English Language Arts (ELA)
NYSAA Frameworks

Grade 4

GLIs and Essences Grade 4 – ELA	4

Required Component 1— Key Idea: Reading

Choice Component 1— Standard 2: Students will read, write, listen, and speak for **literary response and expression.**

ELA Core Curriculum (2005)	Grade-Specific Performance Indicators	Essence of Indicators
Pg. 32	• Select literature on the basis of personal needs and interests from a variety of genres and by different authors • Engage in purposeful oral reading in small and large groups • Read print-based and electronic literary texts silently, on a daily basis, for enjoyment • Relate the setting, plot, and characters in literature to own lives • Explain the difference between fact and fiction • Make predictions, draw conclusions, and make inferences about events and characters • Identify cultural influences in texts and performances • Maintain a personal reading list to reflect reading accomplishments • Use specific evidence from stories to identify themes; describe characters, their actions, and their motivations; relate a sequence of events • Use knowledge of story structure, story elements, and key vocabulary to interpret stories • Read, view, and interpret literary texts from a variety of genres, with assistance • Define the characteristics of different genres, with assistance • Identify literary elements, such as setting, plot, and character, of different genres, with assistance • Recognize how the author uses literary devices, such as simile, metaphor, and personification, to create meaning, with assistance • Recognize how different authors treat similar themes, with assistance • Identify literary elements, such as setting, plot, and character, of different genres, with assistance • Use graphic organizers to record significant details about characters and events in stories	• Select and read literature for understanding • Relate setting, plot, and characters in literature to own lives • Make predictions, draw conclusions, and make inferences about different characters and events • Record basic details about characters and events in stories • Use evidence from stories to describe characters, and their actions, and their motivation (sequence of events) • Use knowledge of story structure, story elements, and key vocabulary to interpret stories

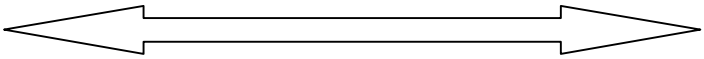
AGLIs Grade 4 – ELA	4

Required Component 1— Key Idea: Reading

Choice Component 1— Standard 2: Students will read, write, listen, and speak for **literary response and expression.**

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for Reading-Standard 2

Less Complex  **More Complex**

The student will: • attend to or read literary texts (12101) • attend to or read different genres (poetry, prose, fiction, nonfiction, drama, etc.) (12105) • identify important people and/or events in stories read or read aloud by others (12106) • interact with parts of a story through familiar hand motions and/or expression of emotions (12104)	The student will: • read aloud with fluency (12201) • identify the definition of story element terms (character, setting, etc.) (12207) • recognize plot means the sequence of events or action of a narrative (12208) • relate text to a personal experience (12204) • recognize explicit motives of characters (12205) • answer comprehension questions about plot, character, and/or setting of texts (12209)	The student will: • select and read literature with fluency for comprehension (12307) • recognize literary terms (e.g., plot, character, setting, etc.) as they apply to literary texts (12308) • demonstrate that plot means the sequence of events or action of a narrative leading to a logical ending (12309) • recognize explicit motives of characters (12304) • identify favorite and/or least favorite parts of a story (12305) • make predictions about the ending of story (12306)

SATs Grade 4 – ELA	4

Required Component 1— Key Idea: Reading

Choice Component 1— Standard 2: Students will read, write, listen, and speak for **literary response and expression.**

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT12101	The student will attend to or read literary texts during reading time.	• Video tape of the student attending to the teacher reading a story
SAT12105	The student will attend to or read a variety of genres when given choices.	• Data Collection Sheet recording student performance on the amount of time the student attends during reading time
SAT12106A	The student will identify a picture from a variety of pictures that corresponds to people in a text that is read aloud.	• Student work product of pictures of people matched to specific texts read aloud
SAT12106B	The student will identify an event in a text read aloud by choosing a picture of the event from multiple choices.	• Data Collection Sheet recording student performance when identifying pictures of events that occurred in texts read aloud
SAT12104	The student will respond to the repeated language of Gunniwolf (Pit - a- pat, pit-a pat, etc.) being read aloud by tapping the drum with his hand.	• Video tape of the student responding to the repeated language in a story by drumming at appropriate parts
SAT12207	The student will identify the definitions of the terms: plot, character, and setting by selecting the definition from a set of sentence cards and matching them with the term.	• Student work product of the terms and the definitions pasted next to them • Sequenced, captioned, dated photographs of the student matching the definition with the corresponding term in a story
SAT12208	The student will recognize plot as a sequence of events or actions in a narrative by placing pictures or sentence strips in the correct order based on a literary text.	• Student work product of ordered sentence strips or pictures showing events or actions in a literary text read or read aloud
SAT12204A	The student will compare a character in a text to him/her after being shown two or more pictures of the character in the text.	• Student work product of the comparison of characteristics of the student and the character in the text (e.g., work product may include a semantic feature analysis chart, other graphic organizer, etc.)
SAT12204B	The student will relate a text to a personal experience by choosing a character that is most like him/her in the text and indicate a reason for the choice.	• Video tape or audio tape of the student indicating the character that is most like him/her and indicating a reason for the choice by selecting a picture, object, or symbol that represents the similarity, and/or verbalizing or signing the reason

SAT12209A	The student will indicate why a character in a story has a problem.	• Data Collection Sheet recording student performance that includes the story title, sentence strips provided to the student and the student's choice of sentence strip indicating why the character has a problem
SAT12209B	The student will match descriptors to specific events, people and places in a text.	• Sequenced, captioned, dated photographs of the student matching several descriptors on word cards with pictures or other word cards for events, people, and places in text
SAT12308	The student will recognize literary terms as they apply to literary texts by answering questions about the text. (e.g., plot, character, setting)	• Data Collection Sheet recording student performance when answering questions that use the literary terms such as plot, character, or setting
SAT12304	The student will recogninze explicit motives of characters by selecting the card that gives the plausible motive or verbally stating why a character took a specific action in the story.	• Student work sample of cards selected showing motive affixed to a worksheet • Audio tape of the student describing why a character took a specific action
SAT12305	The student will identify his/her favorite and least favorite parts of a story by selecting pictures that represents those parts.	• Student work sample of pictures showing favorite part and least favorite part of story affixed to a worksheet under correct headings (favorite/least favorite)
SAT12306	The student will indicate a prediction of how a story will end.	• Video tape or audio tape of the student predicting the end of a story by selecting a picture from several pictures, sentence strips, etc., and/or verbalizing or signing the prediction

GLIs and Essences Grade 4 – ELA	4

Required Component 1—Key Idea: Reading

Choice Component 2— Standard 4: Students will read, write, listen, and speak for **social interaction.**

ELA Core Curriculum (2005)	Grade-Specific Performance Indicators	Essence of Indicators
Pg. 33	• Share reading experiences to build relationships with peers or adults; for example, read together silently or aloud • Respect the age, gender, position, and cultural traditions of the writer • Recognize the types of language (e.g., informal vocabulary and jargon) that are appropriate to social communication	• Share reading experiences to build relationships with peers • Respect what others say and write • Ask questions to clarify understanding of a text • Demonstrate the use of language (e.g. informal vocabulary and jargon) that is appropriate to social communication • Demonstrate understanding of stories/ expository text through oral demonstration

AGLIs Grade 4 – ELA	4

Required Component 1—Key Idea: Reading

Choice Component 2— Standard 4: Students will read, write, listen, and speak for **social interaction.**

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for Reading-Standard 4

Less Complex ⟷ **More Complex**

The student will: • attend to text read aloud by others (14101) • attend to or read texts and take turns responding (14102) • attend to and respond appropriately to others' thoughts and/or opinions about texts (14103) • answer "who," "what," and/or "when" questions about texts with classmates (14104)	The student will: • read or have read to them multiple texts with classmates (14203) • answer literal questions about text read or read aloud by others in a peer setting (14204)	The student will: • read texts with classmates, e.g., the same text separately, in unison, similar texts; or different texts aloud to one another (14301) • discuss texts (asking and/or answering questions) with classmates to enhance comprehension (14302) • use appropriate language for classroom discussion (14303) • relate events in stories in sequence with a group (14304) • identify main characters within a group (14306)

SATs Grade 4 – ELA	4

Required Component 1—Key Idea: Reading

Choice Component 2— Standard 4: Students will read, write, listen, and speak for **social interaction.**

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT14101A	The student will attend to stories read to the class.	• Sequenced, captioned, dated photographs of the student attending to a story being read to the class by the teacher
SAT14101B	The student will attend to a four-page story read on tape by keeping a pair of headphones on during the story.	• Data Collection Sheet recording student performance on the amount of time the student listens to the story
SAT14104	The student will answer literal questions about texts with classmates.	• Video tape of the student answering literal questions with classmates
SAT14203	The student will read multiple texts with a group while following appropriate group work procedures.	• Data Collection Sheet recording student performance when using appropriate conversation skills during a conversation with peers about multiple texts
SAT14301	The student will read texts with classmates.	• Audio tape of the student reading texts with classmates in a small group following appropriate procedures for group work (e.g., the same text separately, in unison; similar texts; or different texts aloud to one another)
SAT14302	The student will take turns asking and answering questions with classmate(s) after reading or listening to a text.	• Video tape of the student asking and answering questions
SAT14304	The student will correctly place in a sequence a series of three or more events in a story with a classmate(s).	• Video tape or audio tape showing the student sequencing events, using sentence strips, pictures, etc.
SAT14306A	The student will identify the main characters with classmates by selecting pictures representing characters as text is read.	• Sequenced, captioned, dated photographs of the class creating a character chart on a felt board while the story is being read
SAT14306B	The student will work with a peer to identify one fact about each character in a text by creating a character board during reading activities.	• Sequenced, captioned, dated photographs of the student working with a peer to create the character board where the student is identifying specific character facts from a choice of picture cards

GLIs and Essences Grade 4 – ELA	4

Required Component 2— Key Idea: Writing

Choice Component 1— Standard 1: Students will read, write, listen, and speak for **information and understanding.**

ELA Core Curriculum (2005)	Grade-Specific Performance Indicators	Essence of Indicators
Pg. 34	• Take notes to record data, facts, and ideas both by following teacher direction and by writing independently • State a main idea and support it with details • Use organizational patterns such as compare/contrast, cause/effect, and time/order, for expository writing • Use a variety of resources, such as age-appropriate dictionaries and/or computer software, to spell words correctly • Produce clear, well-organized, and well-developed explanations, reports, accounts, and directions that demonstrate understanding of a topic • Support interpretations and explanations with evidence from text • Maintain a portfolio that includes informational writing as a method of reviewing work with teachers and parents/caregivers • Compare and contrast ideas and information from two sources • Write labels and captions for graphics to convey information, with assistance	• Take notes to record facts • State a main idea • Compare ideas and information

AGLIs Grade 4 – ELA	4

Required Component 2— Key Idea: Writing

Choice Component 1— Standard 1: Students will read, write, listen, and speak for **information and understanding.**

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for Writing-Standard 1

Less Complex ⟷ **More Complex**

The student will: • select words, pictures, symbols, etc., from simple text to record facts (21105) • identify main ideas in texts for note-taking (21102) • arrange events in logical and sequential order (21103) • create pictures, symbols, objects, etc. to communicate information (21104)	The student will: • take notes from text to record facts, data, and/or ideas (21201) • describe in his/her own words main ideas in texts for note-taking (21205) • identify similar facts or ideas in one text for note-taking (21203) • demonstrate ongoing journaling of information (21204)	The student will: • compare ideas or facts (21301) • compose a general statement about a comparison (21306) • identify a main idea based on notes (21307) • summarize informational text in his/her own words (21308) • begin to use the writing process in composing text (e.g., prewriting, drafting, revising, proofreading, and revising) (21305)

SATs Grade 4 – ELA	4

Required Component 2— Key Idea: Writing

Choice Component 1— Standard 1: Students will read, write, listen, and speak for **information and understanding.**

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT21105	The student will select cards of photographs, symbols or objects representing facts in an informational text and place them on a graphic organizer.	• Video tape of the student attending to the text and selecting the appropriate cards for note-taking • Student work product of the completed graphic organizer
SAT21102	The student will identify the main idea of a text for note-taking when given at least two choices.	• Data Collection Sheet recording student performance that includes the title of the text, choices, and the student's selection
SAT21103	The student will arrange three or more pictures in chronological order that represent a sequence of events from a weekly current events article.	• Data Collection Sheet recording student performance when arranging pictures in chronological order • Video tape of the student arranging pictures in chronological order
SAT21104	The student will use pictures or images to communicate information about a text.	• Video tape of the student creating graphics or images using Boardmaker, Internet pictures, writing with symbols, etc. to communicate information
SAT21201A	The student will record notes, either by writing, audio recording, (or method typically used by this student) based on reading or listening to an informational text.	• Video tape or audio tape of the student taking or recording notes from an informational text
SAT21201B	The student will identify three main facts or ideas presented in a text and will record the facts as notes.	• Student work product of the student the three main facts in a text that the student recorded notes based on the informational text
SAT21205	The student will describe the main idea of a text in his/her own words for note-taking.	• Student work product of student-created or written notes indicating the main idea of the text in his/her own words
SAT21203A	The student will identify similar facts or ideas presented in a text, by grouping cards with words, pictures, symbols or objects in to groups.	• Data Collection Sheet recording student performance while grouping similar information
SAT21203B	The student will identify similarity of facts in a text by arranging cards into groups. (e.g., topic of animals—grouped by habitat and food sources, grouped by mammal and amphibian, etc.)	• Sequenced, captioned, dated photographs of the student grouping similar information

SAT21204	The student will record in a journal a response to a daily question.	• Student work product with responses to daily questions: symbols, pictures, word cards, sentence strips, etc.
SAT21301	The student will compare facts by indicating a similarity of at least two different facts in informational text(s).	• Student work product of a graphic organizer showing the title of the text and the similarities of two different facts
SAT21306	The student will create a general statement comparing nonfiction texts by identifying common themes in two or more nonfiction texts. (e.g., biographies, histories, personal narratives, etc.).	• Student work product of a graphic organizer showing the titles of nonfiction texts and common themes
SAT21307	The student will identify the main idea of an informational text based on notes pre-recorded in a graphic organizer.	• Video tape of the student identifying the main idea of an informational text, using the text and notes in a graphic organizer
SAT21308	The student will summarize text using images.	• Student work product of the student's summary of a text using symbols, pictures or word cards to summarize it
SAT21305	The student will edit text he/she has developed using the writing process.	• Student work product of a student-created text by showing the student work product before and after editing

GLIs and Essences Grade 4 – ELA	4

Required Component 2— Key Idea: Writing

Choice Component 2— Standard 2: Students will read, write, listen, and speak for **literary response and expression.**

ELA Core Curriculum (2005)	Grade-Specific Performance Indicators	Essence of Indicators
Pg. 34	• Write original literary texts that - use dialogue to create short plays - use vivid and playful language • Write interpretive and responsive essays that - describe literary elements such as plot, setting, and characters - describe themes of literary texts - compare and contrast elements of texts • Produce clear, well-organized responses to stories read or listened to, supporting the understanding of characters and events with details from the story • Produce imaginative stories and personal narratives that show insight, development, organization, and effective language • Use resources such as personal experiences and themes from the text and performances to stimulate own writing • Use a computer to create, respond to, and interpret literary texts • Maintain a portfolio that includes literary and interpretive writing as a method of reviewing work with teachers and parents/caregivers • Summarize the plot, with assistance • Describe the characters and explain how they change, with assistance • Describe the setting and recognize its importance to the story, with assistance • Draw a conclusion about the work, with assistance	• Write original literary texts having elements such as plot, setting and characters • Write clear, concise and varied sentences • Produce responses to stories read or listened to

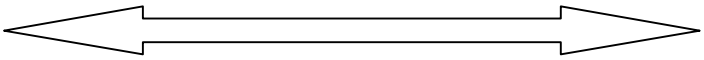
AGLIs Grade 4 – ELA	4

Required Component 2— Key Idea: Writing

Choice Component 2— Standard 2: Students will read, write, listen, and speak for **literary response and expression.**

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for Writing-Standard 2

Less Complex  **More Complex**

The student will: • tell stories about personal experiences (22101) • attend to/read stories and tell what happened by using words, pictures, signs, symbols, etc. (22102) • compose ideas for stories (22106) • tell a story with character(s) and/or setting (22104) • create pictures, symbols, objects, etc. to communicate a story (22105)	The student will: • compose stories about personal experiences (22207) • compose stories having a plot, setting and/or characters (22208) • retell the plot of a story read or read aloud (22209) • compose comprehension question(s) about literary text(s) (22210) • respond to stories by relating to personal experiences (22205) • begin to use the initial steps of the writing process (prewriting and drafting) (22211)	The student will: • compose stories using personal experiences enhanced with make-believe having plot, setting and/or characters (22304) • use the writing process in composing text (e.g., prewriting, drafting, revising, proofreading, and revising) (22302) • compose complete sentences to answer comprehension questions about a literary text (22305) • compose a complete sentence indicating a reaction to a literary text (22306)

SATs Grade 4 – ELA	4

Required Component 2— Key Idea: Writing

Choice Component 2— Standard 2: Students will read, write, listen, and speak for **literary response and expression.**

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

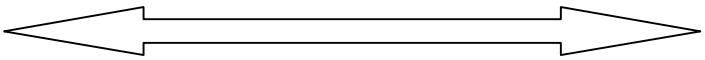
SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT22101A	The student will tell (write, draw, select pictures, etc.) stories about personal experiences when given a starting question.	• Student work product of a story about the student's weekend activities
SAT22101B	The student will select pictures that illustrate a personal experience.	• Sequenced, captioned, dated photographs of the student selecting pictures from a set to tell about a personal experience
SAT22102	The student will tell what happened in a story that was read aloud.	• Video tape of the student attending to a story and then telling what happened in the story using pictures, signs, symbols, etc.
SAT22106	The student will compose some ideas for a story about animals by selecting from a group of idea word cards. (e.g., choice cards presented should include some relevant and irrelevant ideas about the topic)	• Student work product of selected word cards with ideas indicated for the specific topic
SAT22104	The student will tell a story by indicating the elements of character and setting from a group of choice cards.	• Student work product showing story elements (pictures, word cards, symbols, etc.)
SAT22105	The student will create a storyline that tells a common theme.	• Student work product showing a storyline that includes an identifying theme (student can use pictures, symbols, signs, etc.)
SAT22207	The student will create text about a personal experience by selecting sentence strips that relate to the story of a favorite day.	• Student work product of the student's story using images
SAT22208	The student will create text with a simple plot, setting, and characters for a story journal.	• Student work product of the student's story using images
SAT22209	The student will retell plot by relating one or more events of a story.	• Video tape or audio tape of the student relating an event(s) of a story using images or a speech generating device
SAT22205	The student will relate a person he/she knows or knows about to a character in a story.	• Student work product showing the connections between the person and a character in the story (student can use a graphic organizer, images, speech generating device, etc.)

SAT22211	The student will begin to use the writing process to draft a story outline.	• Student work product of drafted story outline
SAT22304	The student will write a story about something the student knows about that has a plot, setting, characters, and exaggerated details.	• Video tape of the student writing the story
SAT22302	The student will edit his/her own text using the writing process.	• Student work product of his/her own text before and after student edits

Mathematics
NYSAA Frameworks

Grade 4

GLIs and Essences Grade 4 – Mathematics			4
Required Component 1— Strand: Number Sense and Operations			
Choice Component 1— Band: Number Systems			
Math Core Curriculum (2005)	**Grade-by-Grade Indicators**		**Essence of Indicators**
Pg. 45-46	4.N.1	Skip count by 1,000's	• Read and write, count, group, compare and order whole numbers to 10,000 • Use concrete materials and visual models to compare and order unit fractions or fractions with the same denominator and generate equivalent fractions (halves, fourths, thirds, fifths, sixths and tenths) • Understand decimals as part of a whole and compare and order decimals to hundredths in the context of money
	4.N.2	Read and write whole numbers to 10,000	
	4.N.3	Compare and order numbers to 10,000	
	4.N.4	Understand place value structure of the base ten number system: 10 ones = 1 ten 10 tens = 1 hundred 10 hundreds = 1 thousand 10 thousands = 1 ten thousand	
	4.N.5	Recognize equivalent representations for numbers up to four digits and generate them by decomposing and composing numbers	
	4.N.6	Understand, use and explain the associative property of multiplication	
	4.N.7	Develop an understanding of fractions as locations on number lines and as divisions of whole numbers	
	4.N.8	Recognize and generate equivalent fractions (halves, fourths, thirds, fifths, sixths, and tenths) using manipulatives, visual models, and illustrations	
	4.N.9	Use concrete materials and visual models to compare and order unit fractions or fractions with the same denominator (with and without the use of a number line)	
	4.N.10	Develop an understanding of decimals as part of a whole	
	4.N.11	Read and write decimals to hundredths, using money as a context	
	4.N.12	Use concrete materials and visual models to compare and order decimals (less than 1) to the hundredths place in the context of money	

AGLIs Grade 4 – Mathematics	4
Required Component 1— Strand: Number Sense and Operations	
Choice Component 1— Band: Number Systems	
ALTERNATE GRADE LEVEL INDICATORS (AGLIs)	
POSSIBLE ENTRY POINTS for Number Sense and Operations-Number Systems	
Less Complex  **More Complex**	

The student will: • compare two whole numbers 0 to 19 (11107) • order three or more whole numbers 0 to 19 (11108) • demonstrate the commutative property of addition (11103) • demonstrate an understanding that a decimal represents a part of a whole using manipulatives (11109) • read, write, and/or name decimals to the tenths place with or without the use of manipulatives (11110) • identify numerals 0 to 19 (11106)	The student will: • compare two whole numbers 0 to 100 (11207) • order three or more whole numbers 0 to 100 (11208) • compare two unit fractions (11209) • order three or more unit fractions (11210) • read, write, and/or name decimals to the hundredths place in the context of money with or without the use of manipulatives (11211) • identify numerals 0 to 100 (11206)	The student will: • compare two whole numbers 0 to 1,000 (11308) • order three or more whole numbers 0 to 1,000 (11309) • compare two fractions with the same denominator (11310) • order three or more fractions with the same denominator (11311) • compare two decimals to the hundredths place in the context of money (11305) • order three or more decimals to the hundredths place in the context of money (11306) • identify numerals 0 to 1,000 (11307)

SATs Grade 4 – Mathematics	4
Required Component 1— Stand: Number Sense and Operations	
Choice Component 1— Band: Number Systems	

SAMPLE ASSESSMENT TASKS (SATs)

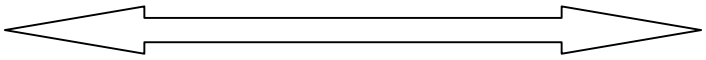
Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT11107	The student will communicate the comparison of peers' biographical information by ordering them in descending order. (e.g., one student compares the number of people in his/her family to the number of people in a peer's family)	• Student work product showing a list of student names and the comparison of information by ordering the information from most to fewest
SAT11108A	The student will take large-sized, cut-out numerals of 1, 2, and 3 and give a numeral to the first, second, and third child in line (students represent a number line).	• Video tape of the student taking the numerals 1, 2, and 3 and giving them to the appropriate student standing in line
SAT11108B	The student will put the numbers 12, 7, and 15 in correct counting order.	• Student work product of a set of three mixed-up numbers that the student reordered in correct counting order
SAT11103	The student will show that the answer for 2 + 1 is the same as the answer for 1 + 2 using manipulatives.	• Sequenced, captioned, dated photographs of the student working with a set of manipulative to show commutative properties
SAT11109	The student will match decimals to pictures of a tenths and/or hundredths charts shaded to represent decimals less than 1.	• Student work product showing the student matching decimals to the correct models
SAT11106	The student will indicate the numeral 1 upon request when given three large sized, cut-out numerals of 1, 3 and 5.	• Data Collection Sheet recording student performance when identifying numbers between 0 and 19
SAT11210	The student will place measuring cups ($\frac{1}{3}$, $\frac{1}{2}$, $\frac{3}{4}$) in nesting order along the table or workspace.	• Video tape of the student ordering measuring cups
SAT11206	The student will indicate the numerals requested from three large, cut-out numerals (0-100).	• Sequenced, captioned, dated photographs of the student indicating the requested number from a set of manipulatives

SAT11310A	The student will compare fractions with the same denominator by placing them on a number line or identifying where they go on a number line.	• Sequenced, captioned, dated photographs of the student placing fractions on the number line
SAT11310B	The student will indicate the fraction that is larger when given two fractions $\frac{3}{5}$ and $\frac{5}{5}$.	• Student work product indicating fractions presented to the student and the fraction the student indicated as larger
SAT11311	The student will indicate the order from smallest to largest of three fractions (i.e., $\frac{2}{6}$, $\frac{5}{6}$, $\frac{3}{6}$).	• Video tape or audio tape of the student ordering fractions from smallest to largest
SAT11305	The student will compare two decimals to the hundredths place by indicating which coin amounts, written using correct currency symbols ($0.00), is larger.	• Student work product indicating coin amounts given and the student's mark on the one that is larger

GLIs and Essences Grade 4 – Mathematics			4
Required Component 1— Strand: Number Sense and Operations			
Choice Component 2— Band: Operations			
Math Core Curriculum (2005)	**Grade-by-Grade Indicators**		**Essence of Indicators**
Pg. 46-47	4.N.14	Use a variety of strategies to add and subtract numbers up to 10,000	• Use a variety of strategies to add and subtract whole numbers to 10,000 • Multiply and divide one- and two-digit numbers • Add and subtract proper fractions with common denominators • Add and subtract decimals to tenths and hundredths using a hundredths chart
	4.N.15	Select appropriate computational and operational methods to solve problems	
	4.N.16	Understand various meanings of multiplication and division	
	4.N.17	Use multiplication and division as inverse operations to solve problems	
	4.N.18	Use a variety of strategies to multiply two-digit numbers by one-digit numbers (with and without regrouping)	
	4.N.19	Use a variety of strategies to multiply two-digit numbers by two-digit numbers (with and without regrouping)	
	4.N.20	Develop fluency in multiplying and dividing multiples of 10 and 100 up to 1,000	
	4.N.21	Use a variety of strategies to divide two-digit dividends by one-digit divisors (with and without remainders)	
	4.N.22	Interpret the meaning of remainders	
	4.N.23	Add and subtract proper fractions with common denominators	
	4.N.24	Express decimals as an equivalent form of fractions to tenths and hundredths	
	4.N.25	Add and subtract decimals to tenths and hundredths using a hundredths chart	

AGLIs Grade 4 – Mathematics	4
Required Component 1— Strand: Number Sense and Operations	
Choice Component 2— Band: Operations	
ALTERNATE GRADE LEVEL INDICATORS (AGLIs)	
POSSIBLE ENTRY POINTS for Number Sense and Operations-Operations	

Less Complex  **More Complex**		
The student will: • add and/or subtract one-digit numbers (13106) • multiply and/or divide one-digit numbers (13102) • select the appropriate operation to solve problems (13103) • use the appropriate operation to solve problems (13104) • recognize a whole and/or its parts (13105)	The student will: • add and/or subtract, one and/or two-digit whole numbers (13206) • multiply and/or divide one and/or two-digit whole numbers (13207) • select the appropriate operation to solve problems using two or more of the four operations (13208) • use the appropriate operation to solve problems using two or more of the four operations (13209) • connect written representations of unit fractions with pictorial representations (13210)	The student will: • add and/or subtract fractions with the same denominators (13303) • add and/or subtract decimals to tenths and hundredths using a hundredths chart (13304)

SATs Grade 4 – Mathematics	4

Required Component 1— Strand: Number Sense and Operations

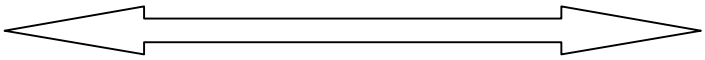
Choice Component 2— Band: Operations

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT13106	The student will solve one-digit simple addition and subtraction problems.	• Data Collection Sheet recording student performance when answering simple addition or subtraction problems
SAT13103	The student will select the operation (addition) needed to find the total value or cost of items contained in a list of purchases from an advertisement brochure or catalog.	• Video tape of the student being presented with the problem and selecting the appropriate operation from a set of word cards
SAT13104	The student will subtract the costs of two items from a starting amount of money to find the amount of money, if any, that will remain.	• Student work product showing the student using subtraction to find the amount, if any, of money that remains
SAT13105	The student will recognize a whole circle when given a whole circle and a half circle by indicating it upon request.	• Student work product showing a set of items in whole form and half form with student marks on the whole form
SAT13206	The student will add and/or subtract two-digit whole numbers using a set of concrete objects.	• Student work product consisting of a worksheet showing addition and subtraction of two-digit numbers and the objects the student used
SAT13208	The student will determine which operations make a true number sentence when given a set of operation symbols (e.g., +, -, x). (e.g., 5 ___ 2 ___ 3 = 13; 4 __ 1 __ 1 = 2; 7 __ 0 __ 2 = 2; etc.)	• Sequenced, captioned, dated photographs of the student selecting the operations needed to complete the number sentence, then checking their work using a calculator
SAT13209	The student will solve word problems involving making purchases of three or more items using addition and multiplication.	• Student work product showing the word problem and the multiplication and addition of the items to solve the problem
SAT13210	The student will indicate which unit fraction goes with a pictorial representation. (e.g., $\frac{1}{2}$ ☐ is one half of ▭ $\frac{1}{4}$ ☐ is one quarter of ☐)	• Video tape of the student working with a pictorial representation and selecting the unit fraction that is appropriate
SAT13303	The student will add two fractions with the same denominator.	• Student work product of the addition of two fractions with the same denominator

GLIs and Essences Grade 4 – Mathematics			4
Required Component 2— Strand: Measurement			
Choice Component 1— Band: Units of Measurement			
Math Core Curriculum (2005)	**Grade-by-Grade Indicators**		**Essence of Indicators**
Pg. 49	4.M.1	Select tools and units (customary and metric) appropriate for the length being measured	• Measure length, mass and capacity in standard and metric units
	4.M.2	Use a ruler to measure to the nearest standard unit (whole, $\frac{1}{2}$ and $\frac{1}{4}$ inches, whole feet, whole yards, whole centimeters, and whole meters)	
	4.M.3	Know and understand equivalent standard units of length: 12 inches = 1 foot 3 feet = 1 yard	
	4.M.4	Select tools and units appropriate to the mass of the object being measured (grams and kilograms)	
	4.M.5	Measure mass, using grams	
	4.M.6	Select tools and units appropriate to the capacity being measured (milliliters and liters)	
	4.M.7	Measure capacity, using milliliters and liters	

AGLIs Grade 4 – Mathematics	4
Required Component 2— Strand: Measurement	
Choice Component 1— Band: Units of Measurement	
ALTERNATE GRADE LEVEL INDICATORS (AGLIs)	
POSSIBLE ENTRY POINTS for Measurement-Units of Measurement	
Less Complex  **More Complex**	

The student will: • order objects according to their lengths (21101) • recognize the difference in length between standard units of measurement (21102) • compare two objects according to the attributes of mass (more mass/less mass) (21107) • order three or more objects according to the attributes of mass (more mass/less mass) (21108) • identify tools appropriate for measurement (21105) • use standard and/or non-standard tools for measurement (21109)	The student will: • use a ruler to measure and identify lengths to the nearest whole standard unit (21206) • use a scale to measure and identify the mass of objects measured in grams (21207) • use a scale to measure the mass of objects and compare the mass of two or more objects measured in grams (21208) • use appropriate tools to measure capacities (volume) and identify the amounts measured in standard units (21209) • use appropriate tools to measure and compare the capacity (volume) of two or more amounts measured in standard units (21210)	The student will: • use a ruler or meter stick to measure and compare lengths to the nearest whole standard unit (21304) • use a scale to measure the mass of objects and compare the masses of objects measured in kilograms (21305) • recognize, name, and use appropriate tools to measure capacities (volumes), lengths, and/or mass measured in standard units (21306)

SATs Grade 4 – Mathematics	4

Required Component 2— Strand: Measurement

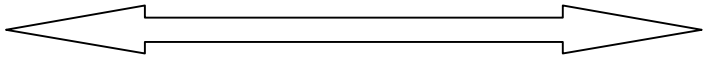
Choice Component 1— Band: Units of Measurement

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT21101	The student will order students by using a height chart to determine who in the class is the tallest and shortest.	• Sequenced, captioned, dated photographs of the student reading and/or recording the heights of students and indicating who is the tallest or shortest
SAT21102	The student will recognize the difference in length between standard units of measurement by placing them in order from smallest unit to largest.	• Video tape of the student ordering units of measure from inch to yard
SAT21108	The student will place three items that are significantly different in mass in order by ordering them from lightest to heaviest.	• Video tape of the student ordering items according to mass
SAT21105	The student will select the appropriate measuring tool necessary to measure a given series of items. (e.g., poster – ruler; car – scale; salt – measuring spoon, etc.)	• Student work product of the items and appropriate measuring tools indicated or marked by the student
SAT21109A	The student will measure the desktop or workspace first using hand-spans and then using a ruler.	• Data Collection Sheet recording student performance when measuring using non-standard and standard units of measurement
SAT21109B	The student will use a tool of measurement by standing on a scale when given the scale and told it is time to be weighed.	• Video tape of the student using a scale to measure weight
SAT21209	The student will select the appropriate tool for measurement of a liquid and will measure a required capacity (volume) of a liquid for a recipe.	• Data Collection Sheet recording student performance when selecting and using measuring cups or spoons appropriately to measure capacity (volume) of a liquid
SAT21304	The student will measure the lengths of the sides of classroom objects (e.g., desk, blackboard, shoe) using a meter stick, centimeter ruler, yardstick, and/or ruler and will compare the lengths by placing them in order.	• Student work product of a scrapbook containing pictures of classroom objects placed in order by their length
SAT21305	The student will weigh a set of familiar objects in kilograms and order them according to their mass.	• Student work product of a list of five or more objects and their mass in order from least to greatest

GLIs and Essences Grade 4 – Mathematics			4
Required Component 2— Strand: Measurement			
Choice Component 2— Band: Units/Estimation			
Math Core Curriculum (2005)	**Grade-by-Grade Indicators**		**Essence of Indicators**
Pg. 49	4.M.8	Make change, using combined coins and dollar amounts	• Make change, using combined coins and dollar amounts • Calculate elapsed time in hours and half hours (not crossing A.M./P.M.) and in days and weeks, using a calendar
	4.M.9	Calculate elapsed time in hours and half hours, not crossing A.M./P.M.	
	4.M.10	Calculate elapsed time in days and weeks, using a calendar	

AGLIs Grade 4 – Mathematics	4
Required Component 2— Strand: Measurement	
Choice Component 2— Band: Units/Estimation	
ALTERNATE GRADE LEVEL INDICATORS (AGLIs)	
POSSIBLE ENTRY POINTS for Measurement-Units/Estimation	
Less Complex  **More Complex**	

The student will: • recognize coins and their value (penny, nickel, dime and/or quarter) (22105) • recognize the value of a collection of 2 or more of the same coins (22102) • recognize the value of a collection of 2 or more coins of different value (22103) • recognize the days of the week (22104)	The student will: • make change using coins (22201) • make change using the least number of coins (22202) • order the days of the week and relate them to an activity schedule (22204) • tell time using an analog clock (22205)	The student will: • make change using coins and/or dollar amounts (22301) • use a monthly calendar to relate days to special activities or events (22302) • relate lengths of time to activity schedules using any measure of time to include seconds, minutes, hours, days, weeks, months, and/or years (22303)

SATs Grade 4 – Mathematics	4

Required Component 2— Strand: Measurement

Choice Component 2— Band: Units/Estimation

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT22105	The student will select a quarter from a set of coins and match the quarter to its value from a chart of coin values.	• Video tape of the student identifying the quarter from a set of coins when asked for the quarter and then placing it next to the correct value amount on the chart
SAT22104	The student will recognize the days of the week by putting them in order from Sunday to Saturday.	• Data Collection Sheet recording student performance when ordering the days of the week
SAT22201	The student will determine change after a purchase using values under $1.00 when given a total amount available and a total cost.	• Sequenced, captioned, dated photographs showing the student making change using coins
SAT22204	The student will order the days of the week and place activity cards on the days they generally occur. (e.g., library on Monday, pizza for lunch on Friday, etc)	• Student work product of the days of the week in order and activities placed on the days they generally occur.
SAT22205	The student will tell time to the hour using an analog clock.	• Student work product consisting of a worksheet of clocks to the hour with the time indicated underneath each clock
SAT22302	The student will use a monthly calendar and place pictures and/or symbols of special events or activities that will be occurring on the correct day. (e.g., holiday, doctor appointment, birthdays, etc.)	• Student work product of a calendar with special events or activities indicated
SAT22303	The student will relate time to activities by using a monthly calendar to determine how many weeks, and/or days until a special event occurs.	• Video tape of the student using a calendar to determine how much time until an event occurs

Science
NYSAA Frameworks

Grade 4

GLIs and Essences Grade 4 – Science	4

Required Component 1—Standard: 1-Analysis, Inquiry, and Design (Scientific Inquiry)

Choice Component 1—Key Idea 1: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.

Science Core Curriculum	Performance Indicators	Essence of Indicators
Pg. 6	S1.1 Ask "why" questions in attempts to seek greater understanding concerning objects and events they have observed and heard about. S1.1a Observe and discuss objects and events and record observations S1.1b Articulate appropriate questions based on observations S1.2 Question the explanations they hear from others and read about, seeking clarification and comparing them with their own observations and understandings. S1.2a Identify similarities and differences between explanations received from others or in print and personal observations or understandings S1.3 Develop relationships among observations to construct descriptions of objects and events and to form their own tentative explanations of what they have observed. S1.3a Clearly express a tentative explanation or description which can be tested	• Observe objects and events and ask questions about them • Describe observations about objects or events • Identify similarities and differences in various observations

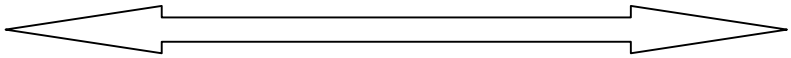
AGLIs Grade 4 – Science	4

Required Component 1—Standard: 1-Analysis, Inquiry, and Design (Scientific Inquiry)

Choice Component 1—Key Idea 1: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for Analysis, Inquiry, and Design (Scientific Inquiry)-Key Idea 1

Less Complex  **More Complex**

The student will: • interact with objects (11104) • make observations about events or objects (11105) • recognize similarities between objects (11106) • recognize differences between objects (11107)	The student will: • identify similarities among objects or events (11203) • identify differences among objects and/or events (11204) • sort objects according to similarities (11205) • sort objects according to differences (11206)	The student will: • describe observations of objects and/or events (11303) • ask questions about objects and/or events they observe (11302) • sort objects according to similarities and differences (11304) • recognize similarities and differences between objects (11305)

SATs Grade 4 – Science	4

Required Component 1—Standard: 1-Analysis, Inquiry, and Design (Scientific Inquiry)

Choice Component 1—Key Idea 1: The central purpose of scientific inquiry is to develop explanations of natural phenomena in a continuing, creative process.

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT11104A	The student will interact with a variety of objects that have different characteristics using his/her senses. (e.g., objects such as— leaf, flower, sandpaper, cotton, silk, soil, fur; texture characteristics such as— rough, smooth, bumpy, prickly; object characteristics such as—warm, cool, etc.)	• Data Collection Sheet recording student performance when the student holds, feels and/or smells different objects using his/her senses
SAT11104B	The student will interact with an object by selecting an object of the same texture as a given textured object.	• Student work product showing matching textured papers • Video tape of the student selecting matching textured items
SAT11104C	The student will interact with 5 sensory items after each object is put into his/her hand by holding it, smelling it, shaking it or tasting it.	• Sequenced, captioned, dated photographs of the student interacting with objects
SAT11105	The student will observe which objects float when placed in water.	• Video tape of the student observing a scientific investigation of objects placed in a tank of water
SAT11106	The student will select an object that has a similar characteristic to a given set of objects.	• Video tape of the student selecting objects • Student work product – example: suitcase, cereal box and a crate are grouped together because they are all square. The student would circle which object belongs to that group: shipping box, T-shirt or a cup.
SAT11107	The student will recognize the item that has a different function from the other items in a given set. (e.g., teacher posed question 'What is the difference?')	• Student work product of sets with one item that has a different function- student places an X on the item that has a different function from the rest of the items in the set
SAT11203	The student will tell what the similarity is in a given set of objects.	• Video tape of the student explaining the similarity or grouping similar objects together
SAT11204	The student will tell the difference between two items [shirt, cup – (the shirt is a piece of clothing, the cup is not)]	• Video or audio tape of the student explaining the difference between the two items

SAT11205A	The student will sort objects into groups according to a similar characteristic(s). (e.g., similarities when sorting by physical characteristics of two animals— a dog and a horse identifying do both have a tail, ears, eyes, fur, etc.; similarities when sorting by texture characteristics of multiple objects—a cotton ball, a tissue, a blanket are all soft or a rock, a pencil, a block are all hard, etc.)	• Sequenced, captioned, dated photographs of the student sorting the objects by similarities
SAT11205B	The student will sort objects by physical characteristics. (e.g., sorting items by color, texture, weight, size, etc.)	• Video tape of the student sorting the objects by physical characteristics
SAT11205C	The student will sort objects by similarities given a group of objects that represent two or more categories. (e.g., items that are round, square, triangular-sort by shape.)	• Student work product with circles, squares and triangles – The student colors circles red, squares green and triangles blue
SAT11206	The student will sort boughs by their difference, given a group of tree boughs (pines, maples).	• Sequenced, captioned, dated photographs (1. Examining boughs; 2. Separating boughs into 2 groups according to leaf shape; 3. Finished product of 2 groups)
SAT11303	The student will indicate what happens to objects when they are placed in water by placing a picture of the object above or below the water line on a diagram. (it floats, it sinks)	• Student work product showing where the student marked whether the object was going to sink or float • Data Collection Sheet recording student performance on buoyancy activity
SAT11302A	The student will ask a question related to the weekly science experiment that he/she observed. (e.g., questions such as—Did it work? What happened? Why did it happen? How long did it take? etc.)	• Audio or video tape of the student asking a question about a science experiment
SAT11302B	The student will ask questions about why an event shown in a picture happened. (e.g. The sidewalk is wet because it rained)	• Audio tape of the student looking at a picture and asking questions about the event in the picture
SAT11304	The student will sort items found in nature by similarities and differences. (e.g., rocks, twigs, caterpillars, etc.)	• Sequenced, captioned, dated photographs of the student creating a poster board entitled, “Things Found in Nature” - The poster will show items sorted according to a particular category (plants, seeds, rocks, insects, etc.) • Video tape of the student reporting on similarities and differences between the items

SAT11305A	The student will identify similarities or differences by sorting objects into their category using a distinguishing characteristic. (e.g., tree limbs of Pine and oak: similarity in trees; differences in texture)	• Audio or Video tape of the student placing objects into groups by their similarities or differences from the same category with distinguishing characteristics
SAT11305B	The student will explain one similarity and one difference, when presented with three objects that incorporate similarities and differences. (e.g., pajamas, T-shirt, coat: they are all clothing, a coat is worn outside to keep us warm)	• Video tape of the student explaining what all items have in common and indicating which one is slightly different

GLIs and Essences Grade 4 – Science	4

Required Component 1—Standard: 1-Analysis, Inquiry, and Design (Scientific Inquiry)

Choice Component 2—Key Idea 2: Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.

Science Core Curriculum	Performance Indicators	Essence of Indicators
Pg. 6	S2.1 Develop written plans for exploring phenomena or for evaluating explanations guided by questions or proposed explanations they have helped formulate. S2.1a Indicate materials to be used and steps to follow to conduct the investigation and describe how data will be recorded (journal, dates and times, etc.) S2.2 Share their research plans with others and revise them based on their suggestions. S2.2a Explain the steps of a plan to others, actively listening to their suggestions for possible modification of the plan, seeking clarification and understanding of the suggestions and modifying the plan where appropriate S2.3 Carry out their plans for exploring phenomena through direct observation and through the use of simple instruments that permit measurement of quantities, such as length, mass, volume, temperature and time. S2.3a Use appropriate "inquiry and process skills" to collect data S2.3b Record observations accurately and concisely	• Plan and develop procedures for exploration • Identify materials needed for exploration • Implement an exploration • Report observations

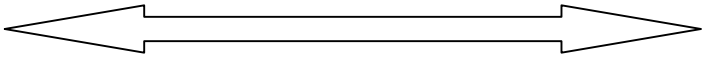
AGLIs Grade 4 – Science	4

Required Component 1—Standard: 1-Analysis, Inquiry, and Design (Scientific Inquiry)

Choice Component 2—Key Idea 2: Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for Analysis, Inquiry, and Design (Scientific Inquiry)-Key Idea 2

Less Complex  **More Complex**

The student will: • recognize scientific tools used in a simple investigation (12101) • attend to someone conducting a single step for a simple investigation (12102) • complete a single step of a simple investigation (12103) • recognize the general outcome of the procedure (12104)	The student will: • identify the purpose of common tools and/or materials needed for a simple investigation (12201) • complete two steps of a simple investigation (12202) • recognize the planning steps of a simple investigation (12203) • identify specific results of the investigation (12206) • sequence the steps of a familiar investigation (12205) • identify tools needed in a simple investigation (12207) • identify materials needed in a simple investigation (12208)	The student will: • gather common tools and materials that will be needed for a simple investigation (12305) • plan a simple investigation (12302) • implement the steps of a simple investigation (12303) • report specific results of a simple investigation (12306)

SATs Grade 4 – Science	4

Required Component 1—Standard: 1-Analysis, Inquiry, and Design (Scientific Inquiry)

Choice Component 2—Key Idea 2: Beyond the use of reasoning and consensus, scientific inquiry involves the testing of proposed explanations involving the use of conventional techniques and procedures and usually requiring considerable ingenuity.

Sample Assessment Tasks (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT12101A	The student will select a scientific tool commonly used in classroom experiments. (e.g., thermometer, scale, ruler, beaker, etc.)	• Data Collection Sheet recording student performance when selecting scientific tools
SAT12101B	The student will recognize the scientific tool used after observing a simple investigation.	• Student work product with a thermometer and scale where the student circles the thermometer for an investigation testing temperature
SAT12101C	Given a thermometer and a popsicle stick, the student will recognize the tool used to investigate the temperature of water by pointing to the thermometer.	• Video tape of the student selecting the tool to investigate water temperature
SAT12102	The student will watch as the teacher completes a single procedure for a simple investigation	• Time segment Data Collection Sheet charting the student attending to materials, procedures, results of the simple investigation
SAT12103	The student will complete a single step of a simple investigation that involves 3 or more steps.	• Photographs of the student placing ice and salt in a tin can to discover how dew and frost are formed (ref: weatherwizkids.com)
SAT12104	The student will recognize the outcome of an investigation once it is complete by selecting a picture that represents it.	• Data Collection Sheet recording student performance • Student work product where the student selects the correct picture depicting the outcome of a simple investigation and glues it onto the worksheet
SAT12201A	The student will select one purpose of a tool or material used in an investigation, given two choices.	• Data Collection Sheet recording student performance at selecting the tool
SAT12201B	The student will select the correct tool to fulfill a purpose, given a purpose. (e.g., "tells which is heavier"- scale)	• Data Collection Sheet recording student performance • Student work product where the student circles or places a thumbprint on the correct tool

SAT12202A	The student will complete two steps of a simple experiment. (e.g., sinking and floating –step one: identify the objects to use, step two: put the objects in a bucket, and step three: observe the results)	• Video tape of the student completing two steps of a three step experiment
SAT12202B	The student will complete two steps of an investigation that involves three or more steps. (e.g., snowfall amount measurements)	• Sequenced, captioned, dated photographs of a snowfall investigation 1. Student getting a yard stick (gathering materials) 2. Student placing the yardstick in the snow 3. Student placing a red mark on the yardstick at snow level
SAT12203A	The student will identify a step that is not included in an investigation that he/she has completed.	• Student work sample indicating which is not a step in an investigation that he/she has completed
SAT12203B	The student will identify the planning steps of a simple investigation given sentence strips with planning and performance steps printed on them.	• Sentence strips placed on a worksheet • Sequenced, captioned, dated photographs of the student selecting sentence strips for a poster
SAT12206	The student will identify the card that illustrates the result of a simple investigation when given three picture cards.	• Student work sample with the investigation written as a story- The last sentence will have a blank space where the results of the investigation should go. The student glues the picture card representing the results in the blank space.
SAT12205	The student will sequence steps of a simple investigation by placing photographs of him/her involved in actual investigation in the correct order.	• Student work sample of photographs sequenced to show steps of a simple investigation
SAT12207	The student will identify tools needed to perform a simple investigation given the investigation procedures.	• Student work product showing a variety of tools – The student circles the tools needed for the investigation • Video tape of the student identifying the tools needed for the investigation
SAT12208	The student will identify materials needed to perform a simple investigation.	• Video tape of the student identifying materials needed for the investigation • Student work product showing a variety of materials – The student circles the materials needed for the investigation
SAT12305	The student will gather tools and materials needed to conduct an investigative procedure.	• Video tape of the student gathering tools and materials needed to conduct the procedure • Multi-step Data Collection Sheet where the student gathered each tool and material needed for one step is recorded
SAT12302	The student will determine (plan) steps needed to test a given hypothesis.	• Student work product of pictures or sentence strips put in order to complete a simple investigation

SAT12303	The student will perform steps of a simple investigation to test a hypothesis.	• Video tape of the student performing the steps of a simple investigation • Multi-step Data Collection Sheet - Each step of the investigation would be a step on the chart.
SAT12306A	The student will create a simple report showing the results of an experiment. (e.g., using a simple tally to illustrate results, sorting objects into piles according to results, etc).	• Student work product that contains pictures that illustrate the results of the experiment
SAT12306B	The student will report the results of an investigation at its conclusion.	• Video tape of the student activating a voice output device to report the results of the investigation to the class

GLIs and Essences Grade 4 – Science	4

Required Component 2— Standard: 4-The Living Environment

Choice Component 1—Key Idea 3: Individual organisms and species change over time.

Science Core Curriculum	Performance Indicators	Essence of Indicators
Pg. 18–19	**3.1 Describe how the structures of plants and animals complement the environment of the plant or animal.** 3.1a Each animal has different structures that serve different functions in growth, survival, and reproduction. • wings, legs, or fins enable some animals to seek shelter and escape predators • the mouth, including teeth, jaws and tongue, enables some animals to eat and drink • eyes, nose, ears, tongue, and skin of some animals enable the animals to sense their surroundings • claws, shells, spines, feathers, fur, scales, and color of body covering enable some animals to protect themselves from predators and other environmental conditions, or enable them to obtain food • some animals have parts that are used to produce sounds and smells to help the animal meet its needs • the characteristics of some animals change as seasonal conditions change (e.g., fur grows and is shed to help regulate body heat; body fat is a form of stored energy and it changes as the seasons change) 3.1b Each plant has different structures that serve different functions in growth, survival, and reproduction. • roots help support the plant and take in water and nutrients • leaves help plants utilize sunlight to make food for the plant • stems, stalks, trunks, and other • similar structures provide support for the plant • some plants have flowers • flowers are reproductive structures of plants that produce fruit which contains seeds	• Understand that animals and plants have different structures that are essential for growth, reproduction, and survival • Understand that animals and plants adapt to their environment

	Performance Indicators (continued)	
	• seeds contain stored food that aids in germination and the growth of young plants 3.1c In order to survive in their environment, plants and animals must be adapted to that environment. • seeds disperse by a plant's own mechanism and/or in a variety of ways that can include wind, water, and animals • leaf, flower, stem, and root adaptations may include variations in size, shape, thickness, color, smell, and texture • animal adaptations include coloration for warning or attraction, camouflage, defense mechanisms, movement, hibernation, and migration **3.2 Observe that differences within a species may give individuals an advantage in surviving and reproducing.** 3.2a Individuals within a species may compete with each other for food, mates, space, water, and shelter in their environment. 3.2b All individuals have variations, and because of these variations, individuals of a species may have an advantage in surviving and reproducing.	

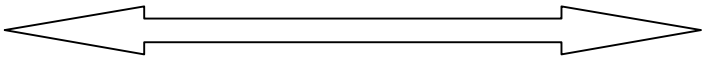
AGLIs Grade 4 – Science	4

Required Component 2— Standard: 4-The Living Environment

Choice Component 1—Key Idea 3: Individual organisms and species change over time.

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for The Living Environment-Key Idea 3

Less Complex  **More Complex**

The student will: • distinguish between plants and animals (22105) • identify basic plant or animal structures (e.g., fins, wings, legs, arms, mouths, noses, eyes, ears, roots, stems, leaves, flowers, seeds, etc.) (22106) • identify different plants or animals found in different places (22107) • recognize the environment in which an organism is typically found (22104)	The student will: • identify the functions of basic plant or animal structures (e.g., fins, wings, legs, arms, mouths, noses, eyes, ears, roots, stems, leaves, flowers, seeds, etc.) (22204) • associate some characteristic features of plants or animals with certain environments (e.g., heavy fur for cold climates, thick stems for dry areas, etc.) (22205) • identify the part that is missing from a specific plant or animal (22203)	The student will: • identify that animals or plants have different structures that are essential for growth, reproduction, and/or survival (22303) • recognize how animals or plants adapt to their environment (22304)

SATs Grade 4 – Science	4

Required Component 2— Standard: 4-The Living Environment

Choice Component 1—Key Idea 3: Individual organisms and species change over time.

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT22105A	The student will distinguish between a plant and an animal. (e.g., flower labeled plant; tree labeled plant; cat labeled animal; human labeled animal, etc.)	• Student work product of a scrapbook containing pictures of plants with labels and animals with labels
SAT22105B	The student will distinguish between plants and animals by sorting a group of pictures into categories.	• Student work product in which the student glues pictures of plants on one side of the page and pictures of animals on the other side of the page • Sequenced, captioned, dated photographs of the student completing the activity 1. All pictures 2. Partially complete 3. Finished 4. Final product
SAT22106	The student will select structures of plants when named.	• Student worksheet with labels placed on basic structures • Video tape of the student selecting a structure from a group when the structure is named
SAT22107	The student will identify animals found in different environments. (e.g., fish – water, bear – woods, etc.)	• Student worksheet of the environment given. The student places the pictures on the worksheet of animals found in the environment
SAT22104A	Given a set of animals or plants, the student will identify the environment in which they live.	• Sequence, captioned, dated photographs of the student completing a diorama of the environment in which the animals live
SAT22104B	Given a nest and a fish bowl, the student will recognize the environment in which a bird is usually found by placing the bird in the nest.	• Video tape of the student placing animals into appropriate habitats

SAT22204	The student will identify the function of a given list of structures. (e.g., wings – for flying, roots – for taking in water, etc.)	• Student work product where the student glues a picture or symbol to fill in the blank (e.g., birds have wings in order to fly; Plants have roots in order to take in water) • Video or audio tape of the student providing verbal answers to questions
SAT22205	The student will select only those characteristics that help an animal survive in their environment, given an environment and a list of animal characteristics. (e.g., thick fur, padded feet, scales – Which are needed to survive in the arctic?)	• Student work product where a variety of characteristics are listed - Student places an X on those characteristics that do not help an animal survive in their environment.
SAT22203	The student will identify the part that is missing on a diagram of a specific plant or animal.	• Sequenced, captioned, dated photographs of the student selecting the correct picture card to complete a diagram • Student work product with the missing part glued onto the worksheet
SAT22303	The student will identify plant structures used in reproduction	• Student work product with reproductive parts labeled • Video tape of the student naming the reproductive parts of a mode or poster of a plant
SAT22304A	The student will identify an adaptation that an animal has to their environment. (e.g., animals get thicker fur in winter, bears hibernate, birds fly south, etc.)	• Student work product where the student glues pictures or symbols to partially completed sentences on a worksheet, such as: When the weather gets cold (winter) 1. Animal fur gets __(thicker/thinner) 2. Birds_____(fly south/ hibernate) 3. Bears _____(hibernate /fly south)
SAT22304B	The student will identify animal adaptations or survival techniques. (e.g., a chameleon changes color to match its environment)	• Student work product showing a specific animal and its survival technique

GLIs and Essences Grade 4 – Science	4

Required Component 2— Standard: 4-The Physical Setting/Earth Science

Choice Component 2—Key Idea 2: Many of the phenomena that we observe on Earth involve interactions among components of air, water, and land.

Science Core Curriculum	Performance Indicators	Essence of Indicators
Pg. 13	**2.1 Describe the relationship among air, water and land on Earth.** 2.1a Weather is the condition of the outside air at the particular moment. 2.1b Weather can be described and measured by: • temperature • wind speed and direction • form and amount of precipitation • general sky conditions (cloudy, sunny, partly cloudy) 2.1c Water is recycled by natural processes on Earth. • evaporation: changing of water (liquid) into water vapor (gas) • condensation: changing of water vapor (gas) into water (liquid) • precipitation: rain, snow, sleet, hail • runoff: water flowing on Earth's surface • groundwater: water that moves downward into the ground 2.1d Erosion and deposition result from the interaction among air, water, and land. o interaction between air and water breaks down Earth materials o pieces of Earth material may be moved by air, water, wind, and gravity o pieces of Earth material will settle or deposit on land or in the water in different places o soil is composed of broken-down pieces of living and nonliving Earth material 2.1e Extreme natural events (floods, fires, earthquakes, volcanic eruptions, hurricanes, tornadoes, and other severe storms) may have positive or negative impacts on living things.	• Recognize that weather components (temperature, wind speed, etc.) can be described and measured • Understand that erosion, deposition, extreme natural events, and the water cycle impact the environment

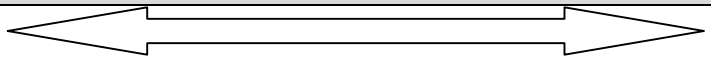
AGLIs Grade 4 – Science	4

Required Component 2— Standard: 4-The Physical Setting/Earth Science

Choice Component 2—Key Idea 2: Many of the phenomena that we observe on Earth involve interactions among components of air, water, and land.

ALTERNATE GRADE LEVEL INDICATORS (AGLIs)

POSSIBLE ENTRY POINTS for The Physical Setting/Earth Science-Key Idea 2

Less Complex  **More Complex**

The student will: • identify at least one component of the daily weather (e.g. general wind speed or direction, general temperature, precipitation, or cloudiness) (32106) • identify the appropriate tools for measuring weather conditions (e.g. thermometer, wind vane) (32102) • recognize erosion (32107) • recognize deposition (32108) • recognize storms (extreme natural events) (32104) • recognize liquid or solid forms of water (32109)	The student will: • distinguish between various weather conditions (e.g. sunny or cloudy, hot or cold, windy or quiet, rainy or dry) (32201) • recognize that a thermometer indicates how hot or cold something is (32202) • recognize that a wind vane indicates the direction the wind is blowing (32209) • identify evidence of erosion (32210) • identify evidence of deposition (32211) • recognize liquid and solid forms of water (32212) • attend to water being evaporated (i.e. steam from heated water) (32206) • attend to water being frozen (i.e. ice cube trays with water placed in a freezer and removed with ice) (32207) • recognize that natural events change land (32208)	The student will: • describe multiple elements of daily weather (e.g. sunny, cold, and windy) (32308) • identify the temperature as indicated by a thermometer (32302) • identify the wind direction as indicated by a wind vane (32303) • identify that material is being "moved away" during erosion (32309) • identify that material is being "added to" during deposition (32310) • identify the gas form of water (32305) • recognize that liquid, solid, and gaseous forms of water are interchangeable (32306) • describe ways that extreme natural events affect the environment (32307) • identify liquid and solid forms of water (32311)

SATs Grade 4 – Science	4

Required Component 2— Standard: 4-The Physical Setting/Earth Science

Choice Component 2—Key Idea 2: Many of the phenomena that we observe on Earth involve interactions among components of air, water, and land.

SAMPLE ASSESSMENT TASKS (SATs)

Sample assessment tasks are organized from least complex to most complex in accordance with AGLI ordering. Please note that not all AGLIs have a sample assessment task.

SAT Alignment to AGLI	Sample Assessment Tasks	**Possible** Datafolio Products and Verifying Evidence Assessment Strategies
SAT32106A	The student will chart the weather each day for a one week period.	• Student work product of a five day chart with a picture on each day that indicates what the weather was for that day Note: Two charts must be submitted as Verifying Evidence if work samples are being submitted for both dates of student performance.
SAT32106B	Given two switches with weather choices, the student will identify the weather of the day by hitting the appropriate switch.	• Video tape of the student making weather choices
SAT32102	The student will identify the weather tools from a group of tools.	• Student work product with weather tools circled • Sequenced, captioned, dated photographs of the student selecting a weather tool from a choice of two items
SAT32107	The student will select pictures that show erosion	• Student work product with pictures that the student selected to show erosion
SAT32108	The student will select pictures that show deposition. (e.g., ant hill, delta, etc.)	• Video tape or sequenced, captioned dated photographs of the student selecting pictures of an ant hill or delta from a series of pictures
SAT32104	The student will select pictures that show storms. (e.g., thunderstorm, blizzard, hurricane, etc.)	• Student work product with pictures that the student selected • Video tape of the student selecting storm pictures
SAT32109	The student will select pictures that represent "liquid" water when given pictures of liquids and solids.	• Sequenced, captioned, dated photographs of the student selecting liquids • Student work product of picture cards selected by the student to represent a liquid
SAT32201	The student will label pictures of various weather conditions.	• Video tape of the student labeling pictures as sunny or cloudy

SAT32202	The student will use simulation thermometers to indicate general temperature (hot/cold) when shown pictures of extreme weather or environments. (e.g., snow storm, sunny day at beach, etc.)	• Student work product of a thermometer picture colored in to indicate the temperature for a weather picture attached
SAT32209A	The student will select a wind vane when asked which tool indicates the direction of the wind.	• Student worksheet with pictures of tools circled by the student that indicate the direction of the wind.
SAT32209B	The student will recognize that a wind vane indicates the direction in which the wind is blowing. (e.g., using a fan to produce wind, going outside, matching pictures of wind direction to wind vane direction, etc.)	• Video tape of the student making a wind vane that shows which way the wind is blowing
SAT32210A	The student will identify that material is being "moved away" during erosion. (e.g., pouring water on sand to illustrate erosion)	• Sequenced, captioned, dated photographs of the student creating erosion
SAT32210B	The student will observe investigations that involve erosion and indicate the evidence of the erosion.	• Video tape of the student observing an investigation and pointing to the gullies and deposits
SAT32211	The student will identify deposition left during the process of an erosion investigation.	• Student work product with the deposition labeled • Video tape of the student identifying (pointing to) the deposition after an erosion investigation
SAT32212	The student will categorize pictures of items made up of two forms of matter: liquid or solid.	• Student work product with pictures glued under headings of liquids or solids
SAT32206	The student will attend to a water evaporation investigation	• Video tape of the student watching (attending to) a water evaporation investigation
SAT32207	The student will attend to an investigation about water freezing.	• Video tape of the student watching (attending to) an investigation about water freezing
SAT32208	The student will match pictures of land changes with pictures of natural events that could have caused them. (e.g., twisted trees- tornado, trees split – lightening, flooding caused by heavy rain, etc.)	• Video tape of the student matching pictures • Student work product with matching pictures aligned
SAT32308	The student will chart at least two weather conditions each day. (e.g., sunny/hot, rainy/wind/cold, etc.)	• Student work product-weekly chart of daily weather conditions. Note: Two charts must be submitted as Verifying Evidence if work samples are being submitted for both dates of student performance.

SAT32302	The student will read and record the temperature indicated on a thermometer.	• Student work product-weekly chart of daily temperature Note: Two charts must be submitted as Verifying Evidence if work samples are being submitted for both dates of student performance. • Sequenced, captioned, dated photographs of the student reading, recording and charting the temperature
SAT32303	The student will use a wind vane to indicate the direction of the wind.	• Student work product-weekly chart with the direction of the wind recorded for each day Note: Two charts must be submitted as Verifying Evidence if work samples are being submitted for both dates of student performance.
SAT32309	The student will describe what happens to soil or rock during erosion.	• Video or audio tape recording of the student explaining the erosion process
SAT32310	The student will describe what happens to soil or rock during deposition.	• Video tape of students modeling what happens to soil at the delta of a river during deposition
SAT32305A	The student will label a diagram indicating steam as the gaseous form of water.	• Student work product with gas labels glued onto a worksheet to indicate water in a gaseous form • Video tape of the student indicating steam on a large wall diagram of the water cycle
SAT32305B	The student will indicate when water is in the gaseous form by hitting a voice output device when steam is visible.	• Video tape of the student observing an investigation and hitting a voice output device when the steam is visible
SAT32306	The student will participate in an investigation that takes water from its solid state to its gaseous state and label each state of matter as it occurs.	• Video tape of the student hitting a voice output device as each stage takes place "I see a solid", "I see a liquid", I see a gas". Teacher places ice in pan (solid), applies heat (liquid), applies heat (gas) • Data Collection Sheet with three steps indicating that student labeled each stage: 1 for a solid, 2 for a liquid, 3 for a gas
SAT32307	The student will describe how an extreme natural event changes the environment. (e.g., Winds of a hurricane topple trees. Lightening from a thunder storm starts forest fires. Fire clears land.)	• Video tape of the student describing the natural event and the change that occurred from it.

SAT32311A	The student will recognize liquid and solid forms of water. (e.g., recognizing water as a liquid, then participating in putting the water in a freezer, then participating in removing the water from the freezer, then recognizing ice or "solid water")	• Sequenced, captioned, dated photographs of the student's recognition of forms of water
SAT32311B	The student will label pictures of water in various states of matter.	• Student work product divided into columns for liquid and solid. The student places pictures of water in different containers under correct heading. (Pictures: lake, glass of water, ice cube tray)