

**Bauck's CHEMISTRY Ch. 1 part 2 Test Review**  
*This is an optional assignment due the day of the test.*

Materials: loose leaf paper, pencil, calculator (clear memory if applicable)

Test date: \_\_\_\_\_

Test value: 200 points

Test format: all math problems and calculations...

metric conversions (practices 1-2), density (practice 3), sig.figs. (practice 4), mole D.A. (practice 5),  
general D.A. (practice 5)

Equations you will be given:	$K = C + 273.15$	$D = M/V$
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Topics:

- 1) **Absolute zero**— What is it? What is its significance?
- 2) **Accuracy**—What is it? Compare and contrast with **precision**.
- 3) **Base unit**— What is it? Give examples for the base units of length, mass, time, temperature, and amount of substance.
- 4) **Conversion factor**—What is it? How are they used in calculations? Give an example of a common conversion factor.
- 5) **Density**— What does this measure? (Be able to solve the density equation for D, M, or V.)
- 6) **Derived unit**— What is it? Compare and contrast with **base unit**. Give three examples from the notes.
- 7) **Mass**—What does this measure? Give three examples of mass units. (Be able to recognize and work with various mass units.)
- 8) **Metrics**—What do the following abbreviations mean?: k, h, da, d, c, m (Be able to convert from one metric prefix to another.)
- 9) **Scientific notation**—How does this work? Give an example.
- 10) **Significant figures** (“Sig.Figs.”)—Why are these used in science calculations? (Be able to determine the number of sig.figs and calculate problems to the correct amount of sig.figs.)
- 11) **Temperature**—What does it measure? Give three examples of temperature scales from the notes. (Be able to recognize and work with various temperature units.)
- 12) **Volume**—What does this measure? Give three examples of volume units. (Be able to recognize and work with various volume units.)
- 13) Math Problems... For this review, give an example of a solved math problem for each of the following:
  - a. Density
  - b. Dimensional Analysis with time, distance, or metrics
  - c. (Mole → gram) or (gram → mol) DA
  - d. (Mole → liter) or (liter → mol) DA
  - e. (Mole → particle) or (particle → mol) DA
  - f. Metric prefix conversions
  - g. Scientific notation
  - h. Significant figures
  - i. Temperature conversions using  $K = C + 273$

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\*\*\* Note: There will be at least one question pertaining to material in past chapter(s) or unit(s). \*\*\*