

Name: _____

Class/Period: _____

Assignment: 9-24 and 9-25

Teacher: Thibodeau

1 The results of the gold foil experiment led to the conclusion that an atom is

- 1 mostly empty space and has a small, negatively charged nucleus
- 2 mostly empty space and has a small, positively charged nucleus
- 3 a hard sphere and has a large, negatively charged nucleus
- 4 a hard sphere and has large a large, positively charged nucleus

2 The discovery of the electron as a subatomic particle was a result of

- 1 collision theory
- 2 kinetic molecular theory
- 3 the gold-foil experiment
- 4 experiments with cathode ray tubes

3 Four statements about the development of the atomic model are shown below.

A: Electrons have wavelike properties.

B: Atoms have small, negatively charged particles.

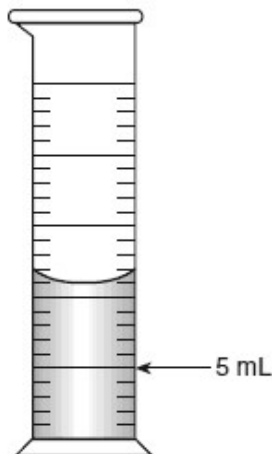
C: The center of an atom is a small, dense nucleus.

D: Atoms are hard, indivisible spheres.

Which order of statements represents the historical development of the atomic model?

- 1 $C \rightarrow D \rightarrow A \rightarrow B$
- 2 $C \rightarrow D \rightarrow B \rightarrow A$
- 3 $D \rightarrow B \rightarrow A \rightarrow C$
- 4 $D \rightarrow B \rightarrow C \rightarrow A$

4 How much water should be added to the graduated cylinder shown below to increase the volume to 15 milliliters?



- 1 11 mL
- 2 10 mL
- 3 3 mL
- 4 4 mL

5 The basic unit of length in the metric system is the

- 1 kilogram
- 2 gallon
- 3 liter
- 4 meter