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

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

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 <u>incorrect</u>)*	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