

SCH4U Daily Assignments

Here is a comprehensive list of daily assignments that will be assigned in this course.

- Please keep all your Daily Assignments together in one binder section, neatly labeled with the numbers and headings given below. Your work will be monitored periodically.
- Daily Assignment completion is essential to your understanding of the course material, and is worth 10% of your final grade.
- Chapter and Unit Review questions are *highly* recommended – you do not have to complete *all* of them, they are meant as a self-assessment and skills-improvement tool. Solutions to these problems can be downloaded from the course website.

It is essential that you spend time outside of class contemplating the course material. Daily Assignments are designed to give you an opportunity to develop and practice new skills, and to learn new material being taught in the course.

Daily Assignment completion is not an option – it is crucial to your success in this course. It will also be assessed based on the following rubric and is worth 10% of your final grade.

To facilitate this, your daily assignments *must be on a separate sheet of paper, with clearly titled assignments*. Be prepared to submit your Daily Assignments with one day's notice.

Daily Assignments: Assessment Of Learning Rubric

	Level 1	Level 2	Level 3	Level 4
Completeness /10	Less than ½ of all items attempted or completed.	At least ½ of all items attempted or completed.	At least ¾ of all items attempted or completed.	All items attempted or completed.
Knowledge and Understanding /5	Work contains significant errors; little effort put into corrections.	Work has merit but may contain significant errors; some effort towards making corrections.	Work is largely correct.	Work is correct or has only minor, inconsequential errors.
Communication /5	Communicates information and ideas with limited clarity and precision.	Communicates information and ideas with moderate clarity and precision.	Communicates information and ideas with considerable clarity and precision.	Communicates information and ideas with a high degree of clarity and precision.
	Writing is not legible, items are out of order, work is generally messy.	Writing is not legible in places, some items are out of order, or work is generally messy.	Writing is legible, items are in order, work is generally neat.	Writing is legible, items are in order, work is exceptionally neat, orderly and presentable.
Thinking and Inquiry /5	Work does not address the question(s).	Work partially addresses the question(s) or gives some explanation.	Work addresses the question asked and provides a detailed explanation to support solution.	Work addresses the question(s) asked and provides a detailed and focused explanation to support solution. Key ideas are emphasized and only relevant information is included

Unit 1 – Structure and Properties

Big Ideas:

- The nature of the attractive forces that exist between particles in a substance determines the properties and limits the uses of that substance.
- Technological devices that are based on the principles of atomic and molecular structures can have societal benefits and costs.

Assignment Number	Assignment	Complete	Level
1	- p.158-159 #5-9,11 - read 'Tao of Physics' excerpt; underline/highlight names, concepts		
2	- read text sections 3.1-3.4 - p.166 #3-5,11 - p.180 #1,2,5		
3	- read text sections 3.5-3.6 - p.191 #1,3,4 - p.194 #6-8,11		
4	- p.197 #4,9,10,13 - p.202 #1,2,5 - read text section 3.7		
5	- Chapter 3 Review: p.219 Self Quiz - p.220 #5,6,8,12,13,15,17 - read text p.207-208		
6	- p.227 #3-5 - p.229 #10,12		
7	- p.246-249 #2,3,9,10,11abf - p.250 #1-3		
8	- VSEPR – 10 Shapes		
[9]	- p.253-255 #1-3,6 (polarity),8,10 - p.256 #1a,b,d		
10	- read text p.262-266 - p.264 #9	- p.260 #1-3 - p.266 #4,5,7	
11	- p.273 #2,3,5,7,8 - p.276 #3-6,9		
12	- Chapter 4 Review: p.281 Self Quiz - p.282 #3,5,7-10,14-22,25		
13	- Unit 1 Review: p.286 #1-40 (MC/TF) - p.288 #1,2,9,13,14,16,20,25,26,27,32		

Unit 2 – Organic Chemistry

Big Ideas:

- Organic compounds have predictable chemical and physical properties determined by their respective structures.
- Organic chemical reactions and their applications have significant implications for society, human health, and the environment.

Assignment Number	Assignment	Complete	Level
1	- read text sections 1.1 and 1.2 - p.15-21 practice problems 1,2bce,4,5,6ace,7,8ace - p.22 #1-4		
2	- read text section 1.3 - p.27-30 practice problems 1-3,5,6 - p.31 #4		
3	- p.33-37 practice problems 1,2ac,6ace - p.37 #1,3		
4	- p.41-48 practice problems 1,2,4,5,7,8,11,13 - p.48 #3,4,6		
5	- p.51-56 practice problems 1-7		
6	- p.60-68 practice problems 1,2,5,11,12,14		
7	- p.72-77 #2-7		
8	- p.82 #1defg,2-4		
9	- Chapter 1 Review: p.95 Self Quiz - p.96 #1,2,5,7ace...,8ace...,14,16ab		
10	- p.102 #1-3 - p.107 #1,3,6,7 - p.113 #1,3,5		
11	- review text sections 2.4-2.7 Practice Problems on - p.124 #4,6 - p.128 #2,3 - p.131 #1-5 - p.136 #1-5		
12	- Chapter 2 Review: p.145 Self Quiz - p.146 #1-3,10,11		
13	- Unit 5 Review: p.150 Self Quiz - p.152 #1-3,6-8,10,11,20,21		

Unit 3 – Chemical Systems and Equilibrium

Big Ideas:

- Chemical systems are dynamic and respond to changing conditions in predictable ways.
- Applications of chemical systems at equilibrium have significant implications for nature and industry.

Assignment Number	Assignment	Complete	Level
1	- p.428 #1-5 - read text section 7.1		
2	- p.437 #6,7 - p.438 #7 (not c)		
3	- p.442-447 #1,2,4,6,7 - p.448 #1,4,6 - read text section 7.2		
4	- read text sections 7.3 and 7.4 - p.459 #6,10	- p.457 #1-4 - p.462 #3,4 (practice)	
5	- p.465-480 practice problems 2,4,6,7,10 - p.481 #5,7		
6	- p.486 #3,4 - p.492 #7,10,11	- p.489 #5 - p.493 #1,8(good one!),11	
7	- Chapter 7 Review: p.522 Self Quiz - p.523 #3-6,10,13,15,18,19		
8	- read text p.528-550, define bolds - p.532-549 practice problems 1,2,5,8,10,12,14,18		
9	- p.554-578 practice problems 4,6,7,10,13,14		
10	- p.588-591 practice problems 2,9 - p.594 #1-3,5		
11	- p.599-613 practice problems 1-3,5,6,7,10		
12	- p.620 #2,3 practice - p.620 #3,6,7		
13	- Chapter 8 Review: p.631 Self Quiz - p.632 #1,7,9,15,18		
14	- Unit 3 Review: p.636 Self Quiz - p.639 #1-4,6,7,11,12,17,21,22,32,33,35,38,40,41,45,50,52,57		

Unit 4 – Energy and Rates

Big Ideas:

- Energy changes and rates of chemical reactions can be described quantitatively.
- Efficiency of chemical reactions can be improved by applying optimal conditions.
- Technologies that transform energy can have societal and environmental costs and benefits.

Assignment Number	Assignment	Complete	Level
1	- read p.298-301 define bold terms - p.300 #1,4,5 (- p.302 #8,9,12)		
2	- read p.302-305 - p.304 #14,15 - p.305 #1,3-6		
3	- read text section 5.2 (- p.308 #1,3 - p.310,11 #4,6,7,10) - p.312 #1,3		
4	- read text section 5.3 - p.319 #1-3 - p.320 #1,2,3		
5	- read text p.327-329 - p.326 #1-3 - p.329 #4,5		
6	- p.332 #1 - p.335 #2,5 - p.338 #7,9 } (note: use data tables p.799-800)		
7	- p.346 practice 3 - p.355 Self Quiz - p.356 #3-6,9,11,15,16e		
8	- p.364 #3,4 - p.365 #8 - p.366 #2 - p.371 #1		
9	- read text sections 6.4 and 6.5 - p.391 #1-3		
10	- p.400 #1,2		
11	- Chapter 6 Review: p.407 Self Quiz - p.408 #1,4,5,7,9,11-14		
12	- Unit 2 Review: p.412 Self Quiz - p.414 #1-3,5,6,10,17,26		

Unit 5 – Electrochemistry

Big Ideas:

- Oxidation and reduction are paired chemical reactions in which electrons are transferred from one substance to another in a predictable way.
- The control and applications of oxidation and reduction reactions have significant implications for industry, health and safety, and the environment.

Assignment Number	Assignment	Complete	Level
1	- read text section 9.1 - p.653-662 practice problems 1-4,8,9,11,12-14,19		
2	- p.678-679 practice problems 10,15 - p.680 #23 - p.683-684 #5,6,9		
3	- p.700 #2,3,5-7		
4	- p.708 #10,11,6 - p.709 #3,7		
5	- p.714 #1-3,6,8,10		
6	- Chapter 9 Review: p.725 Self Quiz - p.726 #2-4,9,12,13,15,20,22		
7	- read text section 10.1, define bolds - p.735 #1-3		
8	- p.736 #2,4-7 - p.741-744 practice problems 3-5,9 - p.746 #4,6,8		
9	- p.751 #8 - p.752 #9,10		
10	- Chapter 10 Review: p.759 Self Quiz - p.760 #1,2 (<u>not</u> 3-5), 6a,7-10,13,15		
11	- Unit 4 Review: p.764 Self Quiz - p.766 #1,3,4,13,16,18,24,26-28,31,32,34		