydro- mean/refer to? (water)
27. What about oil, and other like substances, allows it to sit on top of water? (hydrophobic: ionic or polar substance that repels water)