**Honors Chemistry II Unit 6 Tentative Agenda** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Reactions

| **Date** | **Agenda** |
| --- | --- |
| Monday 11/25 | * Go over Unit 5 Test. * Begin Reactions Notes (CH 4) * HW:   + Read Chapter 4   + Begin Mastering (1-15) Work on this as we go and ask me questions as you go. You will learn more this way☺ Some of the net ionic equations in this section are hard. You will probably need help. No whining on the night it’s due. (You are welcome to ASK QUESTIONS and whine a little, if needed, all other days.)   + Start studying polyatomic ions. |
| Tuesday 11/26 | * CH 4 Notes * 16.2 & 16.11 Notes * HW:   + Read section 16.2 and 16.11   + Mastering (16-30) |
| Monday 12/2 | * Finish Notes/Mastering Day * HW:   + Mastering (31-45) |
| Tuesday 12/3 | * Reactions Quiz (Chapter 4, 16.2, 16.11) * Turn in Pre/Post Questions for   + Ester Lab   + Pain Relief Mixture Lab * Start Lab: Titration of Hydrogen Peroxide * HW:   + Mastering (46-60) |
| Wednesday 12/4 | * Lab: Titration of Hydrogen Peroxide * HW:   + Mastering (61-75) |
| Thursday 12/5 | * Finish Lab: Titration of Hydrogen Peroxide * Unit 6 Review * Mastering in Class * HW:   + Mastering (76-81) |
| Friday 12/6 | * Begin Unit 7 (Stoichiometry)   + Stoichiometry and Reactions will have a combined test at the end of the Stoichiometry unit. |

LO 2.1 Students can predict properties of substances based on their chemical formulas, and provide explanations of their properties based on particle views. [See SP 6.4, 7.1]

LO 3.1 Students can translate among macroscopic observations of change, chemical equations, and particle views. [See SP 1.5, 7.1]

LO 3.2 The student can translate an observed chemical change into a balanced chemical equation and justify the choice of equation type (molecular, ionic, or net ionic) in terms of utility for the given circumstances. [See SP 1.5, 7.1]

Enduring understanding 3.A: Chemical changes are represented by a balanced chemical equation that identifies the ratios with which reactants react and products form.

* + Chemical reactions are the primary means by which transformations in matter occur.
  + Chemical equations for reactions efficiently communicate the rearrangements of atoms that occur during a chemical reaction. Describing a chemical change can include different forms of the equation, such as molecular, ionic, and net ionic. The equation provides information about atoms, ions and/or molecules reacting (not how they react) at the particulate level, as well as quantitative information about stoichiometry at the macroscopic level. Many chemical reactions involve small whole number ratios of reactants and products as expressed by the stoichiometric coefficients of the balanced equation. Many modern materials are composed of non-stoichiometric combinations of the constituent elements.

Essential knowledge 3.A.1: A chemical change may be represented by a molecular, ionic, or net ionic equation.

1. Chemical equations represent chemical changes, and therefore must contain equal numbers of atoms of every element on each side to be “balanced.”
2. Depending on the context in which it is used, there are different forms of the balanced chemical equations that are used by chemists. It is important not only to write a balanced molecular, ionic, or net ionic reaction equation, but also to have an understanding of the circumstances under which any of them might be the most useful form.
3. The balanced chemical equation for a reaction is capable of representing chemistry at any level, and thus it is important that it can be translated into a symbolic depiction at the particulate level, where much of the reasoning of chemistry occurs.
4. Because chemistry is ultimately an experimental science, it is important that students be able to describe chemical reactions observed in a variety of laboratory contexts.

LO 3.8 The student is able to identify redox reactions and justify the identification in terms of electron transfer. [See SP 6.1]

LO 3.9 The student is able to design and/or interpret the results of an experiment involving a redox titration. [See SP 4.2, 5.1]

Essential knowledge 3.B.3: In oxidation-reduction (redox) reactions, there is a net transfer of electrons. The species that loses electrons is oxidized, and the species that gains electrons is reduced.

1. In a redox reaction, electrons are transferred from the species that is oxidized to the species that is reduced.

✘✘ Language of reducing agent and oxidizing agent is beyond the scope of this course and the AP Exam.

Rationale: Understanding this terminology is not necessary for reasoning about redox chemistry.

1. Oxidation numbers may be assigned to each of the atoms in the reactant and products; this is often an effective way to identify the oxidized and reduced species in a redox reaction.
2. Balanced chemical equations for redox reactions can be constructed from tabulated half-reactions.
3. Recognizing that a reaction is a redox reaction is an important skill; an apt application of this type of reaction is a laboratory exercise where students perform redox titrations.
4. There are a number of important redox reactions in energy production processes (combustion of hydrocarbons and metabolism of sugars, fats, and proteins).

LO 3.10 The student is able to evaluate the classification of a process as a physical change, chemical change, or ambiguous change based on both macroscopic observations and the distinction between rearrangement of covalent interactions and noncovalent interactions. [See SP 1.4, 6.1, connects to 5.D.2]

Enduring understanding 3.C: Chemical and physical transformations may be observed in several ways and typically involve a change in energy.

* + An important component of a full understanding of chemical change involves direct observation of that change; thus, laboratory experiences are essential for the AP Chemistry student to develop an appreciation of the discipline. At the AP course level, observations are made on macroscopically large samples of chemicals; these observations must be used to infer what is occurring at the particulate level. This ability to reason about observations at one level (macroscopic) using models at another level (particulate) provides an important demonstration of conceptual understanding and requires extensive laboratory experience. The difference between physical and chemical change is best explained at the particulate level. Laboratory observations of temperature change accompanying physical and chemical transformations are manifestations of the energy changes occurring at the particulate level. This has practical applications, such as energy production via combustion of fuels (chemical energy conversion to thermal energy) and/or batteries (chemical energy conversion to electrical energy).

Essential knowledge 3.C.1: Production of heat or light, formation of a gas, and formation of a precipitate and/or a color change are possible evidences that a chemical change has occurred.

1. Laboratory observations are made at the macroscopic level, so students must be able to characterize changes in matter using visual clues and then make representations or written descriptions.
2. Distinguishing the difference between chemical and physical changes at the macroscopic level is a challenge; therefore, the ability to investigate chemical properties is important.
3. In order to develop the ability to distinguish experimentally between chemical and physical changes, students must make observations and collect data from a variety of reactions and physical changes within the laboratory setting.
4. Classification of reactions provides important organizational clarity for chemistry; therefore, students need to identify precipitation, acid-base, and redox reactions.

| [**#**](http://session.masteringchemistry.com/myct/yui-dt0-href-ordinal) | [**TITLEShow Descriptions**](http://session.masteringchemistry.com/myct/yui-dt0-href-title) | | **DIFFICULTY** | | | **MEDIAN TIME** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| [**This Course**](http://session.masteringchemistry.com/myct/yui-dt0-href-courseDifficulty) | [**System**](http://session.masteringchemistry.com/myct/yui-dt0-href-systemDifficulty) | | [**This Course**](http://session.masteringchemistry.com/myct/yui-dt0-href-formattedCourseTime) | [**System**](http://session.masteringchemistry.com/myct/yui-dt0-href-formattedSystemTime) | |
| 1 | [Solutions](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962256) | | -- | 2 | | -- | 4m | |
| 2 | [Animation—Evaluating Electrolytes and Nonelectrolytes](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962291) | | -- | 2 | | -- | 6m | |
| 3 | [Give It Some Thought: 4.1](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962293) | | -- | 2 | | -- | 4m | |
| 4 | [Give It Some Thought: 4.2](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962322) | | -- | 1 | | -- | 1m | |
| 5 | [Go Figure 4.3](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962323) | | -- | 1 | | -- | 1m | |
| 6 | [Problem 4.1](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962324) | | -- | 1 | | -- | 1m | |
| 7 | [Problem 4.2](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962343) | | -- | 1 | | -- | 1m | |
| 8 | [Problem 4.15](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962301) | | -- | 1 | | -- | 6m | |
| 9 | [Problem 4.18](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962425) | | -- | 2 | | -- | 11m | |
| 10 | [Chapter 4 Question 1 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962412) | | -- | 1 | | -- | 1m | |
| 11 | [Chapter 4 Question 3 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962398) | | -- | 1 | | -- | 1m | |
| 12 | [Chapter 4 Question 4 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962446) | | -- | 1 | | -- | 1m | |
| 13 | [Net Ionic Equations](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962426) | | -- | 4 | | -- | 12m | |
| 14 | [Precipitation Reactions](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962415) | | -- | 3 | | -- | 13m | |
| 15 | [Go Figure 4.4](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962429) | | -- | 2 | | -- | 2m | |
| 16 | [Problem 4.19](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962430) | | -- | 3 | | -- | 2m | |
| 17 | [Problem 4.24](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962683) | | -- | 2 | | -- | 19m | |
| 18 | [Problem 4.25](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962651) | | -- | 1 | | -- | 1m | |
| 19 | [Chapter 4 Reading Quiz Question 2](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962684) | | -- | 2 | | -- | 1m | |
| 20 | [Chapter 4 Reading Quiz Question 3](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962654) | | -- | 3 | | -- | 3m | |
| 21 | [Chapter 4 Question 4 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962686) | | -- | 1 | | -- | 1m | |
| 22 | [Chapter 4 Question 5 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962705) | | -- | 1 | | -- | 1m | |
| 23 | [Chapter 4 Question 8 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962688) | | -- | 4 | | -- | 1m | |
| 24 | [Chapter 4 Question 9 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962690) | | -- | 4 | | -- | 1m | |
| 25 | [Chapter 4 Question 11 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962674) | | -- | 2 | | -- | 1m | |
| 26 | [Chapter 4 Question 11 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962706) | | -- | 2 | | -- | 1m | |
| 27 | [Chapter 4 Question 13 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962746) | | -- | 1 | | -- | 1m | |
| 28 | [Chapter 4 Question 14 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962747) | | -- | 3 | | -- | 1m | |
| 29 | [Chapter 4 Question 15 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962714) | | -- | 2 | | -- | 2m | |
| 30 | [Chapter 4 Question 18 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962748) | | -- | 1 | | -- | 1m | |
| 31 | [Acid-Base Reactions](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962716) | | -- | 3 | | -- | 12m | |
| 32 | [Acids, Bases, and Salts](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962787) | | -- | 4 | | -- | 3m | |
| 33 | [Electrolytes](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962776) | | -- | 3 | | -- | 9m | |
| 34 | [± Neutralizing an Acid Spill](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962779) | | -- | 4 | | -- | 10m | |
| 35 | [Give It Some Thought: 4.4](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962805) | | -- | 3 | | -- | 1m | |
| 36 | [Problem 4.36](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962736) | | -- | 5 | | -- | 3m | |
| 37 | [Problem 4.40](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962806) | | -- | 5 | | -- | 39m | |
| 38 | [Problem 4.41](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962801) | | -- | 2 | | -- | 20m | |
| 39 | [Problem 4.42](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962854) | | -- | 3 | | -- | 9m | |
| 40 | [Chapter 4 Question 19 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962882) | | -- | 2 | | -- | 1m | |
| 41 | [Chapter 4 Question 20 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962902) | | -- | 1 | | -- | 1m | |
| 42 | [Chapter 4 Question 21 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962903) | | -- | 1 | | -- | <1m | |
| 43 | [Chapter 4 Question 22 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962904) | | -- | 3 | | -- | 1m | |
| 44 | [Chapter 4 Question 26 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962905) | | -- | 1 | | -- | <1m | |
| 45 | [Predicting Reaction Products](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962957) | | -- | 2 | | -- | 11m | |
| 46 | [Oxidation-Reduction Reactions](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962896) | | -- | 2 | | -- | 5m | |
| 47 | [Oxidation States](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962982) | | -- | 2 | | -- | 6m | |
| 48 | [Give It Some Thought: 4.7](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963002) | | -- | 2 | | -- | 2m | |
| 49 | [Problem 4.46](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963003) | | -- | 1 | | -- | <1m | |
| 50 | [Problem 4.49](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963004) | | -- | 1 | | -- | 5m | |
| 51 | [Problem 4.51](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962938) | | -- | 2 | | -- | 9m | |
| 52 | [Problem 4.53](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962964) | | -- | 2 | | -- | 26m | |
| 53 | [Chapter 4 Question 29 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963036) | | -- | 2 | | -- | 1m | |
| 54 | [Chapter 4 Question 32 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962971) | | -- | 1 | | -- | 1m | |
| 55 | [Electrolytic Properties and Molarity](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962973) | | -- | 2 | | -- | 7m | |
| 56 | [± Molarity](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30962999) | | -- | 2 | | -- | 11m | |
| 57 | [Problem 4.60](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963000) | | -- | 1 | | -- | 4m | |
| 58 | [Chapter 4 Question 36 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963038) | | -- | 3 | | -- | 2m | |
| 59 | [Chapter 4 Question 30 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963001) | | -- | 1 | | -- | 1m | |
| 60 | [Chapter 4 Question 10 - Algorithmic](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30963046) | | -- | 1 | | -- | 1m | |
| 61 | [Problem 4.67](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30982622) | | -- | 2 | | -- | 10m | |
| 62 | [Chapter 4 Reading Quiz Question 9](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30982628) | | -- | 3 | | -- | 3m | |
| 63 | [Acid-Base Titration](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30982904) | | -- | 2 | | -- | 4m | |
| 64 | [Solution Stoichiometry](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30982928) | | -- | 3 | | -- | 10m | |
| 65 | [± Titrations and Solution Stoichiometry](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30982918) | | -- | 3 | | -- | 12m | |
| 66 | [Problem 4.85](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983012) | | -- | 3 | | -- | 6m | |
| 67 | [Chapter 4 Question 56 - Bimodal](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30982960) | | -- | 1 | | -- | 1m | |
| 68 | [Chapter 4 Question 75 - Multiple Choice](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983023) | | -- | 2 | | -- | <1m | |
| 69 | [Conjugate Pairs](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983304) | | -- | 2 | | -- | 7m | |
| 70 | [Give It Some Thought: 16.3](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983306) | | -- | 1 | | -- | <1m | |
| 71 | [Go Figure 16.2](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983344) | | -- | 2 | | -- | 1m | |
| 72 | [Go Figure 16.3](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983313) | | -- | 5 | | -- | 5m | |
| 73 | [Problem 16.2](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983337) | | -- | 1 | | -- | 3m | |
| 74 | [Problem 16.15](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983403) | | -- | 1 | | -- | 4m | |
| 75 | [Problem 16.17](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983410) | | -- | 1 | | -- | 3m | |
| 76 | [Definitions of Acids and Bases](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983396) | | -- | 3 | | -- | 10m | |
| 77 | [Lewis Acids and Bases](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983397) | | -- | 2 | | -- | 5m | |
| 78 | [Problem 16.1](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983412) | | -- | 1 | | -- | 1m | |
| 79 | [Problem 16.10](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983399) | | -- | 2 | | -- | 9m | |
| 80 | [Problem 16.97](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983442) | | -- | 1 | | -- | 2m | |
| 81 | [Problem 16.98](http://session.masteringchemistry.com/myct/itemView?showStatsForCourse=1110976&view=solution&showStats=1&assignmentProblemID=30983443) | | -- | 1 | | -- | 2m | |
| **Average:** | |  | | | **Total:** | | |  | |
| **--** | | **2** | | | **--** | | | **407m** | |