

Name _____

Chemistry

___/___/___

Part I: Match the name on the right with the correct statement on the left. You will use some names more than once.

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| 1. H - His model of the atom is the Electron Cloud Model. | A. Aristotle |
| 2. E - He discovered the nucleus. | B. Bohr |
| 3. B - He put electrons into energy levels. | C. Dalton |
| 4. B - He designed his atomic model after the solar system. | D. Democritus |
| 5. C - He said atoms of different elements have different properties. | E. Rutherford |
| 6. A - He believed that matter is continuous. | F. Stoney |
| 7. G - He discovered the electron. | G. Thomson |
| 8. E - He discovered that the atom is mostly empty space. | H. Schrödinger |
| 9. H - He used math to explain the location and energy of the electrons in an atom. | I. Einstein |
| 10. C - He is the Father of the Atomic Theory. | J. Planck |
| 11. H - His model is called the quantum mechanics model. | K. Heisenberg |
| 12. B - He fixed Rutherford's model. | L. de Broglie |
| 13. E - He used polonium and gold foil in his famous experiment. | M. Millikan |
| 14. G - He used a cathode ray tube to make his discovery. | N. Chadwick |
| 15. N - He discovered the neutron. | |
| 16. D - He used the term "atomos" to describe an indivisible part at the base of all matter. | |
| 17. F - He named the electron. | |
| 18. C - He wrote that atoms of different elements combine to form compounds in a simple whole number ratio. | |
| 19. L - He discovered the wave nature of the electron. | |
| 20. H - He designed a mathematical equation for the model of the atom. | |
| 21. M - He determined the charge of the electron. | |
| 22. J - He deduced the relationship between the energy and frequency of radiation. | |
| 23. I - He proposed that light could be described as quanta of energy that behave as particles. | |

Part II: Write the last name of the atomic theorist that answers each of the following questions.

1. **Schrödinger** - Which scientist is responsible for the quantum mechanics model?
2. **Thomson** - Which scientist used a cathode ray tube and a magnet in his famous experiment?
3. **Thomson** - Who designed the "Plum Pudding Model" of the atom?
4. **Planck** - Who developed the formula $E=h\nu$?

5. **Dalton** - Who is called the Father of the Atomic Theory?
6. **Rutherford** - Who discovered the nucleus?
7. **Dalton** - Who wrote, "all matter is made up of indivisible, indestructible atoms"?
8. **Bohr** - Who put electrons in energy levels?
9. **Thomson** - Who discovered the electron?
10. **Rutherford** - Who discovered that the atom is mostly empty space?
11. **Millikan** - Which scientist determined the charge of the electron?
12. **Chadwick** - Which scientist proved the existence of neutrons?
13. **Bohr** - Who designed his model of the atom after the solar system?
14. **Einstein** - Who used Planck's constant to show how light can behave as a particle?
15. **Dalton** - Who is the first to write an atomic theory based upon experimentation?
16. **Heisenberg** - Who wrote that it is impossible to know exactly both the location and velocity of a particle at the same time?
17. **Rutherford** - Who discovered that the nucleus has a positive charge?
18. **Dalton** - Who claimed that atoms of the same element have the same physical and chemical properties?
19. **Planck** - Who was able to deduce the relationship between energy and frequency of radiation?
20. **Aristotle** - Which theorist would NOT have been considered an atomist?
21. **Plum Pudding** - What is the name of J.J. Thomson's model of the atom?
22. **Democritus** - Who was the first to suggest the idea of atoms?
23. **Thomson** - Whose atomic model consisted of negatively charged electrons inside an overall neutral atom?
24. **de Broglie** - Who discovered the wave nature of the electron?
25. **Bohr** - Who used Planck's ideas to improve upon Ernest Rutherford's atomic model?
26. **Millikan** - Which scientist performed the "oil drop experiment"?
27. **Schrödinger** - Who developed the first mathematical model of the atom?
28. **Planck** - Who discovered that energy emitted by a resonator could only take on discrete values?
29. **Dalton** - Who proclaimed that atoms cannot be subdivided, created or destroyed when involved in chemical reactions?

At the completion of this assignment you will be prepared to take the following Chapter 2 on-line quizzes:

- atomic theory scientist photo quiz 1
- atomic theory scientist photo quiz 2
- atomic theory scientist quiz 1
- atomic theory scientist quiz 2
- atomic theory scientist quiz 3