

**Dougherty Valley HS Chemistry**  
**Chapter #12 – Review Topics and One Pager**

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



**Name:**

**Period:**

**Seat#:**

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## Dougherty Valley HS Chemistry Chapter #12 – Review Topics and One Pager

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.

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.	