Year 9 Science: Atomic theory: Rutherford, Bohr and the parts of an atom

Name: _____ Date: _____

Try these without your notes first, then check the answer key.

Practice

1. How many protons and electrons are in a neutral atom of magnesium, atomic number 12?

2. An atom has 7 protons. Name the element.

3. In the gold foil experiment, why did most alpha particles pass straight through the foil?

4. Which particle did Thomson's plum pudding model include, and which part did Rutherford add?

5. A particle has 17 protons and 18 electrons. What is its overall charge?

Fix the mistake

6. Correct this statement: "Some alpha particles bounced back, so the gold foil experiment showed atoms are solid."

7. Correct this statement: "Electrons sit in the nucleus with the protons."

8. Correct this statement: "Neutrons are the negative particles."

9. Correct this statement: "Atomic number means protons plus neutrons added together."