Bauck's CHEMISTRY Ch. 2 Test Review

This is an optional assignment due the day of the test.

Materials: loose leaf paper, pen and pencil, and a calculator
Test date: _____
Test value: 200 points
Test format:

multiple choice
chart questions (protons, neutrons, electrons, atomic number, mass number)
electron dot diagrams (Lewis structures)
"thought questions" (short essays)

Topics:

1) **Amplitude** (of waves)—What is this?
2) **Aristotle**—What was his role in the early ideas of atoms?
3) **Atomic neutrality**—What is it?
4) **Atomic number**—What is it? How do you find it on the periodic table?
5) **Cathode rays**—What do these contain?
6) **Crest**—What is it? Contrast with trough.
7) **CRT**—What is it?
8) **Dalton's atomic theory**—What are the main points? (See the notes)
9) **Democritus**—What was his role in the early ideas of atoms?
10) **Electron**—What is its charge? Where is it located? What is its relative mass compared to neutrons and protons?
11) **Electron dot (Lewis) diagrams**—Be able to draw the electron dot diagram of various atoms. Use the method given in the notes. Give an example for this review.
12) **Em radiation**—What is "em"? List the types of em radiation in the proper order of increasing energy.
13) **Excited state**—What is this? Contrast to ground state.
14) **Frequency** (of waves)—What does this measure? How does this relate to wavelength?
15) **Ground state**—What is this? Contrast to excited state.
16) **Isotopes**—What are they? Be able to recognize examples.
17) **Law of Conservation of Matter**—What does this law state? Be able to apply the law to a simple lab situation
18) **Law of Definite Proportions**—What is this? How does this apply to a simple formula such as NH_3?
19) **Mass number**—What is it? How is it calculated?
20) **Neutron**—What is its charge? Where is it located? What is its relative mass compared to electrons and protons?
21) **Proton**—What is its charge? Where is it located? What is its relative mass compared to electrons and neutrons?
22) **Rutherford's gold foil experiment**—What did this prove? How was it set up? Give a simple sketch of what happened.
23) **Subatomic particles**—How many are there? What are the three important ones?
24) **Trough**—What is it? Contrast with crest.
25) **Valence**—What is this? How does this apply to electrons?
26) **Wave** drawing: Be able to draw a wave with specific dimensions.
27) **Wavelength** (of waves)—What does this measure? How does this relate to frequency?
28) **Wave-particle duality** of nature—What does this mean?