

## Bauck's CHEMISTRY Ch. 1, part 1 Test Review

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

Materials: loose leaf paper, pen, pencil  
Test date: \_\_\_\_\_  
Test value: 200 points  
Test format: true-false, multiple choice; short answers

Topics:

- 1) **Branches of chemistry** (from the notes): List them. Know a key concept about each.
- 2) **CFCs (chlorofluorocarbons)**—What are they? What is the main concern about CFCs in the atmosphere? Why is their study and monitoring important?
- 3) **Conclusion**—How does this fit into the scientific method?
- 4) **Control group**—What is it? Compare and contrast with **experimental group**.
- 5) **Data**—What is it? Compare and contrast **qualitative** and **quantitative** information.
- 6) **Experiment**—What is it?
- 7) **Hypothesis**—What it is? Can it be proven? How does it fit into an experiment?
- 8) **Mass**—What is it? Compare and contrast with **weight**.
- 9) **Matter**—What is it? How does it relate to **mass**?
- 10) **Observation**—What is it? Compare and contract **direct** and **indirect** observations.
- 11) **Ozone**—What is it? What is its chemical formula? What is its main function in the upper atmosphere? Why is its study important?
- 12) **Research**—Contrast **pure research** and **applied research**. What is the significance of research to science?
- 13) **Scientific law**—What it is? Can it be proven? How does it fit into an experiment? Contrast with **hypothesis** and **theory**. Give a famous example.
- 14) **Scientific method**—What is it? How is it used?
- 15) **Scientific model**—What is it? Give an example.
- 16) **Substance**—What is it? Give an example.
- 17) **Theory**—What is it? Can it be proven? How does it fit into an experiment? Give a famous example.
- 18) **Variables**—What are they? Compare and contrast **independent** and **dependent** variables.

General comments:

- There is a substantial amount of material on the nature of science (the scientific method and experimental design).
- The test is not just vocabulary definitions. You will have to apply knowledge and synthesize information.