

CONCEPT REVIEW

1

Atoms and atomic models

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PAGES 6-17

Complete this concept review handout and keep it as a record of what you have learned.

Definitions

- An atom is _____
- The electron is _____
- The proton is _____
- The neutron is _____

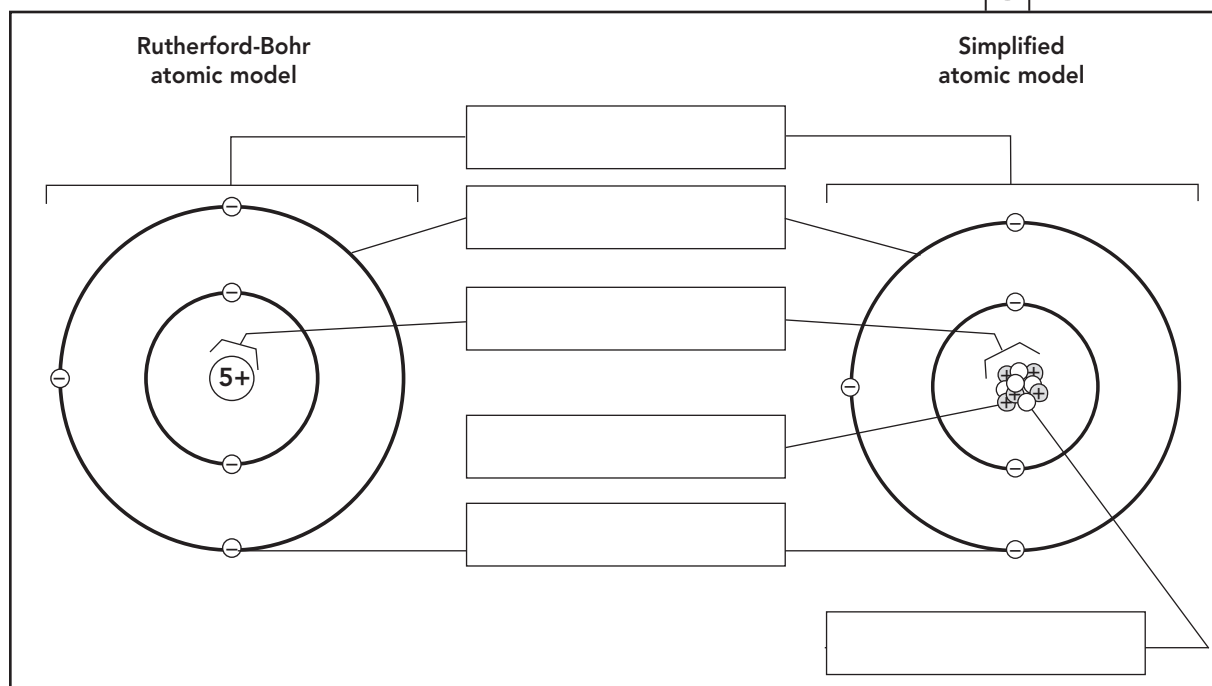
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Characteristics of atomic particles

Particle	Symbol	Electrical charge	Mass (g)	Mass (u)
			9.109×10^{-28}	0.00055
			1.673×10^{-24}	1.007
			1.675×10^{-24}	1.008

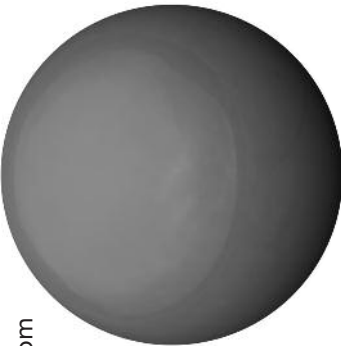
Parts of the atom

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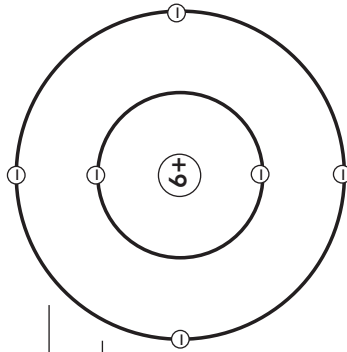


1808 Dalton's atomic model

According to Dalton, the atom is like a billiard ball—solid and indivisible.



1913 Rutherford-Bohr atomic model

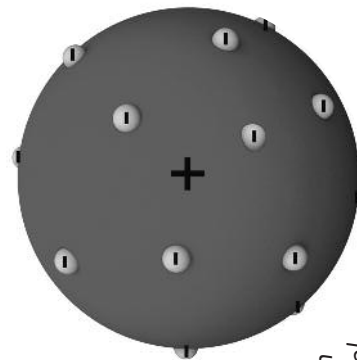


1897 Thomson's atomic model

Thomson modified Dalton's atomic model by describing the atom as a positively charged ball embedded

with small negatively charged particles, namely, electrons.

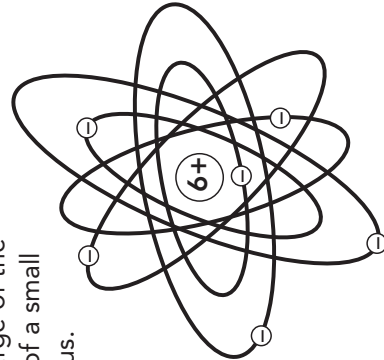
Thomson's version is often referred to as the *plum pudding model*.



1911 Rutherford's atomic model

Rutherford modified Thomson's atomic model by imagining the entire positive charge of the atom in the form of a small but massive nucleus.

The negatively charged electrons circle the nucleus.



After 1932 Simplified atomic model

