

Name _____ Period _____

The following definitions of task verbs that are commonly used in the free-response questions is taken from the Course and Exam Descriptions for AP chemistry.

Calculate: Perform mathematical steps to arrive at a final answer, including algebraic expressions, properly substituted numbers, and correct labeling of units and significant figures.

Describe: Provide the relevant characteristics of a specified topic.

Determine: Make a decision or arrive at a conclusion after reasoning, observation, or applying mathematical routines (calculations).

Estimate: Roughly calculate numerical quantities, values (greater than, equal to, less than), or signs (negative, positive) of quantities based on experimental evidence or provided data.

Explain: Provide information about how or why a relationship, process, pattern, position, situation, or outcome occurs, using evidence and/or reasoning to support or qualify a claim. Explain “how” typically requires analyzing the relationship, process, pattern, position, situation, or outcome; whereas, explain “why” typically requires analysis of motivations or reasons for the relationship, process, pattern, position, situation, or outcome. Also phrased as “give one reason.”

Identify/Indicate/Circle: Indicate or provide information about a specified topic in words or by circling given information. Also phrased as “What is?” or “Which?” or other interrogatory words.

Justify: Provide evidence to support, qualify, or defend a claim and/or provide reasoning to explain how that evidence supports or qualifies the claim.

Make a claim: Make an assertion that is based on evidence or knowledge.

Predict/Make a prediction: Predict the causes or effects of a change in, or disruption to, one or more components in a relationship, pattern, process, or system.

Represent/Draw/Write an Equation/Complete a Diagram: Use appropriate graphs, symbols, words, and/or models to describe phenomena, characteristics, and/or relationships.

You will have a summative assessment over these definitions.

Name _____ Period _____

Match the term with the action.

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|---|--|
| _____ 1) Algebraic expressions and properly substituted numbers | A. Calculate |
| _____ 2) Circling given information | B. Describe |
| _____ 3) Correct labeling of units and significant figures | C. Determine |
| _____ 4) Decide or arrive at a conclusion | D. Estimate |
| _____ 5) Determine if values are greater than, equal to, less than | E. Explain |
| _____ 6) Determine signs (negative, positive) of quantities based on experimental evidence or provided data | F. Explain "how" |
| _____ 7) Indicate or provide information about a specified topic in words | G. Explain "why" |
| _____ 8) Make an assertion that is based on evidence or knowledge | H. Identify/Indicate/Circle |
| _____ 9) Perform mathematical steps to arrive at a final answer | I. Justify |
| _____ 10) Predict the causes or effects of a change in | J. Make a claim |
| _____ 11) Predict the effects of a disruption to one or more components in a relationship, pattern, process, or system. | K. Predict/Make a prediction |
| _____ 12) Provide evidence to support, qualify, or defend a claim | L. Represent/Draw/Write an Equation/Complete a Diagram |
| _____ 13) Provide information about how or why a relationship, process, pattern, position, situation, or outcome occurs | |
| _____ 14) Provide reasoning to explain how that evidence supports or qualifies the claim. | |
| _____ 15) Provide the relevant characteristics of a specified topic | |
| _____ 16) Roughly calculate numerical quantities | |
| _____ 17) Typically requires analysis of motivations or reasons for the relationship, process, pattern, position, situation, or outcome. Also phrased as "give one reason." | |
| _____ 18) Typically requires analyzing the relationship, process, pattern, position, situation, or outcome | |
| _____ 19) Use appropriate graphs to describe phenomena | |
| _____ 20) Use appropriate models to describe relationships | |
| _____ 21) Use appropriate symbols and words to describe characteristics of a object or process | |
| _____ 22) Using evidence and/or reasoning to support or qualify a claim | |