

Bauck's CHEMISTRY Ch. 10 Test Review

This is a 10/10 optional assignment due the day of the test.

- Materials:** loose leaf paper, pen and/or pencil, calculator
(You will be given a periodic table.)
- Test date:** _____
- Test value:** 200 points
- Format:** math problems, writing/balancing equations: three-step DA, limiting reactant question with 4 parts, long % yield, short % yield, chemical equations to write/complete/balance

BACKGROUND INFO:

- 1) What is the numerical value for **Avogadro's number**?
- 2) How do you know when to use **Avogadro's number** in calculations?
- 3) List the four types of **representative particles**. Give an example of each.
- 4) What is the **molar volume** of a gas at STP? What is the number of liters used?
- 5) Why is "**molar mass**" the same as **grams per mole, GFM** and **GMM**?

MATH PROBLEMS: Include one example of each numbered category for this review.

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|---|--|
| 6) Mole-mole | mol A \rightarrow mol B |
| 7) Mole-mass
or Mass-mole | mol A \rightarrow g B
g A \rightarrow mol B |
| 8) Mole-particle
or Particle-mole | mol A \rightarrow r.p. B
r.p. A \rightarrow mol B |
| 9) Mole-volume
or Volume-mole | mol A \rightarrow L B
L A \rightarrow mol B |
| 10) Mass-mass | g A \rightarrow g B |
| 11) Volume-volume | L A \rightarrow L B |
| 12) Particle-particle | r.p. A \rightarrow r.p. B |
| 13) Mass-Particle
or Particle-Mass | g A \rightarrow r.p. B
r.p. A \rightarrow g B |
| 14) Volume-Particle
or Particle-Volume | L A \rightarrow r.p. B
r.p. A \rightarrow L B |
| 15) Mass-Volume
or Volume-Mass | g A \rightarrow L B
L A \rightarrow g B |

- 16) There are chemical reactions on the test:
There will be equations to balance.
Some have to be constructed from words, without products given.
Some will be given to you already balanced.

For this review, give an example of a balanced equation, a skeleton (unbalanced) equation, and an equation in words which you construct and balance.

*** Note ***

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