Chemical Bonds Physical Science

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1. What is an atom?
2. How many protons, neutrons and electrons does an atom of Helium have?
3. What determines how an atom behaves when it encounters another atom?
4. How many electrons can the first electron shell hold?
5. How many electrons can other electron shells hold?
6. What is the octet rule?
7. How many electrons would carbon like to gain? How many would oxygen like to gain?
8. Why are electron configurations important?
9. How many electrons does lead (Pb) have?
10. How many electrons does phosphorus have?
11. What do electron dot structures representative?
12. How many valence electrons does aluminum have?
13. What are chemical bonds? How many types of bonds are there?
14. What is an ionic bond?
15. What reacts to make an ionic compound?
16. How do metals bond?
17. What are positive ions?
18. What do alkali metals form when they bond?
19. What happens when a sodium ion forms?
20. What happens when a magnesium ion forms?
21. Why do Sr atoms form +2 ions?
22. What do non-metals do when they form ionic compounds?
23. What is the electric charge of an unpaired fluorine atom?
24. What is the electric charge of a successful fluoride ion octet?
25. Ionic bonds form between \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_.
26. What forms an ionic bond?
27. What is an electrostatic attraction?
28. Ionic bonds: One big \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_.
29. What happens when Na and Cl form an ionic bond?
30. Na and Cl form what shape compound?
31. What is a covalent bond?
32. What kind of elements form a covalent bond?
33. Are covalently bonded compounds good conductors?
34. What is the difference between shared and exchanged electrons?
35. Polyatomic ions form what kind of bonds?
36. What is a non-polar covalent bond?
37. What kinds of electrons are shared in a covalent bond?
38. What are polar covalent bonds?
39. Polar covalent bonds: unevenly matched \_\_\_\_ \_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_.
40. Why is water a polar covalently bonded molecule?
41. What is a metallic bond?
42. How are metallic bonds formed?
43. What is one characteristic of most metallic bonds?
44. Metallic bonds: Mellow dogs with \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_ \_\_\_\_\_\_ \_\_\_\_\_\_\_.
45. What is a way to describe metallic bonds?
46. Metals form \_\_\_\_\_. What are alloys?
47. What is formula weight?
48. What kind of bond is NaCl? What is its mass?
49. What kind of bond is C2H6? What is its mass?
50. What kind of bond is Na (CO3)2? What is its mass?