

21. List the elements that are gases at room temperature.
22. What is Mendeleev's law?
23. True or False: when one moves from the left of a period to the right of a period, electrons are held tighter and tighter to the nucleus.
24. True or False: as one moves from right to left in a Period, the metallic properties of the elements become more pronounced; the elements become more "metally."
25. True or False: just by looking at the boiling point periodicity of the Periodic Table, one would expect that cadmium (Cd) has a higher boiling point than lithium (Li).
26. What is the atomic number of niobium? Of Cs? Of S? Of rubidium?
27. True or False: the atomic number is the number of neutrons in the nucleus.
28. From the standpoint of the atomic number, which subatomic particles' numbers are interchangeable?
29. True or False: arsenic (As) has 33 protons and 32 electrons.
30. True or False: atoms usually have the same number of protons and electrons, which gives them a neutral charge.
31. Why do we use the atomic mass unit?
32. Which two subatomic particles' atomic mass is so similar that we give them an atomic mass number of 1?
33. What is the mathematical relationship between the atomic mass, the atomic number and the number of neutrons in an element?
34. If you have an atom that has 13 protons and its atomic mass is 37, how many neutrons does it have?
35. What is the name of the element that has 82 electrons and how many neutrons does it have?
36. From a subatomic particle standpoint, what are the differences between the Li and the Be atoms?
37. You have discovered a new element that has 126 electrons and an atomic weight of 315.02. How many protons and neutrons does it have?
38. How many electrons and protons does an imaginary element with an atomic weight of 287.676 have?
39. True or False, Promethium (Pm) with an atomic weight of 145 has more neutrons than neodymium (Nd) with an atomic weight of 144.242.
40. You have a device capable of adding or removing subatomic particles at will, and people are coming to you from all over the world to make gold for them. They have brought you the following elements—carbon, uranium, Kr, bismuth. How many subatomic particles do you have to add or remove to/from the elements to make gold?
41. True or False: we use the measure of average atomic mass when reporting the atomic mass on the Periodic Table because of isotopes.