

# CHEMISTRY AND PHYSICS OF ENERGY

## TEACHER EVALUATION

Unit: Newton's Second Law of Motion  
Module: Impact Damage from Hail Storms

<b>NAME</b>	
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EACH STUDENT WILL ACQUIRE THE SKILLS AND KNOWLEDGE DESCRIBED IN THE MASSACHUSETTS CURRICULUM FRAMEWORKS<sup>1</sup>.

	ADVANCED	PROFICIENT	NEEDS IMPROVEMENT	FAIL	
<b>ACADEMIC SKILLS AND KNOWLEDGE</b>					
<b>SPECIFIC ACADEMIC SKILLS AND KNOWLEDGE ARE DEVELOPED BY EACH ACADEMIC DISCIPLINE</b>					
<b>INFORMATION-BASED TOPICS</b>	The student has a complete and detailed understanding of the information important to the topic.	The student has a complete understanding of the information important to the topic but not in great detail.	The student has an incomplete understanding of the topic and/or misconceptions about some of the information. However, the student maintains a basic understanding of the topic.	The student's understanding of the topic is so incomplete or has so many misconceptions that the student cannot be said to understand the topic.	
	<b>SKILL- OR PROCESS-BASED TOPICS</b>	The student can perform the skill or process important to the topic with no significant errors and with fluency. Additionally, the student understands the key features of the skill process.	The student can perform the skill or process important to the topic without making significant errors.	The student makes some significant errors when performing the skill or process important to the topic but still accomplishes a rough approximation of the skill or process.	The student makes so many errors in performing the skill or process important to the topic that he or she cannot actually perform the skill or process.

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<sup>1</sup>The following two indicators reflect the general rubrics to be applied to specific information, skill, or process-based strands found in the Massachusetts Curriculum Frameworks for Arts, English Language Arts, Foreign Languages, Comprehensive Health, Mathematics, History and Social Science, and Science and Technology/Engineering.

	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>	
<b>INTERDISCIPLINARY SKILLS AND KNOWLEDGE</b>					
<b>THINKING AND REASONING SKILLS</b>					
<b>COMPARING AND CONTRASTING</b>	The student includes all important characteristics on which the items should be compared or contrasted.	The student includes the most of the important characteristics on which the items should be compared or contrasted.	The student excludes some critical elements on which the items should be compared or contrasted.	The student uses trivial elements to compare or contrast items.	
<b>ANALYZING RELATIONSHIPS</b>	The student identifies the main pattern running through information along with all minor patterns.	The student identifies the main pattern running through the information.	The student addresses some of the features of the main pattern running through the information but excludes some critical aspects.	The student does not address the main pattern running through the information.	
<b>CLASSIFYING</b>	The student organizes the items into meaningful categories and describes the defining characteristics of each category.	The student organizes the items into meaningful categories but does not thoroughly describe the defining characteristics of each category.	The student organizes the items into categories that are not very meaningful but address some of the important characteristics of the items.	The student organizes the items into categories that are illogical or trivial.	
<b>ARGUMENTATION</b>	The student provides a well-articulated and detailed argument containing no errors in logic.	The student proves a well-articulated but not detailed argument containing no errors in logic.	The student presents an argument that makes a point but is not well articulated or contains some significant errors in logic.	The student's argument makes no clear point or has so many errors in logic that it is invalid.	
<b>INDUCTION</b>	The student constructs a valid generalization and clearly articulates the logic of this generalization based on the specifics that have been identified.	The student constructs a valid generalization but does not clearly articulate the logic of underlying that generalization.	The student constructs a generalization that has some relationship to the specifics that have been identified; however, the specifics do not totally support the generalization.	The student does not construct a generalization or constructs one that is not at all supported by the specifics.	

	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>	
<b>DEDUCTION</b>	The student generates a valid prediction or conclusion and accurately articulates the relationship between the prediction or conclusion and the principle or premise that was used.	The student generates a valid prediction or conclusion but does not completely articulate the relationship between the prediction or conclusion and the principle or premise that was used.	The student generates a prediction or conclusion that is only partially supported by the premise or rule that was used.	The student does not generate a prediction or conclusion or generates one that is not at all supported by the premise or rule that was used.	
<b>EXPERIMENTAL INQUIRY</b>	The student designs and conducts an experiment that adequately tests a well-articulated hypothesis. When the experiment is completed, the student fully and accurately explains the results in light of the hypothesis.	The student designs and conducts an experiment that adequately tests a well-articulated hypothesis but does not completely explain the results in light of the hypothesis.	The student designs and conducts an experiment that is related to but does not adequately test the hypothesis.	The student does not design and conduct an experiment or designs one that has no relationship to the hypothesis.	
<b>INVESTIGATION</b>	The student thoroughly and accurately identifies what is known about the subject of the investigation and presents a well-articulated solution to the confusions or contradictions associated with the situation.	The student thoroughly and accurately identifies what is known about the subject of the investigation but does not fully address the confusions or contradictions associated with the situation.	The student presents a partial description of what is known about the subject of the investigation.	The student's description of what is known about the subject of the investigation is severely flawed.	
<b>PROBLEM SOLVING</b>	The student selects the solution that is the most effective for overcoming the obstacle or constraint and accurately explains why it is the most effective of the possible solutions.	The student selects the solution that is the most effective for overcoming the obstacle or constraint but does not completely explain why it is the most effective of the possible solutions.	The student selects a solution that overcomes the obstacle or constraint but is not the most effective solution given the options.	The student selects a solution that does not overcome the obstacle or constraint.	
<b>DECISION MAKING</b>	The student uses relevant criteria to select the most appropriate option. The student explains why the option selected is the most appropriate.	The student uses relevant criteria to select the most appropriate option but does not completely explain why the option selected is the most appropriate.	The student uses criteria that are related to the situation but not the most relevant, or the student selects an option that is not the most appropriate given the criteria.	The student uses criteria that are unrelated to the situation.	

	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>	
<b>COMMUNICATION SKILLS</b>					
<b>COMMUNICATES EFFECTIVELY IN WRITTEN FORM</b>	The student uses all necessary conventions of writing without error. Additionally, includes some conventions that are not essential to the communication but add to the overall quality of the communication.	The student uses all necessary conventions of writing without error.	The student does not use some required conventions of writing or demonstrates errors in the use of some conventions. The communication demonstrates an attempt at using the necessary conventions of writing but has significant errors or omissions.	The communication demonstrates little or no attention to the use of necessary conventions of writing.	
	The student uses all necessary conventions of speaking without error. Additionally, includes some conventions that are not essential to the communication but add to the overall quality of the communication.	The student uses all necessary conventions of speaking without error.	The student does not use some required conventions of speaking or demonstrates errors in the use of some conventions. The communication demonstrates an attempt at using the necessary conventions of speaking but has significant errors or omissions.	The communication demonstrates little or no attention to the use of necessary conventions of speaking.	
	The student uses all necessary conventions of the medium without error. Additionally, includes some conventions that are not essential to the communication but add to the overall quality of the communication.	The student uses all necessary conventions of the medium without error.	The student does not use some required conventions of the medium or demonstrates errors in the use of some conventions. The communication demonstrates an attempt at using the necessary conventions of the medium but has significant errors or omissions.	The communication demonstrates little or no attention to the use of necessary conventions of the medium.	
	The student clearly and effectively communicates the main idea or theme and provides support that contains rich, vivid, and powerful detail.	The student clearly communicates the main idea or theme and provides suitable support and detail.	The student communicates important information but not a clear theme or overall structure.	The student communicates information as isolated pieces in a random fashion.	
<b>COMMUNICATES EFFECTIVELY IN ORAL FORM</b>					
<b>COMMUNICATES EFFECTIVELY IN A MEDIUM OTHER THAN WRITING OR SPEAKING</b>					
<b>EXPRESSES IDEAS CLEARLY</b>					

	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>	
<b>EFFECTIVELY COMMUNICATES WITH DIVERSE AUDIENCES</b>	The student presents information in a style and tone that effectively capitalizes on the audiences level of interest and level of knowledge or understanding.	The student presents information in a style and tone consistent with the audiences level of knowledge or understanding.	The student presents information in a style and tone inappropriate for the audiences level of interest or the audiences level of knowledge.	The student presents information in a style and tone inappropriate for the audiences level of interest or the audiences level of knowledge.	
<b>EFFECTIVELY COMMUNICATES FOR A VARIETY OF PURPOSES</b>	The student clearly communicates a purpose in a highly creative and insightful manner.	The student uses effective techniques to communicate a clear purpose.	The student demonstrates an attempt to communicate for a specific purpose but makes significant errors or omissions.	The student demonstrates no central purpose in the communication or makes no attempt to articulate a purpose.	
<b>READING</b>	The student can decode with in depth comprehension for literal, interpretive, and critical meaning in a variety of texts.	The student can decode with comprehension for literal, interpretive and critical meaning in a variety of texts.	The student can decode with minimal comprehension for literal and interpretive meaning in a variety of texts.	The student cannot decode or can decode without comprehension.	
<b>TECHNOLOGY</b>	The student chooses and uses appropriate technology to efficiently and creatively enhance learning, solve problems and communicate effectively.	The student chooses and uses appropriate technology to efficiently enhance learning, solve problems and communicate effectively.	The student chooses and uses appropriate technology to enhance learning, solve problems and communicate .	The student chooses inappropriate technology or does not use technology effectively.	

**EACH STUDENT WILL DEMONSTRATE RESPONSIBLE AND RESPECTFUL BEHAVIOR IN ALL FACETS OF THE SCHOOL COMMUNITY.**

<b>INDICATOR</b>	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>
<b>GOAL SETTING</b>	The student routinely sets appropriate personal goals without being asked and chooses actions that lead to attaining one s goals.	The student sets appropriate personal goals and chooses actions that lead to attaining goals when asked and occasionally without being asked.	The student sets appropriate personal goals and chooses actions that lead to attaining one s goals only when required to do so or when the request involves some form of explicit or implicit threat.	The student sets appropriate goals but does not choose actions that lead to attaining one s goals or refuses to set appropriate goals.

<b>INDICATOR</b>	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>
<b>CONFLICT RESOLUTION</b>	The student routinely resolves conflicts in a constructive manner without being asked.	The student resolves conflicts in a constructive manner when asked and occasionally without being asked.	The student resolves conflicts in a constructive manner only when required to do or when the request involves some form of explicit or implicit threat.	The student does not resolve conflicts in a constructive manner.
<b>PARTICIPATION</b>	The student contributes to classroom activities and discussion without being asked, balancing the need to listen and speak effectively.	The student contributes to classroom activities and discussion when asked and occasionally without being asked.	The student contributes to classroom activities and discussions only when required to do so or when the request involves some form of explicit or implied threat.	The student refuses to engage in classroom activities and discussions.
<b>TASK COMPLETION</b>	The student is punctual or early in completing and submitting tasks and exceeds the stated requirements relative to neatness and adherence to conventions.	The student is mostly punctual in completing and submitting tasks and meets the stated requirements relative to neatness and adherence to conventions.	The student is occasionally punctual in completing and submitting tasks or does not meet the stated requirements relative to neatness and adherence to conventions.	The student is not punctual in completing and submitting tasks and does not meet the stated requirements relative to neatness and adherence to conventions.
<b>GROUP GOAL ATTAINMENT</b>	The student routinely works toward the attainment of group goals without being asked.	The student works toward the attainment of group goals when asked and occasionally without being asked.	The student rarely works toward the attainment of group goals unless the request involves strong urging or even some explicit or implicit threat.	The student refuses to work toward the attainment of group goals.
<b>RULE ADHERENCE</b>	The student follows school and classroom rules and procedures without being asked and works constructively to change the rules when necessary.	The student follows school and classroom rules and procedures without being asked.	With reminders, the student follows school and classroom rules and procedures.	The student refuses to follow school or classroom rules or procedures.
<b>EMPATHY</b>	The student works with people with diverse backgrounds and respects individual differences without being asked.	The student works with people with diverse backgrounds and respects individual differences when asked and occasionally without being asked.	The student works with people with diverse backgrounds and respects individual differences only when required to do or when the request involves some form of explicit or implied threat.	The student refuses to work with people with diverse backgrounds or to respect individual differences.

<b>INDICATOR</b>	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>
<b>RESPECT FOR PROPERTY</b>	The student routinely shows respect for school and personal property without being asked and constructively works with others to promote respect for property.	The student shows respect for school and personal property without being asked.	With reminders, the student shows respect for school and personal property.	The student refuses to respect school and personal property.

	<b>TOTAL SCHOOL DAYS</b>	<b>TOTAL TIMES</b>
<b>ABSENTEEISM</b>		
<b>TARDINESS</b>		

**EACH STUDENT WILL DEVELOP THE SKILLS AND KNOWLEDGE NECESSARY FOR TRANSITION INTO INDEPENDENT LIVING.**

	<b>ADVANCED</b>	<b>PROFICIENT</b>	<b>NEEDS IMPROVEMENT</b>	<b>FAIL</b>
<b>HEALTHY LIVING</b>	The student demonstrates an understanding of good health through his or her choice of actions.	The student demonstrates a nearly complete understanding of good health through his or her choice of actions.	The student demonstrates some understanding of good health through his or her choice of actions.	The student demonstrates no understanding or a misunderstanding of good health through his or her choice of actions.
<b>FINANCIAL PLANNING</b>	The student has the skills and knowledge necessary to create and evaluate a plan for financial independence.	The student has most of the skills and knowledge necessary to create and evaluate a plan for financial independence.	The student has some of the skills and knowledge necessary to create and evaluate a plan for financial independence.	The student has little or none of the skills and knowledge necessary to create and evaluate a plan for financial independence.
<b>CAREER PLANNING</b>	The student has the skills and knowledge necessary to explore and plan for a career.	The student has most of the skills and knowledge necessary to explore and plan for a career.	The student has some of the skills and knowledge necessary to explore and plan for a career.	The student has little or none of the skills and knowledge necessary to explore and plan for a career.
<b>SEEKS HELP</b>	The student independently seeks support as necessary.	The student seeks support as necessary when prompted.	The student seeks support as necessary only when directed.	The student does not seek or avoids support.
<b>SCHOOL GOVERNANCE</b>	The student participates by taking a leadership role in school governance.	The student participates in school governance.	The student participates infrequently in school governance.	The student does not participate or inhibits the process of school governance.