

# Atoms Study Guide

(Chapter 4, section 1)

Name \_\_\_\_\_

Period \_\_\_\_\_

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1. What is an atom?

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

a) Dalton

.....  
b) Thomson

.....  
c) Rutherford

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d) Bohr

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3. What is an electron?

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4. What is a nucleus?

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5. What is a proton?

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6. What is an electron's energy level?

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7. What is a neutron?

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8. Diagram and describe the modern atomic model.

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

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10. How do protons, electrons, and neutrons compare in mass? What units are used to measure atoms?

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

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12. What is the atomic number of an element? What is used to identify an element?

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