Atomic Theory Matching Activity Accompanying flashcards:

 <https://www.cram.com/flashcards/atomic-theory-scientists-11618617>

**Instructions**

1. Cut out the Influential Philosophers and Scientists. (Do not separate Rutherford and Chadwick.)
2. Match the names with the dates. (Dates are when they were alive; in brackets is when they made their discovery or proposed their model). Check with a classmate. Then, glue directly next to the people’s names.
3. Spread out the names vertically on a blank sheet of paper.
4. Cut out the Atomic Theory Statements. Using the textbook/powerpoint, match them to the individuals they are associated with, by arranging them on your page.
5. Check your answers with a classmate or the teacher’s answer key. Then, glue everything down.
6. Draw each **scientist’s** model in the available space.
7. Optional: highlight key words for your notes.

**Influential Philosophers and Scientists**

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| **JJ Thomson (Scientist)** |  | 1885-1962 (1913) |
| **Democritus (Philosopher)** |  | 1766-1844 (1803) |
| **Niels Bohr (Scientist)** |  | 1891-1974 (1920) |
| **Aristotle (Philosopher)** |  | 460-370 BC |
| **Ernest Rutherford (Scientist)** |  | 1871-1937 (1909) |
| **James Chadwick (Scientist)** |  | 384-322 BC |
| **John Dalton (Scientist)** |  | 1856-1940 (1897) |

**Atomic Theory Statements**

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| Matter is made of tiny particles called *atomos* that exist in empty space. | A |
| Atoms contain smaller, negatively charged particles known as electrons. | B |
| Electrons move freely in the space surrounding the nucleus in an atom. | C |
| Electrons surrounding the nucleus can only occupy specific “energy levels” or “energy shells”. Electrons in larger shells have higher energy. | D |
| All atoms of the same element are identical in size, mass, and chemical properties. | E |
| Atoms are not indivisible. | F |
| Different atoms combine to form compounds. | G |
| Empty space cannot exist. *(Note: he was incorrect)* | H |
| All matter is made of extremely small particles called atoms. | I |
| The nucleus contains positively charged particles (protons) and neutral particles (neutrons). | J |
| The atom is a “blueberry muffin” or “plum pudding”: a positively charged ball with negatively charged electrons embedded in it. | K |
| Atoms cannot be created, destroyed, or divided. | L |
| *Atomos* cannot be created, destroyed, or divided. | M |
| Atoms have a dense, positively charged nucleus that is very small compared to the size of the atom. | N |