**S-31**

*Review Topics and One Pager   
Instructions on back of this paper. Do   
the One Pager on this side of the page.*

**Name: Period: Seat#:**

**This is a general list of some of the topics we have covered this chapter. These are suggested study topics, not a definitive list. You can/will be assessed on not just whether you have memorized the material, but also if you can apply the information to a new scenario/situation/context/example. Remember – there is a difference between “knowing” something and truly “understanding” something – memorization vs applying!**

* Collision Theory
* Rates (positive for products, negative for reactants)
* Factors that affect rate
* Activation Energy
* Catalysts
* Reaction Mechanism
* Rate Determining Step
* Graphing changes in concentration over time
* Rate Expressions
* Average Rate
* Instantaneous Rates
* Reaction Orders (what are they and finding them)
* Rate Law for single step reactions
* Rate Laws based on data
* Rate Constant (what is it, units, calculating it)
* Using rate laws to solve for one of the variables

One Pager Instructions

A one-pager is a written ***and*** graphic interpretation of what you’ve learned presented on a single sheet of paper. In this case, you will demonstrate that you have successfully practiced strategies commonly used by effective learners. The one-pager will help showcase your thoughts and will provide a reference for later review or further study of the topics.

**Guidelines:**

* Fill the entire paper - minimize the white space in a meaningful way!
* Must represent all topics from chapter.
* Writing must be in ink, no pencil.
* Use color for illustrations.
* Include all required information   
  (arrange it on page any way you choose).
* Must show higher level THINKING and PROCESSING of the information, not just regurgitating every fact you learned.
* Needs to show a high level of effort, detail, thought, and care. This is not something you scribble out during brunch before class starts!
* Must be clear, easy to read, understandable

**Required Information – MUST LABEL SECTIONS AND USE BOXES TO SEPARATE SECTIONS**

* Chapter number and title
* Five most important vocabulary words/terms
* Key equations (with names of equations if applicable).
* List of key big concepts/topics (not vocab words)
* Explanations of words or ideas that correspond to the chapter
* A “warning” or “tips” section
* Visual representations of the important aspects of the chapter
* Two higher level questions about the concepts INCLUDING answers. These are not *calculations* to solve.
* Two annotated/explained “representative practice problems” for any topics related to math. Needs to be more than just listing the steps – that isn’t explaining anything! If no math in the chapter then does not need to be included.

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| --- | --- | --- | --- | --- | --- |
| 5 | 4 | 3 | 2 | 1 | 0 |
| All expectations and required elements were followed/included | Many expectations and required elements followed/included | Some expectations and required elements were followed/ included. | Few of the expectations and required elements were followed/ included. | Very few of the expectations and required elements were followed/ included. |  |
| Elements done in an extremely detailed and high level manner. | Elements done in a detailed and high level manner. | Elements lacking detail or not done in a high level manner. | Elements significantly lacking detail or not done in a high level manner. | Elements significantly lacking detail or not done in a high level manner. |  |
| Demonstrates deep and substantial understanding of the material. | Demonstrates a significant understanding of the material. | Demonstrates a moderate understanding of the material. | Demonstrates a superficial understanding of the material. | Does not demonstrate understanding of the material. |  |
| A significant honors level effort and detail shown. | An attempt at an honors level effort and detail shown. | A greater attempt at an honors level effort and detail needed. | A greater attempt at an honors level effort and detail needed. | A greater attempt at an honors level effort and detail needed. |  |