

Atoms

(PH: Chapter 4, section 1)

Name _____
Period _____

1. An _____ is the basic particle of an element.

2. Diagram and describe atomic models of the following scientists:

a) Dalton

.....
b) Thomson

.....
c) Rutherford

.....
d) Bohr

3. An _____ is a negatively charged particle found outside the nucleus of an atom.

4. A _____ is the center of an atom that contains protons and neutrons.

5. A _____ is a small particle in the nucleus of an atom that has a positive charge.

6. An electron's _____ is the specific amount of energy an electron has.

7. A _____ is a small particle in the nucleus of an atom with no electrical charge.

8. Diagram and describe the modern atomic model.

9. Why are atoms neutral? How do neutrons affect the charge of an atom? Explain.

10. How do protons, electrons, and neutrons compare in mass?

11. The _____ (_____) is the unit used to measure atoms.

12. What makes up most of the volume of an atom?

13. The _____ is the unique number of protons in the nucleus of an atom.

a. What is used to identify an element?

14. _____ are atoms with the same number of protons and a different number of neutrons.

15. What are the three isotopes of carbon? How many protons, electrons, and neutrons does each have? (Make a chart or diagrams)

16. The _____ is the sum of the protons and neutrons in the nucleus of an atom.