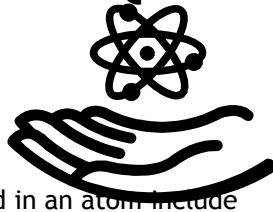


ACC- Parts of an Atom Quiz



151. All elements are made of...
- molecules.
 - elements.
 - compounds.
 - atoms.
152. The sub-atomic particles found in an atom include
- protons.
 - neutrons.
 - electrons.
 - All of the above.
153. A substance made up of only **one** kind of atom is called a(n)
- mixture.
 - solution.
 - element.
 - compound.
154. The dense, central core of an atom containing the protons and neutrons is called the _____.
- element
 - neutron
 - molecule
 - nucleus
155. This part of the atom has a **negative** charge.
- Proton
 - Neutron
 - Electron
 - Nucleus
156. This part of the atom has a **neutral** charge.
- Proton
 - Neutron
 - Electron
 - Nucleus
157. This part of the atom has a **positive** charge.
- Proton
 - Neutron
 - Electron
 - None of the above
158. The majority of the **mass** of an atom is located in the _____.
- Proton
 - Neutron
 - Electron
 - Nucleus
159. This part of an atom can be used to identify the atom.
(*Hint: If you change even one of these, you get an entirely new atom!)
- Protons
 - Neutrons
 - Electrons
 - Nucleus
160. The mass of this part of the atom is so small, that it does not contribute towards the overall Atomic Mass.
- Protons
 - Neutrons
 - Electrons
 - Nucleus
161. What do you find when you add the total number of protons in an atom, to the atom's total number of neutrons?
- Atomic Number
 - Atomic Symbol
 - Atomic Mass
 - None of the above
162. This number describes how many protons an element has.
- Atomic Number
 - Atomic Symbol
 - Atomic Mass
 - None of the above
163. The atom is made up of mostly...
- Protons.
 - Neutrons.
 - Electrons.
 - Empty space.
164. An oxygen atom and a carbon atom are two different elements because they have a different number of what?
- Protons
 - Electrons
 - Neutrons
 - They aren't different.
- Use the following information to help you solve problems 15-17.*
The element Cobalt (Co) has an Atomic Number of 27, and an Atomic Mass of 58.933 amu. (*Use 59 amu for your calculations.)
165. How many **protons** are in one atom of Cobalt?
- 29
 - 27
 - 32
 - 86
166. How many **neutrons** are in one atom of Cobalt?
- 29
 - 27
 - 32
 - 86
167. How many **electrons** are in one atom of Cobalt?
- 29
 - 27
 - 32
 - 86
168. Which of the following is an example of a **molecule**?
- H₂O
 - NH₄
 - H₂
 - All of the above
169. Which of the following is an example of a **compound**?
- N₂

- b. HCl
- c. O₂
- d. All of the above

170. Which of the following is a **diatomic molecule**?

- a. O₃
- b. H₂O
- c. Cl₂
- d. All of the above

True/False:

Mark 'A' for True and 'B' for False on your scantron

171. T/F ____ All electrons are found the **same distance** from the nucleus.

172. T/F ____ The speed and location of any electron can be determined at any particular moment.

173. T/F ____ Based on the **current model**, electrons travel in distinct paths called orbitals.

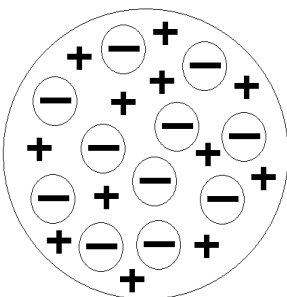
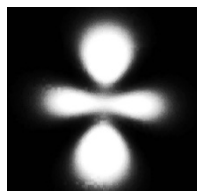
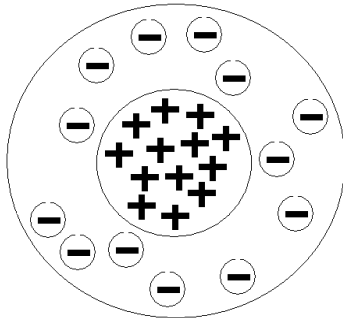
Matching: Scientist to Discovery- #174-179

Match each of the scientists to their major discovery relating to the development of the atom. (6 pts)

- A. Discovered that the atom is made up of mostly empty space, with a dense, positively charged nucleus in the center.
- B. Stated that atoms cannot be broken down, and that all atoms of the same element are identical, while elements of varying elements are different.
- C. Hypothesized that it is impossible to determine the location or speed of an electron as it orbits the nucleus and electron are found in clouds.
- D. Discovered the presence of a negatively charged electron.
- E. Established the concept of orbitals, and the idea that electrons orbit the nucleus in distinct shells with different energy levels.
- AB. Hypothesized the existence of the atom, and stated that all things on earth are made up of atoms.

- 174. Democritus
- 175. John Dalton
- 176. J. J. Thomson
- 177. Ernest Rutherford
- 178. Niels Bohr
- 179. Louis de Broglie & Erwin Schrödinger

****NOTE**** You have choices of A, B, C, D, E, and AB. A, B, C, D, and E you will only fill in that letter. However, for AB, you need to fill in

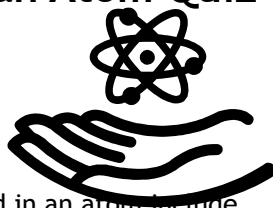
<p>A.</p> 	<p>B.</p>
	<p>D.</p> 
<p>E.</p> 	

- 180. Billiard Ball Model
- 181. Planetary Model
- 182. Solid Sphere Model ("Atomos")
- 183. Electron Cloud Model ("Quantum Mechanical Model")
- 184. Plum Pudding Model
- 185. Bohr Model

Science 8- Parts of an Atom Quiz

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- a. molecules.
- b. elements.
- c. compounds.
- d. atoms.



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- d. 86

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- a. 29
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- c. 32
- d. 86

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- b. NH₄
- c. H₂
- d. All of the above

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- b. HCl
- c. O₂
- d. All of the above

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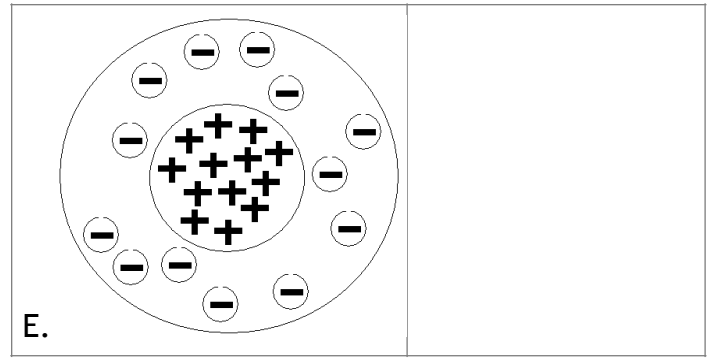
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Matching: Scientist to Discovery- #170-175

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- 176. Billiard Ball Model
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- 179. Plum Pudding Model
- 180. Bohr Model

****NOTE**** You have choices of A, B, C, D, E, and AB. A, B, C, D, and E you will only fill in that letter. However, for AB, you need to fill in

<p>A.</p>	<p>B.</p>
	<p>D.</p>

