

**English Language Arts  
(ELA)  
NYSAA Frameworks**

**Grade 8**

**2014–15**

**New York State Alternate Assessment**

**CCLS and Essence(s)****ELA – Grade 8****CCLS Strand:** Reading Standards for Informational Text**CCLS Sub-Strand:** Craft and Structure**CCLS Page(s):** 50

<b>CCLS Code</b>	<b>Grade-Specific Standard</b>	<b>Essence(s) of Standard</b>
RI.8.6	6. Determine an author's point of view or purpose in a text and analyze how the author acknowledges and responds to conflicting evidence or viewpoints.	Identify the author's purpose (e.g., describe, entertain, inform, or persuade) or point of view in a text.

<b>Extensions and Assessment Tasks</b>	<b>ELA – Grade 8 RI.8.6</b>	<b>Extension 1</b>
<b>Extensions</b>		
Less Complex ◀ ..... ◀ ..... ◀ ..... ▶ ..... ▶ ..... ▶ More Complex		
Recognize the author’s purpose in informational text. (82211)	Identify the author’s point of view in text. (82221)	Identify the author’s point of view and recognize any conflicting evidence in informational text. (82231)
<b>Assessment Tasks</b>		
<ul style="list-style-type: none"> <li>The student will recognize the author’s purpose in informational text (e.g., given an informational text, the student recognizes whether the author’s purpose was to entertain, instruct, persuade, describe; job duty chart to inform; personal letter to inform or entertain; greeting card or picture postcard to describe; e-mail or newspaper to inform; flyer to inform; fire drill safety procedures, to instruct; job procedures, to explain etc.). (AT82211A)</li> <li>The student will match the author’s purpose with the type of text (e.g., given a word, picture, or symbol for the author’s purpose “to entertain,” the student matches it to word, picture or symbol from a set of choices; job chart could be used to inform, directions to follow in a task to explain; advertisement to persuade). (AT82211B)</li> </ul>	<ul style="list-style-type: none"> <li>The student will identify the author’s point of view in informational text (e.g., the student identifies the author’s point of view by choosing the author’s first person statement from options; identifying the author’s opinion or argument from the text). (AT82221A)</li> <li>The student will identify two or more sentences in informational text that help reveal the author’s point of view (e.g., the student highlights or circles a statement the author makes that reflects his or her point of view in a text [stance, opinion, argument]; editorial, movie or book review). (AT82221B)</li> </ul>	<ul style="list-style-type: none"> <li>The student will identify the author’s point of view and recognize any conflicting evidence in informational text (e.g., the author presents an opinion, but also includes statements to the contrary; in an article arguing in favor of a longer school day, the author also recognizes that some believe the longer school day leaves less time for extracurricular activities in the afternoon). (AT82231)</li> </ul>

**THE DEVELOPMENT OF TRANSITION SKILLS (For Instructional Use Only)**

Mastering the Extension Skills can lead to the development of Key Transition Skills. The transition skills in this section are not to be used to assess students with severe disabilities on the NYSAA. Rather, they are intended to be used by teachers for instructional purposes only.

Some of the transition skills that may be developed later by students with disabilities are listed below.

**RI.8.6**

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Identify characteristics of different jobs, based on written descriptions
- Determine the purposes of various written documents (maintain safety, explain procedures)

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Understand authors' points of view and purposes, based on the information they present
- Collect information and understand the purposes of community activities (toy drive, dance )

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Thinking Skills: Recognize different kinds of texts by the authors' purposes (entertainment, persuasion)
- Interpersonal Skills: Express individual points of view to others in a group
- Reading: Understand an author's purpose; identify conflicting viewpoints

**CCLS and Essence(s)****ELA – Grade 8****CCLS Strand:** Reading Standards for Informational Text**CCLS Sub-Strand:** Integration of Knowledge and Ideas**CCLS Page(s):** 50

<b>CCLS Code</b>	<b>Grade-Specific Standard</b>	<b>Essence(s) of Standard</b>
RI.8.9	9. Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation. <ol style="list-style-type: none"> <li>a. Use their experience and their knowledge of language and logic, as well as culture, to think analytically, address problems creatively, and advocate persuasively.</li> </ol>	Compare and contrast conflicting information from two or more texts on the same topic.

<b>Extensions and Assessment Tasks</b>		<b>ELA – Grade 8 RI.8.9</b>	<b>Extension 2</b>
<b>Extensions</b>			
<b>Less Complex</b>	◀ ..... ◀ ..... ◀ ..... ▶ ..... ▶ ..... ▶		<b>More Complex</b>
Recognize similar topic and/or information in informational texts. (82311)	Identify conflicting information on the same topic in informational texts. (82321)	Analyze conflicting information in informational texts on the same topic, in order to make an informed decision. (82331)	
<b>Assessment Tasks</b>			
<ul style="list-style-type: none"> <li>The student will recognize a similar topic and/or information in two or more informational texts. (AT82311A)</li> <li>The student will recognize a similar topic in two or more informational texts (e.g., given a text about bat houses and a text about bat species, the student will identify the similar topic of “bats”; given a job description for a chef and kitchen procedures the student identifies the similar topic of cooking). (AT82311B)</li> <li>The student will recognize similar information in two or more informational texts (e.g., in a text about bat houses and a text about bat species, the student will identify information related to bat species that commonly use bat houses; given a recipe for bread and cake, the student uses a Venn diagram or highlights two ingredients that are common to both recipes). (AT82311C)</li> </ul>	<ul style="list-style-type: none"> <li>The student will identify conflicting information on the same topic in two or more informational texts (e.g., the student identifies conflicting information on the same topic from two or more informational texts using a T-chart or Venn diagram; the student highlights or marks conflicting information on copies of two or more texts to identify conflicting information on the same topic). (AT82321)</li> </ul>	<ul style="list-style-type: none"> <li>The student will analyze conflicting information in two or more informational texts on the same topic, in order to make an informed decision (e.g., given two weather reports the student analyzes conflicting information in order to make a decision about clothing to wear; given two recipes for the same food dish, the student analyzes the information to identify conflicting ingredients in order to make a decision about which recipe to follow). (AT82331A)</li> <li>The student will analyze conflicting information, using two or more advertisements (e.g., using a graphic organizer). (AT82331B)</li> </ul>	

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RI.8.9

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Compare and contrast post-school training and/or employment interests
- Use print media to develop information about personal choices

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Analyze conflicting information across a variety of settings (news reports)
- Determine the importance of information found in different texts

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Thinking Skills: Evaluate facts and identify conflicting information (advertising, promotional information)
- Interpersonal Skills: Understand the importance of clear communication and how conflicting information can cause issues
- Managing Resources: Understand the importance of managing resources to avoid conflict or use (or manage) resources to identify conflicting information and to assist in making informed decisions

**CCLS and Essence(s)****ELA – Grade 8****CCLS Strand:** Writing**CCLS Sub-Strand:** Research to Build and Present Knowledge**CCLS Page(s):** 57

<b>CCLS Code</b>	<b>Grade-Specific Standard</b>	<b>Essence(s) of Standard</b>
W.8.9	<p>9. Draw evidence from literary or informational texts to support analysis, reflection, and research.</p> <p>a. Apply <i>grade 8 Reading standards</i> to literature (e.g., “Analyze how a modern work of fiction draws on themes, patterns of events, or character types from myths, traditional stories, or religious works such as the Bible, including describing how the material is rendered new”).</p> <p>b. Apply <i>grade 8 Reading standards</i> to literary nonfiction (e.g., “Delineate and evaluate the argument and specific claims in a text, assessing whether the reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced”).</p>	<p>Gather information to support analysis, reflection, and research.</p> <ul style="list-style-type: none"> <li>• Analyze themes, patterns of events, and character types</li> <li>• Evaluate arguments and specific claims</li> </ul>

<b>Extensions and Assessment Tasks</b>	<b>ELA – Grade 8 W.8.9</b>	<b>Extension 3</b>
<b>Extensions</b>		
Less Complex ◀ ..... ◀ ..... ◀ ..... ▶ ..... ▶ ..... ▶ More Complex		
Identify the sequence of events in literary text or a claim the author is making in informational text. (83311)	Identify a theme or character type in literary text, or identify detail related to a specific claim in informational text. (83321)	Produce an analysis of a theme or character type from a work of fiction, using evidence from the text and/or other source. (83331)
<b>Assessment Tasks</b>		
<ul style="list-style-type: none"> <li>The student will identify a sequence of events in a literary text or a claim the author is making in an informational text (e.g., the student sequences the events from a literary text placing pictures about the text in order; the student identifies a claim the author is making in an informational text using sentence strips. Note: the same part of this task must be assessed on both the baseline and final). (AT83311A)</li> <li>The student will identify a sequence of two or more events in a literary text (e.g., the student identifies pictures or sentence strips to indicate the beginning, middle, and end of a story). (AT83311B)</li> <li>The student will identify a claim the author is making in an informational text (e.g., the student identifies the author’s claim in a text that having a pet helps people feel happier). (AT83311C)</li> </ul>	<ul style="list-style-type: none"> <li>The student will identify a theme or character type in literary text, or identify detail related to a specific claim in informational text. Note: the same part of this task must be assessed on both the baseline and final. (AT83321A)</li> <li>The student will identify a theme in literary text (e.g., being a good friend, coming of age, danger of innocence, good vs. evil, beauty of simplicity, circle of life, desire to escape). (AT83321B)</li> <li>The student will identify character type in literary text (dynamic, round, flat, static, foil). (AT83321C)</li> <li>The student will identify detail related to a specific claim in informational text (e.g., in a text about having a pet, the student identifies a statistic or other supporting information related to the author’s claim that owning a pet helps people become happier). (AT83321D)</li> </ul>	<ul style="list-style-type: none"> <li>The student will produce an analysis of a theme or character type from a work of fiction, using evidence from the text and/or other source. (AT83331A)</li> <li>The student will analyze the theme in a work of fiction by choosing pictures, objects, symbols, words, etc. to complete a graphic organizer (e.g., after reading or listening to a book about the theme “the American dream,” the student completes a graphic organizer to analyze the theme). (AT83331B)</li> <li>The student will analyze a character type by choosing pictures, objects, symbols, words, etc. to complete a graphic organizer. (AT83331C)</li> </ul>

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**W.8.9**

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Use language (words, pictures, symbols, sentences) to express post-school training and/or employment interests
- Identify different purposes for writing (expository, narrative)

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Analyze details in writing across a variety of settings (job descriptions, work-related responsibilities)

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Managing Information: Use information from a text to create a book review
- Interpersonal Skills: Work with others to complete a project (write and perform a play)
- Writing: Gather important information and identify the themes in texts

<b>CCLS and Essence(s)</b>		<b>ELA – Grade 8</b>
<b>CCLS Strand: Speaking and Listening</b>		
<b>CCLS Sub-Strand: Presentation of Knowledge and Ideas</b>		<b>CCLS Page(s): 63</b>
<b>CCLS Code</b>	<b>Grade-Specific Standard</b>	<b>Essence(s) of Standard</b>
SL.8.6	6. Adapt speech to a variety of contexts and tasks, demonstrating command of formal English when indicated or appropriate. (See grade 8 Language standards 1 and 3 on page 66 for specific expectations.)	Adapt expressive communication as appropriate for a student's audience and the particular social context.



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**SL.8.6**

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Attend to a presentation or speaker and respond appropriately when prompted
- Answer questions about personal preferences

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Use expressive communication skills in an occupational context (greet and interact with customers)
- Use a variety of communication techniques when engaged in a conversation (restating, reflecting, focusing)

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Interpersonal Skill: Respond appropriately to a classmate or person in the community (waiter, doctor)
- Personal Qualities: Transmit information or messages between home and school

**CCLS and Essence(s)****ELA – Grade 8****CCLS Strand:** Language**CCLS Sub-Strand:** Knowledge of Language**CCLS Page(s):** 66

<b>CCLS Code</b>	<b>Grade-Specific Standard</b>	<b>Essence(s) of Standard</b>
L.8.3	3. Use knowledge of language and its conventions when writing, speaking, reading, or listening. <ul style="list-style-type: none"> <li>a. Use verbs in the active and passive voice and in the conditional and subjunctive mood to achieve particular effects (e.g., emphasizing the actor or the action; expressing uncertainty or describing a state contrary to fact).</li> </ul>	Understand vocabulary, mood, and voice to create connections to ensure effective communication.



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**L.8.3**

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Use language (words, pictures, symbols, sentences) to express specific post-school training and/or employment interests
- Understand the vocabulary used in various occupations

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Recognize and respond appropriately to changes in inflection and tone of a speaker across various settings
- Identify examples of responsible behaviors and actions in the school and the community

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Personal Qualities: Listen to and follow verbal directions; understand the importance of a message
- Interpersonal Skills: Use knowledge of language (emphasizing an action) to convey a message to others
- Language: Understand and recognize others' statements as imperative, subjunctive, or indicative

**Mathematics**  
**NYSAA Frameworks**

**Grade 8**

**2014–15**

**New York State Alternate Assessment**

**CCLS and Essence(s)****Mathematics – Grade 8**

CCLS Domain: Geometry

CCLS Page(s): 48

CCLS Code	Cluster (including Standard(s) within the Cluster)	Essence(s) of Cluster
8.G	<p><b>Understand congruence and similarity using physical models, transparencies, or geometry software.</b></p> <ol style="list-style-type: none"> <li>1. Verify experimentally the properties of rotations, reflections, and translations:               <ol style="list-style-type: none"> <li>a. Lines are taken to lines, and line segments to line segments of the same length.</li> <li>b. Angles are taken to angles of the same measure.</li> <li>c. Parallel lines are taken to parallel lines.</li> </ol> </li> <li>2. Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them.</li> <li>3. Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures, using coordinates.</li> <li>4. Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them.</li> <li>5. Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i></li> </ol>	Understand congruent and/or similar figures (traditional or non-standard shapes), using transformations.

Extensions and Assessment Tasks		Mathematics – Grade 8 8.G	Extension 1
Extensions			
Less Complex		More Complex	
Identify a similar and/or a congruent figure. (80511)	Identify a transformation of a figure. <i>(For example, which picture represents a dilation?).</i> (80521)	Demonstrate the effect of a dilation, translation, rotation, and/or reflection of a figure on a coordinate grid. (80531)	
Assessment Tasks			
<ul style="list-style-type: none"> <li>The student will identify a similar and/or a congruent figure (e.g., similar: presented with a large circle, the student indicates the smaller circle from a set of choices; congruent: presented with a non-traditional shape, the student indicates the non-traditional shape that is congruent to the presented shape, from a set of choices). (AT80511A)</li> <li>The student will identify the figure that is similar to a given figure (e.g., provided with a cut-out of a non-traditional shape, the student identifies the picture of a shape that is similar, from a set of choices). (AT80511B)</li> <li>The student will identify a figure that is congruent to a given figure (e.g., provided with a non-traditional shape, the student identifies a shape that is congruent, from a set of choices). (AT80511C)</li> </ul>	<ul style="list-style-type: none"> <li>The student will identify a transformation (e.g., rotation, reflection, dilation, translation) of a given figure (e.g., given a shape that has been transformed, the student selects the correct term to describe the type of transformation). (AT80521A)</li> <li>The student will demonstrate the transformation of a figure in a real-life situation (e.g., sliding puzzle pieces to fit; flipping pancakes; identifying a reflection in ink-blot art; dilating font size; dilating images by projecting on a smart board; rotating shapes to fit on a single piece of paper; rotating pattern pieces to fit on fabric; flipping/rotating a metro card, ATM card, gift card, ID card to scan; flipping a time card to use the reverse side; rotating boxes to fit on shelf; rotating a cookie cutter to maximize the use of rolled-out dough). (AT80521B)</li> </ul>	<ul style="list-style-type: none"> <li>The student will demonstrate the effects of dilation, translation, rotation, and/or reflection of a figure on a coordinate grid (e.g., given a room layout grid and a set of furniture choices, the student will use transformations to fit all of the furniture on the room grid). (AT80531A)</li> <li>The student will demonstrate the effect of dilation on a figure on a coordinate grid (e.g., provided with a figure on a coordinate grid, the student uses a software program to draw a version that is twice as large). (AT80531B)</li> <li>The student will demonstrate the effect of translation on a figure on a coordinate grid (e.g., the student translates a figure 4 units to the left and 5 units down from its original position on a coordinate grid). (AT80531C)</li> <li>The student will demonstrate the effect of rotation on a figure on a coordinate grid (e.g., the student rotates a figure 90 degrees to the right on a coordinate grid). (AT80531D)</li> <li>The student will demonstrate the effect of reflection on a figure on a coordinate grid (e.g., the student reflects a figure over the x-axis on a coordinate grid). (AT80531E)</li> </ul>	

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**8.G**

**Career Development:** Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Understand the concepts of congruency (same size and shape) in real-life settings (work spaces)

**Integrated Learning:** Application of academic knowledge and skills to school, community, and home settings. For example:

- Use learned skills about congruency and transformations across a variety of settings (designing occupational spaces, residential spaces)

**Universal Foundation Skills:** Foundation skills and competencies necessary for success in the workplace. For example:

- **Basic Skills:** Understand concepts of congruency (using maps)
- **Managing Information:** Use information about similarities and differences to make decisions (compare similar and different items)
- **Thinking Skills:** Understand and use a transformation to complete a task (organize shelves/closets)

**CCLS and Essence(s)****Mathematics – Grade 8**

CCLS Domain: Expressions and Equations

CCLS Page(s): 47

CCLS Code	Cluster (including Standard(s) within the Cluster)	Essence(s) of Cluster
8.EE	<p><b>Understand the connections between proportional relationships, lines, and linear equations.</b></p> <p>5. Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</p> <p>6. Use similar triangles to explain why the slope <math>m</math> is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation <math>y = mx</math> for a line through the origin and the equation <math>y = mx + b</math> for a line intercepting the vertical axis at <math>b</math>.</p>	<p>Know how to graph a linear equation and understand the meaning of slope.</p>

Extensions and Assessment Tasks		Mathematics – Grade 8 8.EE		Extension 2	
Extensions					
Less Complex		◀ ..... ▶		More Complex	
Recognize a graph that represents a linear equation. (80811)	Graph a line represented by a linear equation. (80821)	Compare the graphs of linear equations. (80831)			
Assessment Tasks					
<ul style="list-style-type: none"> <li>The student will recognize a graph that represents a linear equation (e.g., given a choice between a linear, quadratic, or parabolic graph, the student selects the linear). (AT80811)</li> </ul>	<ul style="list-style-type: none"> <li>The student will graph a line represented by a linear equation (e.g., the student connects the beginning point to the end point by plotting the middle point and connecting the dots to make a straight line). (AT80821A)</li> <li>The student will graph a line that shows a real-world experience (e.g., rate or amount of pay earned [x axis] to the number of hours worked [y axis]). (AT80821B)</li> </ul>	<ul style="list-style-type: none"> <li>The student will compare the slopes of graphs of two or more linear equations (e.g., which graph has the steepest slope?; which graph has no slope?; the student uses graphs that represent two or more cellular phone rate plans to compare linear equations). (AT80831A)</li> <li>The student will compare the x-intercepts of graphs of two or more linear equations (e.g., is this x-intercept more or less than that x-intercept?). (AT80831B)</li> <li>The student will compare the y-intercepts of graphs of two or more linear equations (e.g., which y-intercept is greatest). (AT80831C)</li> </ul>			

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**8.EE**

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Understand how a linear equation can supply information (rate of pay) that can be used in developing a career plan
- Understand how interest is calculated

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Use knowledge of linear relationships to solve problems (estimate job costs)

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Basic Skills: Understand the concepts of linear graphs (data graphing and data comparisons)
- Thinking Skills: Construct a schedule (allocate work to be completed in a given period of time)
- Managing Information: Use information from a graph to make decisions (use a bus schedule to select the proper bus to get to work on time)
- Managing Resources: Use graphing skills to make decisions (increase or decrease the amount of a task to be completed on various days of the week)

**CCLS and Essence(s)****Mathematics – Grade 8**

CCLS Domain: Expressions and Equations

CCLS Page(s): 47

CCLS Code	Cluster (including Standard(s) within the Cluster)	Essence(s) of Cluster
8.EE	<p><b>Analyze and solve linear equations and pairs of simultaneous linear equations.</b></p> <p>7. Solve linear equations in one variable.</p> <ul style="list-style-type: none"> <li>a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form <math>x = a</math>, <math>a = a</math>, or <math>a = b</math> results (where <math>a</math> and <math>b</math> are different numbers).</li> <li>b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</li> </ul> <p>8. Analyze and solve pairs of simultaneous linear equations.</p> <ul style="list-style-type: none"> <li>a. Understand that solutions to a system of two linear equations in two variables correspond to points of intersection of their graphs, because points of intersection satisfy both equations simultaneously.</li> <li>b. Solve systems of two linear equations in two variables algebraically, and estimate solutions by graphing the equations. Solve simple cases by inspection. <i>For example, <math>3x + 2y = 5</math> and <math>3x + 2y = 6</math> have no solution because <math>3x + 2y</math> cannot simultaneously be 5 and 6.</i></li> <li>c. Solve real-world and mathematical problems leading to two linear equations in two variables. <i>For example, given coordinates for two pairs of points, determine whether the line through the first pair of points intersects the line through the second pair.</i></li> </ul>	<p>Be able to solve a system of linear equations algebraically and graphically.</p>

<b>Extensions and Assessment Tasks</b>		<b>Mathematics – Grade 8 8.EE</b>	<b>Extension 3</b>
<b>Extensions</b>			
<b>Less Complex</b> ◀ ..... ▶		<b>More Complex</b> ▶ ..... ▶	
Solve a simple linear equation, given one variable. ( <i>For example, <math>3 + x = 4</math>, <math>3 + 1 = x</math></i> ). (81811)	Compare linear equations to answer a question. ( <i>For example, one babysitter works 5 hours and earns <math>x</math> dollars per hour. She brings home \$40. Another babysitter works 4 hours and earns <math>y</math> dollars per hour. He brings home \$36. Which babysitter makes more per hour?</i> ). (81821)	Graph a set of two linear equations and identify where they intersect. (81831)	
<b>Assessment Tasks</b>			
<ul style="list-style-type: none"> <li>The student will solve a simple linear equation, given one variable. (AT81811A)</li> <li>The student will solve for the variable at the end of a given linear equation (e.g., <math>3 + 1 = x</math>; <math>75 \div 25 = y</math>). (AT81811B)</li> <li>The student will solve for the variable in the stem of a given linear equation (e.g., <math>3 + x = 5</math>; <math>12x + 3 = 27</math>). (AT81811C)</li> </ul>	<ul style="list-style-type: none"> <li>The student will compare two or more linear equations to answer a question (e.g., given a graphic representation of the scenario: Rick’s Plumbing charges \$50 plus \$10 per hour while Tom’s Plumbing charges \$30 plus \$20 per hour. Which plumber charges more for 1 hour of work? For 3 hours of work?). (AT81821)</li> </ul>	<ul style="list-style-type: none"> <li>The student will graph a set of two linear equations and identify where they intersect (e.g., the student is asked to graph <math>y = 6x + 1</math> and <math>y = 5x + 2</math> and then determine where they will intersect). (AT81831)</li> </ul>	

**THE DEVELOPMENT OF TRANSITION SKILLS (For Instructional Use Only)**

Mastering the Extension Skills can lead to the development of Key Transition Skills. The transition skills in this section are not to be used on the NYSAA to assess students with severe disabilities. Rather, they are intended to be used by teachers for instructional purposes only.

Some of the transition skills that may be developed later by students with disabilities are listed below.

8.EE

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Understand how knowledge of expressions and equations may influence career choice

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Use ability to solve and graph linear equations to solve problems (which career/job pays more)

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Basic Skills: Understand concepts of linear expressions/equations (solving for an unknown)
- Thinking Skills: Solve linear equations (determine the cost of a service, given the hourly rate and hours worked)
- Managing Information: Use information to develop a graph to make decisions (speed of a car and use of fuel for each car)

**CCLS and Essence(s)****Mathematics – Grade 8**

CCLS Domain: Functions

CCLS Page(s): 47

CCLS Code	Cluster (including Standard(s) within the Cluster)	Essence(s) of Cluster
8.F	<p><b>Define, evaluate, and compare functions.</b></p> <ol style="list-style-type: none"> <li>1. Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.<sup>1</sup></li> <li>2. Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). <i>For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</i></li> <li>3. Interpret the equation <math>y = mx + b</math> as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. <i>For example, the function <math>A = s^2</math> giving the area of a square as a function of its side length is not linear because its graph contains the points (1, 1), (2, 4) and (3, 9), which are not on a straight line.</i></li> </ol> <p><sup>1</sup> function notation is not required in Grade 8.</p>	Solve and compare functions.

Extensions and Assessment Tasks		Mathematics – Grade 8 8.F	<b>Extension 4</b>
Extensions			
Less Complex	◀ ..... ▶		More Complex
<p>Identify and/or create a numeric pattern, based on a given rule. (80911)</p>	<p>Complete a function table based on an algebraic equation. (80921)</p>	<p>Identify or solve a function in a real-world situation. (<i>For example, which function represents the cost of renting a boat for 3 hours?</i>) (80931)</p>	
Assessment Tasks			
<ul style="list-style-type: none"> <li>• The student will identify a numeric pattern based on a given rule (e.g., which pattern, shows a multiply by 2 pattern?). (AT80911A)</li> <li>• The student will create a numeric pattern based on a given rule (e.g., the student creates a pattern to demonstrate the rule: “start with 2 and add 10”). (AT80911B)</li> </ul>	<ul style="list-style-type: none"> <li>• The student will complete a function table, based on an algebraic equation with one operation (e.g., <math>y = 3 + x</math>; <math>y = 4x</math>). (AT80921A)</li> <li>• The student will complete a function table based on an algebraic equation with more than one operation (e.g., <math>y = 3x + 7</math>, <math>y = 3x/4</math>). (AT80921B)</li> </ul>	<ul style="list-style-type: none"> <li>• The student will identify or solve a function in a real-world situation. (AT80931A)</li> <li>• The student will identify a function in a real-world situation (e.g., a factory produces 6 chairs in 2 hours. What function can be used to determine the number of chairs made each hour?). (AT80931B)</li> <li>• The student will identify a function given choices that match a real-world situation (e.g., Tom earns \$10 for every hour he works. Yesterday, he earned \$50. Which function shows this situation?). (AT80931C)</li> <li>• The student will solve a given function, using a real-world situation. (AT80931D)</li> </ul>	

**THE DEVELOPMENT OF TRANSITION SKILLS (For Instructional Use Only)**

Mastering the Extension Skills can lead to the development of Key Transition Skills. The transition skills in this section are not to be used on the NYSAA to assess students with severe disabilities. Rather, they are intended to be used by teachers for instructional purposes only.

Some of the transition skills that may be developed later by students with disabilities are listed below.

8.F

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Understand how a function chart of job requirements can help influence a career choice

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Use learned skills to construct and complete a function table about how the application and result of rules can solve problems

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Basic Skills: Listen to and understand concepts of functions (how the application of rules results in various outputs)
- Thinking Skills: Use functions to solve problems in a real-life situation (daily income, when given hours were worked)

**CCLS and Essence(s)****Mathematics – Grade 8**

CCLS Domain: Statistics and Probability

CCLS Page(s): 48

CCLS Code	Cluster (including Standard(s) within the Cluster)	Essence(s) of Cluster
8.SP	<p><b>Investigate patterns of association in bivariate data.</b></p> <ol style="list-style-type: none"> <li>1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</li> <li>2. Know that straight lines are widely used to model relationships between two quantitative variables. For scatter plots that suggest a linear association, informally fit a straight line, and informally assess the model fit by judging the closeness of the data points to the line.</li> <li>3. Use the equation of a linear model to solve problems in the context of bivariate measurement data, interpreting the slope and intercept. <i>For example, in a linear model for a biology experiment, interpret a slope of 1.5 cm/hr as meaning that an additional hour of sunlight each day is associated with an additional 1.5 cm in mature plant height.</i></li> <li>4. Understand that patterns of association can also be seen in bivariate categorical data by displaying frequencies and relative frequencies in a two-way table. Construct and interpret a two-way table summarizing data on two categorical variables collected from the same subjects. Use relative frequencies calculated for rows or columns to describe possible association between the two variables. <i>For example, collect data from students in your class on whether or not they have a curfew on school nights and whether or not they have assigned chores at home. Is there evidence that those who have a curfew also tend to have chores?</i></li> </ol>	<p>Investigate and/or interpret relationships between two sets of data.</p> <p>Know how to create and interpret scatter plots.</p>

<b>Extensions and Assessment Tasks</b>		<b>Mathematics – Grade 8 8.SP</b>	<b>Extension 5</b>
<b>Extensions</b>			
<b>Less Complex</b> ◀.....◀.....◀.....▶.....▶.....▶		<b>More Complex</b>	
Collect two sets of data. (81011)	Collect and display two sets of data in a scatter plot or two-way table. (81021)	Generate a statement to identify a relationship between two sets of data ( <i>For example, does weather affect mood?</i> ). (81031)	
<b>Assessment Tasks</b>			
<ul style="list-style-type: none"> <li>The student will collect two sets of data. (AT81011A)</li> <li>The student will collect two related sets of data (e.g., the student polls classmates to collect data on a topic, such as: favorite sport and favorite team; favorite singer and favorite song; animals with fur and long tails). (AT81011B)</li> <li>The student will collect data on two unrelated sets of data (e.g., the student polls classmates to collect two sets of data on a topic such as favorite colors, heights, or career preferences). (AT81011C)</li> </ul>	<ul style="list-style-type: none"> <li>The student will collect and display two sets of data in a scatter plot or a two-way table. (AT81021A)</li> <li>The student will collect and display two sets of data in a scatter plot (e.g., the student collects and plots data on height and arm span on a scatter plot). (AT81021B)</li> <li>The student will collect and display two sets of data on a two-way table (e.g., the student collects and displays two sets of data, such as hours spent doing homework and grades, on a two-way table; chores and allowance; jogging and aerobics). (AT81021C)</li> </ul>	<ul style="list-style-type: none"> <li>The student will generate a statement to identify a relationship between two sets of data. (AT81031A)</li> <li>The student will generate a statement to identify a relationship between two sets of data displayed on a scatter plot (e.g., the student is asked to make a statement about the relationship represented by a plot that shows distances students live from school and the amount of time it takes to travel to school). (AT81031B)</li> <li>The student will generate a statement to identify a relationship between two sets of data displayed in a two-way table (e.g., presented with a two-way table with data for time spent doing homework and grades, the student makes a statement regarding the relationship). (AT81031C)</li> </ul>	

**THE DEVELOPMENT OF TRANSITION SKILLS (For Instructional Use Only)**

Mastering the Extension Skills can lead to the development of Key Transition Skills. The transition skills in this section are not to be used on the NYSAA to assess students with severe disabilities. Rather, they are intended to be used by teachers for instructional purposes only.

Some of the transition skills that may be developed later by students with disabilities are listed below.

**8.SP**

Career Development: Knowledge about the world of work, career options, personal skills, and abilities relating to future career decisions. For example:

- Collect data to understand the relationship between a student's personal interests and skills/abilities and understand how they align with career requirements
- Understand the relationship between of personal choices and future career decisions (being on time for jobs and interviews, following directions, etc.)

Integrated Learning: Application of academic knowledge and skills to school, community, and home settings. For example:

- Collect and display sets of data to aid in developing a budget
- Collect and use learned probability skills to make decisions about occupational issues (safety practices, hiring practices, etc.)

Universal Foundation Skills: Foundation skills and competencies necessary for success in the workplace. For example:

- Basic Skills: Understand concepts of statistics and probability (customer trends)
- Managing Information: Use information from data sets to identify relationships (compare the skills of a specific job with his and her interests and abilities; work schedules and productivity)
- Thinking Skills: Select and use appropriate statistical data/graphs to complete a task
- Managing Resources: Collect, display, and/or apply information from various data sources to track progress towards a goal (occupational and personal goals).
- Managing Resources: Make a chart to track earnings

**Science  
NYSAA Frameworks**

**Grade 8**

**2014–15**

**New York State Alternate Assessment**

**Standard and Essence(s)****Science – Grade 8****Standard 1:** Analysis, Inquiry, and Design (Scientific Inquiry)**Key Idea 3:** The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.

Science Core Curriculum	Grade Level Indicators (GLI)	Essence(s) of Indicators
Pg. 5–6	<p>S3.1 Design charts, tables, graphs and other representations of observations in conventional and creative ways to help the address their research question or hypothesis.</p> <p>S3.1a organize results, using appropriate graphs, diagrams, data tables, and other models to show relationships</p> <p>S3.1b generate and use scales, create legends, and appropriately label axes</p> <p>S3.2 Interpret the organized data to answer the research question or hypothesis and to gain insight into the problem.</p> <p>S3.2a accurately describe the procedures used and the data gathered</p> <p>S3.2b identify sources of error and the limitations of data collected</p> <p>S3.2c evaluate the original hypothesis in light of the data</p> <p>S3.2d formulate and defend explanations and conclusions as they relate to scientific phenomena</p> <p>S3.2e form and defend a logical argument about cause-and-effect relationships in an investigation</p> <p>S3.2f make predictions based on experimental data</p> <p>S3.2g suggest improvements and recommendations for further studying</p> <p>S3.2h use and interpret graphs and data tables</p> <p>S3.3 Modify their personal understanding of phenomena based on evaluation of their hypothesis.</p>	<ul style="list-style-type: none"> <li>• Organize data (results), using graphs, diagrams, tables, and models</li> <li>• Draw conclusions, based on data from an investigation</li> </ul>

# Alternate Grade Level Indicators (AGLIs) Science – Grade 8

# AGLI 1

**Standard 1:** Analysis, Inquiry, and Design (Scientific Inquiry)

**Key Idea 3:** The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.

## ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

**Less Complex**



**More Complex**

The student will:

- recognize a result of a scientific investigation, using concrete objects, graphs, diagrams, tables, or models (81311)
- recognize the cause of a science related event (81312)
- recognize whether an event is possible, based on the result(s) of the investigation (81313)

The student will:

- record the result of a scientific investigation, using a graph, diagram, table, or model (81321)
- identify a trend in the results of a scientific investigation (81322)
- identify the cause-and-effect relationship of a science-related event (81323)
- identify a conclusion, based on the result(s) of an investigation (81324)

The student will:

- compare the results of two or more scientific investigations, using graph(s), diagram(s), table(s), or model(s) (81331)
- predict a future event, based on the result(s) of a scientific investigation (81332)

## Assessment Tasks

## Science – Grade 8

AGLI  
1

**Standard 1:** Analysis, Inquiry, and Design (Scientific Inquiry)

**Key Idea 3:** The observations made while testing proposed explanations, when analyzed using conventional and invented methods, provide new insights into phenomena.

**ASSESSMENT TASKS (ATs)**

Assessment tasks are organized from less complex to more complex in accordance with AGLI ordering. Tasks must be used as written, cannot be modified, and no original tasks can be used for assessment

AT Alignment to AGLI	Assessment Tasks	POSSIBLE Datafolio Products and Verifying Evidence Assessment Strategies
AT81311A	<p>The student will recognize the result of a scientific investigation shown, using concrete objects, graphs, diagrams, tables, or models.</p> <p>(e.g., answer a question or statement regarding the shown results. For the investigation “the distance objects travel,” the student points to the place on the graph where each object traveled after a specific period of time. For the investigation “What things can be added to soap to make the bubbles last longer?” the student circles the substance in the data table that produced the longest-lasting bubbles)</p>	<ul style="list-style-type: none"> <li>Student work product showing marks that the student made (or the teacher marked for the student based on his or her response) to indicate the result of a scientific investigation on a graph</li> </ul>
AT81311B	<p>The student will recognize the result of a scientific investigation shown, using stacking blocks determine which set of blocks shows the result that is the most or least, highest or lowest, etc. of the investigation variables, as requested.</p> <p>(e.g., for the investigation “measurements of snowfall at certain times of the day,” the student is presented with stacking blocks, representing each inch measured [five blocks, two blocks, one block], and the student chooses the result showing five stacking blocks when asked to indicate the result showing the most snowfall measured. For the investigation “surface tension of different liquids,” the student is presented with stacking blocks representing the number of pennies that were dropped in each of the different liquids before the liquid overflowed [vinegar-15 blocks, water-5 blocks, syrup-24 blocks], and the student chooses the result showing 5 blocks when asked to indicate the result showing the least amount of surface tension)</p>	<ul style="list-style-type: none"> <li>Sequenced, captioned, and dated photographs of the student determining the applicable set of stacking blocks that demonstrate the results of investigations as requested</li> </ul>
AT81312	<p>The student will recognize the cause of a science related event.</p> <p>(e.g., choose between a heat lamp and a ball of ice to indicate which object caused the event of candle wax melting)</p>	<ul style="list-style-type: none"> <li>Data Collection Sheet of the student performance when selecting the cause</li> </ul>

AT81313	<p>The student will recognize whether an event is possible when shown the results of an investigation.</p> <p>(e.g., for the investigation “chart the rise in temperature as ice melts at room temperature,” the student indicates “no” when asked the question “Is it possible to save a snowball in your room?”; the student will respond “yes” to the question, “Will the snowball melt at a high temperature?”)</p>	<ul style="list-style-type: none"> <li>• Student work product showing the student’s Yes or No responses, when considering whether the results of a scientific investigation will allow an event to be possible or not</li> </ul>
AT81321	<p>The student will record the result(s) of a scientific investigation in a graph, diagram, table, or model.</p> <p>(e.g., given the result(s) of a scientific investigation, student completes a graph, diagram, table, or model showing the results)</p>	<ul style="list-style-type: none"> <li>• Sequenced, captioned, and dated photographs of the student recording the result(s) of the investigation in a graph, diagram, table, or model</li> <li>• Student work product of a completed graph, diagram, table, or model, based on a given scientific investigation</li> </ul>
AT81322	<p>The student will identify a trend in the results of a scientific investigation by answering a question(s) regarding a trend(s) using previously recorded data.</p> <p>(e.g., using previously recorded data about temperatures in the month of July, ask the student to identify the trend by eye gazing to the next temperature that he or she would expect in July)</p>	<ul style="list-style-type: none"> <li>• Student work product showing trends indicated by the student</li> </ul>
AT81323	<p>The student will identify the cause-and-effect relationship of a science related event.</p> <p>(e.g., given two sets of pictures [one set showing an ice cube, a heat lamp, and a puddle, and one set showing a box, a road, and a car], the student selects the set of pictures that shows a cause-and-effect relationship)</p>	<ul style="list-style-type: none"> <li>• Data Collection Sheet of student performance when selecting by eye gazing, pointing, or verbalizing (in words, sign language, augmentative communication, etc.) the cause-and-effect relationship for a science-related event</li> </ul>
AT81324	<p>The student will identify a conclusion, based on the result(s) of a scientific investigation.</p> <p>(e.g., after completing an investigation that looked at what plants need to grow and given photographs or actual objects of water and a rock, the student selects a conclusion, based on the result(s) of the investigation; using the results of an investigation in which weight was a determining factor in the distance traveled by a car coasting down a hill, the student identifies the conclusion that the heaviest car traveled the farthest)</p>	<ul style="list-style-type: none"> <li>• Digital video of the student selecting from a list, photographs, or symbols representing different conclusions, which is the correct conclusion, based on the result(s) of the investigation</li> </ul>
AT81331	<p>The student will compare the results of two or more investigations using graph(s), diagram(s), table(s), or model(s) to show the comparison.</p> <p>(e.g., temperature results: the student records the temperature of the classroom at 10:00 a.m. and 2:00 p.m. and compares the morning temperature to the afternoon temperature [warmer/colder])</p>	<ul style="list-style-type: none"> <li>• Student work product of table showing the student’s comparison of temperatures indicating warmer or colder at each time of day</li> </ul>

## Assessment Tasks

AT81332	<p>After reviewing the given result(s) of a scientific investigation, the student will indicate a prediction of a future event, based on the result(s). (e.g., given the results of an investigation of classroom temperature [recorded daily at 10:00 a.m. and 2:00 p.m. over five days], the student predicts tomorrow's temperatures)</p>	<ul style="list-style-type: none"> <li>• Student work product of given temperature results and the student's recording of a weather prediction for the next day</li> </ul>
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**Standard and Essence(s)****Science – Grade 8****Standard 4:** The Physical Setting/Earth Science**Key Idea 3:** Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.

<b>Science Core Curriculum</b>	<b>Grade Level Indicators (GLI)</b>	<b>Essence(s) of Indicators</b>
Pg. 24–25	<p><b>3.1 Observe and describe properties of materials, such as density, conductivity, and solubility.</b></p> <p>3.1a Substances have characteristic properties. Some of these properties include color, odor, phase at room temperature, density, solubility, heat and electrical conductivity, hardness, and boiling and freezing points.</p> <p>3.1b Solubility can be affected by the nature of the solute and solvent, temperature, and pressure. The rate of solution can be affected by the size of the particles, stirring, temperature, and the amount of solute already dissolved.</p> <p>3.1c The motion of particles helps to explain the phases (states) of matter as well as changes from one phase to another. The phase in which matter exists depends upon the attractive forces among its particles.</p> <p>3.1d Gases have neither a determined shape nor a definite volume. Gases assume the shape and volume of a closed container.</p> <p>3.1e A liquid has a definite volume, but takes the shape of a container.</p> <p>3.1f A solid has definite shape and volume. Particles resist a change in position.</p> <p>3.1g Characteristic properties can be used to identify different materials, and separate a mixture of substances into its components. For example, iron can be removed from a mixture by means of a magnet. An insoluble substance can be separated from a soluble substance by such processes as filtration, settling, and evaporation.</p> <p>3.1h Density can be described as the amount of matter that is in a given amount of space. If two objects have equal volume, but one has more mass, the one with more mass is denser.</p> <p>3.1i Buoyancy is determined by comparative densities.</p> <p><b>3.2 Distinguish between chemical and physical changes.</b></p> <p>3.2a During a physical change a substance keeps its chemical composition and properties. Examples of physical changes include freezing, melting, condensation, boiling, evaporation, tearing, and crushing.</p> <p>3.2b Mixtures are physical combinations of materials and can be separated by physical means.</p> <p>3.2c During a chemical change, substances react in characteristic ways to form new substances with different physical and chemical properties. Examples of chemical changes include burning of wood, cooking of an egg, rusting of iron, and souring of milk.</p> <p>3.2d Substances are often placed in categories if they react in similar ways. Examples include metals, nonmetals, and noble gases.</p>	<ul style="list-style-type: none"> <li>• Understand that matter can be described by its characteristics, such as color, odor, state of matter, density, solubility, heat and electrical conductivity, hardness, boiling point, and freezing point</li> <li>• Recognize that matter can change either physically or chemically, but matter is always conserved</li> <li>• Understand that matter is made up of atoms</li> <li>• Understand that elements combine to form all substances</li> </ul>

3.2e The Law of Conservation of Mass states that during an ordinary chemical reaction matter cannot be created or destroyed. In chemical reactions, the total mass of the reactants equals the total mass of the products.

**3.3 Develop mental models to explain common chemical reactions and changes in states of matter.**

3.3a All matter is made up of atoms. Atoms are far too small to see with a light microscope.

3.3b Atoms and molecules are perpetually in motion. The greater the temperature, the greater the motion.

3.3c Atoms may join together in well-defined molecules or may be arranged in regular geometric patterns.

3.3d Interactions among atoms and/or molecules result in chemical reactions.

3.3e The atoms of any one element are different from the atoms of other elements.

3.3f There are more than 100 elements. Elements combine in a multitude of ways to produce compounds that account for all living and nonliving substances. Few elements are found in their pure form.

3.3g The periodic table is one useful model for classifying elements. The periodic table can be used to predict properties of elements (metals, nonmetals, noble gases).

# Alternate Grade Level Indicators    Science – Grade 8 (AGLIs)

## AGLI 2

**Standard 4:** The Physical Setting/Earth Science

**Key Idea 3:** Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.

### ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

**Less Complex**



**More Complex**

The student will:

- recognize that everything is made of matter (83211)
- identify one characteristic of matter (e.g., color, odor, mass, hardness, etc.) (83212)
- recognize a solid and a liquid (83213)
- recognize an object as hot (warm) or cold (cool) (83214)

The student will:

- identify two or more characteristics to describe matter (e.g., color, odor, mass, hardness, etc.) (83221)
- identify whether matter is a solid, a liquid, or a gas (83222)
- identify whether a change occurs when materials interact (83223)
- identify a physical change in a substance (e.g., salt dissolves in water) (83224)
- identify a chemical change in a substance (e.g., oxygen and iron interact to cause iron to rust) (83225)
- sort objects according to characteristic(s) such as mass, length or size (83226)

The student will:

- describe the properties of a solid, a liquid, or a gas (83231)
- compare two objects that are the same size to determine which is more dense or less dense (83232)
- demonstrate conservation of matter (83233)
- recognize that matter is made of small parts (atoms) (83234)
- perform an investigation involving a physical change (83235)
- perform an investigation involving a chemical change (83236)

# Assessment Tasks Science – Grade 8

# AGLI 2

**Standard 4:** The Physical Setting/Earth Science

**Key Idea 3:** Matter is made up of particles whose properties determine the observable characteristics of matter and its reactivity.

## ASSESSMENT TASKS (ATs)

Assessment tasks are organized from less complex to more complex in accordance with AGLI ordering. Tasks must be used as written, cannot be modified, and no original tasks can be used for assessment

AT Alignment to AGLI	Assessment Tasks	POSSIBLE Datafolio Products and Verifying Evidence Assessment Strategies
AT83211A	The student will recognize the concept of matter by indicating an answer to a statement or question. (e.g., given the statement, “Everything is made up of . . .” the student selects a response from a set of choices [matter]; “How do you know it is matter?” [“it has mass and takes up space”])	<ul style="list-style-type: none"> <li>Student work product showing that the student has chosen (scribed, written, used augmented communication) the word/statement “matter” or “it has mass and takes up space” to complete the sentence or answer the question</li> </ul>
AT83211B	The student will recognize that everything is made up of matter by looking at and interacting with different examples of matter. (e.g., a balloon with air, water, or beads in it)	<ul style="list-style-type: none"> <li>Data Collection Sheet (time-segment) of student performance of interactions with different examples of matter</li> <li>Sequenced, captioned, and dated photographs of students looking at and interacting/handling each of the balloons</li> </ul>
AT83212	The student will identify a characteristic of matter (e.g., color, odor, mass, hardness, etc.). (e.g., given a pillow, the student identifies a characteristic of matter from a set of choices [soft]; given a brick, the student identifies a characteristic of matter from a set of choices [dense]. Note: Naming the object does not indicate a characteristic of matter)	<ul style="list-style-type: none"> <li>Data Collection Sheet (multi-step) of student performance when identifying the density or hardness of familiar object(s)</li> <li>Student work product showing the item with the characteristic the student identified</li> </ul>
AT83213	The student will recognize a solid and a liquid. (e.g., the student responds to a question about a solid and a liquid; the student labels two or more items as a solid or a liquid)	<ul style="list-style-type: none"> <li>Student work product showing that the student has labeled two or more objects as solid or liquid</li> <li>Digital video of the student responding yes or no by activating a switch when shown a solid or liquid and posed the question “Is this a _____?”</li> </ul>
AT83214	The student will recognize an object as hot (warm) or cold (cool). (e.g., based on having experienced hot or cold objects [such as the temperature of water, a baked potato, or ice cream], the student can, when asked, indicate whether an object is hot or cold; indicate hot (warm) or cold (cool) when presented with an object)	<ul style="list-style-type: none"> <li>Student work product showing the student’s answer (written, scribed, done with augmented communication) as to whether an item was hot or cold</li> <li>Student work product showing pictures sorted by the student, items/objects that are hot and those that are cold</li> </ul>

AT83221	<p>The student will identify two or more characteristics to describe an object's matter. (e.g., given a piece of pink granite, the student selects the word cards for hard, pink, and odorless from a set of choices on an interactive board)</p>	<ul style="list-style-type: none"> <li>Sequenced, captioned, and dated photographs of the student selecting picture and/or word cards that indicate the characteristics of the matter they were given</li> <li>Student work product with the piece of matter indicated or shown and the recorded student responses or circled words from a list that describe the characteristics of the matter</li> </ul>
AT83222	<p>The student will identify whether a substance is a solid, a liquid, or a gas. (e.g., label an item with the appropriate state of matter, ice as a solid; milk as a liquid; rock as a solid; air as a gas) Note: it is acceptable to represent the state of matter in a container, for example, air in a balloon or milk in a glass.</p>	<ul style="list-style-type: none"> <li>Student work product of a table listing things as a solid, a liquid, or a gas</li> </ul>
AT83223	<p>The student will identify if changes occur when observing two materials being mixed together. (e.g., observe vinegar and baking soda being mixed and respond to the question "does a change occur?" [yes/no, change/no change]; mixing salt with pepper causes no change; pouring water on a pencil causes no change)</p>	<ul style="list-style-type: none"> <li>Data Collection Sheet (multi-step) of student performance when responding to the question "Did a change occur?" for different materials</li> <li>Student work product with the mixtures indicated and "change" or "no change" next to each mixture with the student-marked response on "change" or "no change"</li> </ul>
AT83224	<p>The student will identify a physical change in a substance. (e.g., given the scenario of water freezing to form ice, the student indicates whether this is a physical change or not; water condensing on a pitcher; adding water to dirt; grinding a sugar cube; cutting a piece of cloth)</p>	<ul style="list-style-type: none"> <li>Student work product from observing physical change shows sequence from original state to final state (e.g., water at room temperature [liquid] becomes ice [solid] when frozen)</li> </ul>
AT83225	<p>The student will identify a chemical change in a substance. (e.g., after observing a chemical change occur, the student answers questions about his or her observation; burning paper; mixing baking soda and vinegar; food spoiling, composting)</p>	<ul style="list-style-type: none"> <li>Audio of the student indicating the chemical change that took place (e.g., new substances formed, bubbles [production of a gas])</li> </ul>
AT83226	<p>The student will sort two or more objects according to a characteristic of mass, length, or size. (e.g., place shorter objects inside a box or area and longer objects inside another box or area)</p>	<ul style="list-style-type: none"> <li>Digital video of the student sorting objects into their respective boxes or areas</li> <li>Sequenced, captioned, and dated photographs showing student sorting the objects into two boxes or areas</li> </ul>
AT83231	<p>The student will describe the properties of a solid, liquid, or gas by determining if objects are solid, liquid, or gas and indicating his or her reasoning. (e.g., rock is solid because it maintains its shape and size no matter what container it is in)</p>	<ul style="list-style-type: none"> <li>Student work product identifying objects as solid, liquid, or gas and listing reasons for the student's answers</li> </ul>

Assessment Tasks

AT83232	<p>The student will compare two objects that are the same size, and will indicate which object is more dense or less dense. (e.g., given two objects that are the same size, the student compares the mass by holding the objects and identifying which object is denser)</p>	<ul style="list-style-type: none"> <li>• Data Collection Sheet (multi-step) of student performance when comparing objects over multiple object combinations</li> </ul>
AT83233	<p>The student will demonstrate that matter is conserved by investigating matter through phase changes. (e.g., put an ice cube in water; measure the mass of the ice cube and water together, observe that, as ice cube melts, the total mass remains the same and that matter does not disappear)</p>	<ul style="list-style-type: none"> <li>• Student work product from an investigation showing that matter is conserved</li> </ul>
AT83234	<p>The student will recognize that matter is made up of small parts (atoms). (e.g., respond to a question about how a particular piece of matter is made up of atoms; create a flyer, poster, or presentation to describe that matter is made up of atoms)</p>	<ul style="list-style-type: none"> <li>• Student work product of description of how a particular piece of matter is made up of atoms</li> </ul>
AT83235	<p>The student will perform an investigation involving a physical change. (e.g., dissolve Kool-Aid in water; make a fruit smoothie)</p>	<ul style="list-style-type: none"> <li>• Digital video of the student performing the investigation</li> <li>• Sequenced, captioned, and dated photographs showing student performing investigation: 1.) Student putting water on stove, 2.) Student turning stove on, 3.) Student observing bubbles in water or observing tea kettle whistling</li> </ul>
AT83236	<p>The student will perform an investigation involving a chemical change. (e.g., follow a recipe focusing on how the ingredients change to form a new substance [the flour is indistinguishable once mixed with other ingredients])</p>	<ul style="list-style-type: none"> <li>• Student work product with identified ingredients by their chemical characteristics (including solid and liquid) and how their chemical characteristics change in the final product</li> </ul>