

DC CAS-Alt Entry Points

2011-2012

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Entry Points

The entry points are a set of possible outcomes or methods for students with special needs which are aligned to the general education content standards with a modified level of difficulty, breadth, or depth. The entry points are a tool teachers may use to fine tune their grade-level aligned targeted skills or to think about ways students can gain access to the grade level standards.

These “entry points” to the standard are on a continuum from less to more complex. The continuum varies based on the level of Bloom’s Revised Taxonomy that the general education standard accesses. For instance, if the general education standard asks the student to “analyze” then the most complex entry point illustrates a way for students to analyze while modifying the breadth, depth, and difficulty of the standard. The less complex entry points will fall lower on the Bloom’s Revised Taxonomy; e.g., asking the student to “identify” or “demonstrate understanding.” Teachers can use the entry points to develop targeted skills and activities linked to the general education curriculum; however, teachers should avoid copying the entry point statement verbatim as a substitute for a well-written targeted skill. The entry points also provide some common strategies for students with severe cognitive disabilities to access curriculum.

An entry point within a strand indicates that the student is working within that strand; that is, if the strand is “Literary Text” and the entry point says “student will answer ‘who’ questions,” the expectation is that the student will answer those questions within a literature context, not a mathematic context. For questions about the general education content expectations, please refer to the resources on the OSSE website at <http://www.osse.dc.gov> or a content specialist within the OSSE system.

The original entry points were a part of the 2006-2007 alignment study and the information from this study was used to modify the entry points. More recently, a team of OSSE content specialists and special educators came together to further develop and revise the entry points.

Note: The Entry Points for 2011-2012 are organized by grade level rather than by content area as in previous years. Grade 3 English Language Arts (ELA) entry points are followed by grade 3 Mathematics entry points. Grade 4 entry points will appear next in the document and so on.

Entry Points – Grade 3

ELA

DC CAS-Alt

CONTENT Reading/ELA

STRAND Language Development

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Language Development	3LD-V8	Identify the meaning of common prefixes and suffixes (e.g., un-, re-, in-, dis-, -ful, -ly, -less), and know how they changed the meaning of roots (e.g., happy/unhappy, tell/retell).	<ul style="list-style-type: none"> ◆ Understand prefixes and suffixes and how they change the definition of root words
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
	<ul style="list-style-type: none"> ◆ Identify letters in a prefix or suffix ◆ Highlight prefixes or suffixes in a word. 	<ul style="list-style-type: none"> ◆ Create a word list of, suffixes and their definitions ◆ Match a prefix with its definition ◆ Define root word in unfamiliar words 	<ul style="list-style-type: none"> ◆ Use word cards of suffixes or prefixes to form new words ◆ Match a suffix and root word to its meaning

General Education Example

Example: Students make a list of words with prefixes, such as unwrap and rewrite, then determine how the prefix changes the meaning. Make another list of words with suffixes, such as helpful and sleepless, and determine the effect of the suffix on the base word.

CONTENT Reading/ELA

STRAND Language Development

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Language Development	3LD-V12	Use context of the sentence to determine the intended meaning of an unknown word or a word with multiple meanings (e.g., hatch, arm, boot)	<ul style="list-style-type: none"> ◆ Define words using context cues
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Vocabulary	<ul style="list-style-type: none"> ◆ Match words with multiple meanings to various pictures or words illustrating those meanings. ◆ Locate and/or cut out three words/pictures with multiple meanings from a newspaper, magazine, comic strip, student generated pictures etc 	<ul style="list-style-type: none"> ◆ Identify words that have multiple meanings ◆ Use multiple meaning words to complete a sentence ◆ Name the part of speech of each multiple meaning word ◆ Use reference books (including student generated dictionary/thesaurus, etc) to locate each word/picture from a list of multiple meaning words 	<ul style="list-style-type: none"> ◆ Select correct picture definition among multiple meaning words, that completes a given sentence correctly ◆ Demonstrate how multiple meaning words change the meaning of a sentence by using words or pictures (saw, well, foot, love)

General Education Example

Example: Students use a list of multiple-meaning words to write several sentences using the different meanings of the words (e.g., hatch, arm, boot, match, light, run).

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CONTENT Reading/ELA STRAND Literary Text

Grade 3				
Learning Standards as written			Essential and Prioritized Skill	
Literary Text	3LT-U4	Use story details and prior knowledge to understand ideas that are not directly stated in the text.	◆ Make simple inferences using story details and prior knowledge	
Less Complex		Possible Entry Points		More Complex
	The student will:	The student will:	The student will:	
Literary Text	<ul style="list-style-type: none"> ◆ Identify story details ◆ Identify main characters ◆ Recall through written or pictorial representation previous personal experiences or events related to the text 	<ul style="list-style-type: none"> ◆ Match story details to pictures of events ◆ Describe or demonstrate a personal experience similar to the story 	<ul style="list-style-type: none"> ◆ Answer simple inference questions about the story using prior knowledge (e.g., choose whether the main character will be happy or sad about a hypothetical event.) ◆ Using a chart with story details the student will determine how the character would feel in each instance (e.g., happy or sad) ◆ Listing known information prior to reading a story (e.g., look at all of the pictures of the story and state what you know/think) 	

CONTENT Reading/ELA STRAND Literary Text

Grade 3				
Learning Standards as written			Essential and Prioritized Skill	
Literary Text	3LT-F8	Identify the elements of stories (problem, solution, character, and setting) and analyze how major events lead from problem to solution.	◆ Analyze how events in a text lead to a problem or solution	
Less Complex		Possible Entry Points		More Complex
	The student will:	The student will:	The student will:	
Literary Text	<ul style="list-style-type: none"> ◆ Answer questions of who, what, where, when, or how ◆ Recognize that events have causes in a text ◆ Identify elements of a story (using pictures, objects, or words) 	<ul style="list-style-type: none"> ◆ Define the terms plot, character, or setting ◆ Sequence major events of the story ◆ Categorize characters by those who were a part of the problem and those who were not a part of the problem ◆ Identify critical details, facts, key events, and/or people involved in a story or read aloud ◆ Identify and describe the plot, characters, or setting (using pictures, objects, or words) ◆ Create a detailed character description of the main character from story 	<ul style="list-style-type: none"> ◆ Match events of a story with a problem (cause and effect) ◆ Compare how two characters would solve a problem differently (e.g., given pictures representing two characters and pictures representing three possible solutions, correctly match which character would develop which solution and one detail explaining why) ◆ Classify events as a leading to or not leading to a solution 	

General Education Example: Students read a piece of fiction. Individually, students create a mini book illustrating the problem, solution, characters, and setting. Suggested books include: The Story of Ruby Bridges by Robert Coles, My Mamma Had a Dancing Heart by Libba Moore Gray, Sleeping Ugly by Jane Yolen.

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CONTENT Reading/ELA

STRAND Informational Text

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	3IT-E1	Identify the purpose or main point and supporting details in text.	◆ Identify purpose or main point and supporting details
Less Complex		Possible Entry Points	
<u>The student will:</u>		<u>The student will:</u>	
Informational Text	◆ Answer who or what questions in informational text	◆ Identify critical details, facts, key events, and/or people involved in an informational text	◆ Identify the purpose and supporting details of informational text ◆ Identify the main point and supporting details of informational text
	◆ Name/locate the characters	◆ Identify main point	
	◆ Identify (using pictures) where the story takes place	◆ Identify the purpose	

General Education Example: *Students brainstorm a list of animals they know. Then they read About Mammals: A Guide for Children by Cathryn Sill. With their teacher, they list common traits of mammals (the main idea of the book). Using what they have learned from the book, they decide which animals on their original list are mammals. Students then identify supporting details from the book to illustrate why or why not the animal they named is a mammal.*

CONTENT Reading/ELA

STRAND Informational Text

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	3IT-E3	Distinguish cause from effect.	◆ Distinguish cause from effect
Less Complex		Possible Entry Points	
<u>The student will:</u>		<u>The student will:</u>	
Informational Text	◆ Identify the first event in informational text	◆ Sequence events in informational text	◆ Categorize events as cause or effect in informational text ◆ Match simple cause and effect pictures/concepts in informational text ◆ Given a specific event, list or match possible effects
	◆ Explain, using words or pictures, what the cause is of a given situation from a text.	◆ Classify sentences/pictures to show cause or effect	
	◆ Explain using words or pictures, what the effect is of a given situation from a text.		

General Education Example: *Students read Why Mosquitoes Buzz in People's Ears by Verna Aardema. As a class, have the students follow the path of cause and effect.*

DC CAS-Alt

CONTENT Reading/ELA

STRAND Informational Text

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	3IT-E4	Identify and use knowledge of common textual features to make predictions about content (e.g., title, headings, table of contents, glossary, captions).	◆ Apply knowledge of textual features to make predictions
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Informational Text	<ul style="list-style-type: none"> ◆ Identify the title in informational text ◆ Identify table of contents in informational text ◆ Identify letters in the title of informational text 	<ul style="list-style-type: none"> ◆ Match a caption to a picture in informational text ◆ Match a picture to a section of the informational text 	<ul style="list-style-type: none"> ◆ Given an illustration and the title of a text, predict what the text will be about ◆ Based on the title, predict which informational text will help to find information ◆ Predict, with clues and pictures provided by the teacher, which event will occur next

General Education Example: *Using their textbook, pairs of students identify each of the textual features and its purpose (e.g., table of contents, glossary, captions) to make predictions about content.*

CONTENT Reading/ELA

STRAND Informational Text

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	3IT-E5	Form questions about text and locate facts in response to those questions.	◆ Apply knowledge of informational text by forming and answering questions and locating facts
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Informational Text	<ul style="list-style-type: none"> ◆ Identify letters/words in an informational text ◆ Match picture to section of narrative 	<ul style="list-style-type: none"> ◆ Answer who/what questions about informational text ◆ Answer a question by choosing an appropriate picture or word from the text. ◆ Locate facts in text to answer questions ◆ Answer questions developed by classmates or teacher about informational text ◆ Ask questions about a text read aloud (e.g., by pointing to the appropriate response) 	<ul style="list-style-type: none"> ◆ Form questions that can be answered from specific informational text and locate the facts in response to those questions ◆ Given informational text the student will choose from a list of questions that would relate to the topic and find the answer in a text.

General Education Example: *Prior to a lesson in and reading about the life of Thomas Jefferson, students write several questions regarding the subject. Students then record the answers as they locate facts while reading Who Was Thomas Jefferson? by Dennis Brindell Fradin.*

DC CAS-Alt
CONTENT Reading/ELA

STRAND Informational Text

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	3IT-DP6 Less Complex	Locate specific information in graphic representations (e.g., charts, maps, diagrams, illustrations, tables, timelines) of text. Possible Entry Points	◆ Identify information on graphic representations of informational text More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Locate common signs, symbols, or pictures in the environment ◆ Match pictures with written and graphic symbols 	<ul style="list-style-type: none"> ◆ Identify graphic representations (charts, maps, timelines) ◆ Identify basic sight words in graphic representations within informational text (Dolch, Edmark) 	<ul style="list-style-type: none"> ◆ Answer questions about informational text using graphic representations ◆ Identify words in graphic representations within informational text (Metro stops) ◆ Identify information in informational text (e.g., map of Washington, DC locate a monument)

General Education Example: Using a map of Washington, D.C., students locate monuments, parks, and museums.

CONTENT Reading/ELA

STRAND Informational Text

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	3IT-D7 Less Complex	Use information from text and text features to determine the sequence of activities needed to carry out a procedure. Possible Entry Points	◆ Apply knowledge of text and text features to complete an activity More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Follow a set of oral directions to complete a task ◆ Identify letters/words in a set of directions 	<ul style="list-style-type: none"> ◆ Order a series of tasks needed to complete an activity ◆ Sequence events from informational text to complete an activity 	<ul style="list-style-type: none"> ◆ Follow a set of written/pictorial directions to complete a task ◆ Carry out a step by step set of instructions from informational text to complete a specific task ◆ Complete an activity using text features (e.g. numbering pages, sequencing pictures, etc.)

General Education Example: Students use text and illustrations of an origami bird to create the figure.

Entry Points – Grade 3

Mathematics

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CONTENT Mathematics

STRAND Number Sense & Operations

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Number Sense and Operations	3NSO-N1	Exhibit an understanding of the base 10 number system by reading, modeling, and writing whole numbers to at least 10,000; demonstrate an understanding of the values of the digits.	<ul style="list-style-type: none"> Understand the proportional value of the number system based on 10 (e.g., 10 ones = 1 ten, 10 tens = 100 ones, 10 one hundreds = 1,000, etc.)
Less Complex		Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Number Sense	<ul style="list-style-type: none"> Identify single digit numbers Match single digit numbers to correct number of objects 	<ul style="list-style-type: none"> Identify the value of each digit up to 100 Use counting strategy to represent place value using manipulatives (e.g, ones/tens/hundreds) 	<ul style="list-style-type: none"> Represent, write and identify the value of each digit for numbers Identify, order and numerically represent whole numbers using manipulatives Write digits on a place value chart for 2 or 3 digit numbers up to 100

General Education Example

Example: Write 793 for the number "seven hundred ninety-three."

CD CAS-Alt
CONTENT Mathematics

STRAND Number Sense & Operations

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Number Sense and Operations	3NSO-E24	Understand and use the strategies of rounding and regrouping to estimate quantities, measures, and the results of whole-number computations (addition, subtraction, and multiplication) up to two-digit whole numbers and amounts of money to \$100 and to judge the reasonableness of answers.	Apply rounding and regrouping to estimate: <ul style="list-style-type: none"> • Quantities • Measures • Money to \$100 Judge reasonableness of answer
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Estimation	<ul style="list-style-type: none"> ◆ Identify if a number is more or less than 5 up to 10 ◆ Identify if a number is rounded to the ones or tens place 	<ul style="list-style-type: none"> ◆ Match numbers and their representation using manipulatives and place value chart to round up to the next highest number ◆ Identify nearest whole dollar for purchase under \$10.00 ◆ Estimate numbers using regrouping (e.g., number of boxes of plastic forks needed for a party with 30 people.) ◆ Add, subtract, and/or multiply numbers using rounding or regrouping 	<ul style="list-style-type: none"> ◆ Identify nearest whole dollar for purchase under \$10.00. Check to see if you were right ◆ Estimate numbers using regrouping (e.g., number of boxes of plastic forks needed for a party with 30 people. Check to see if you have enough.) ◆ Estimate measurement given a portion of the measurement (e.g., if you know that half of the table is 10 inches, what would the whole table be?). Check your answer

General Education Example

Example: You have \$20. Do you have enough to buy all four items? Explain how you made your estimate.

Hat – \$4.52

Socks – \$1.99

Sweater – \$9.41

Scarf – \$3.95

CONTENT Mathematics

STRAND Number Sense & Operations

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Number Sense and Operations	3NSO-C10	Demonstrate an understanding of and the ability to use conventional algorithms for the addition and subtraction of up to five-digit whole numbers	♦ Apply conventional procedures and formulas to solve addition and subtraction problems
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Computation	<ul style="list-style-type: none"> ♦ Identify the required math operation in a simple problem situation – addition or subtraction ♦ Identify mathematical situations in which the order of events makes a difference and situations in which the order does not make a difference (commutative and non-commutative, e.g., $2+3=3+2$, $5-2\neq5-3$) 	<ul style="list-style-type: none"> ♦ Identify the commutative property of addition using number sentences (e.g., $3+2=2+3$) ♦ Use objects and manipulatives to demonstrate the commutative property 	<ul style="list-style-type: none"> ♦ Add to and split groups of objects to represent and solve addition and subtraction problems ♦ Add or subtract single digit whole numbers using manipulatives

General Education Example

Example: $85,412 - 42,747 = ?$ Explain your method.

CONTENT Mathematics

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Number Sense and Operations	3NSO-C18	Solve division problems in which a multi-digit whole number is evenly divided by a one-digit number (e.g., $125 \div 5$).	<ul style="list-style-type: none"> ◆ Solve division problems
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Number Sense	<ul style="list-style-type: none"> ◆ Define the quotient, dividend, divisor, and remainder ◆ Identify even vs. odd numbers in division problems ◆ Identify the quotient, dividend, divisor, and remainder in a division problem 	<ul style="list-style-type: none"> ◆ Split groups of objects into equal parts to represent division problem ◆ Split groups of objects into equal parts with remaining objects to represent division problem with remainder 	<ul style="list-style-type: none"> ◆ Use counting strategy to solve division problem in which numbers are divided evenly ◆ Use counting strategy to solve division problem (i.e., 6 divided by 2) with or without manipulatives

Example: What is $125 \div 5$?

CONTENT Mathematics

STRAND Number Sense & Operations

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Number Sense and Operations	3NSO-F5	Identify and represent fractions (between 0 and 1 with denominators through 10) as parts of unit wholes and parts of a collection.	<ul style="list-style-type: none"> ◆ Identify and understand fractions
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Fractions	<ul style="list-style-type: none"> ◆ Divide an object into equal portions ◆ Combine equal parts to make a whole 	<ul style="list-style-type: none"> ◆ Identify parts of a whole ($1/2$, $1/4$, $1/3$, $1/8$) written as a fraction ◆ Match a fraction to a representation 	<ul style="list-style-type: none"> ◆ Identify and numerically represent common fractions ◆ Identify and pictorially represent common fractions ◆ Split groups of objects into two, three, or four equal parts and match to written fraction

General Education Example

Example: Fold a piece of paper in half and then in half again creating fourths. Shade 2 sections or $2/4$ of the sheet of paper. Now fold the paper in half three times. Shade 3 sections of the sheet of paper or $3/8$.

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Patterns, Relations, & Algebra	3PRA-3	Determine values of variables in simple equations involving addition, subtraction, or multiplication (e.g., $4106 - t = 37$, $5 = m + 3$, and $r - m = 3$).	<ul style="list-style-type: none"> Solve for variables in addition, subtraction, or multiplication problems
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
<ul style="list-style-type: none"> Identify numbers in an addition problem Discriminate between numbers and letters 		<ul style="list-style-type: none"> Identify an addition problem Identify a subtraction problem Use one-to-one number correspondence to represent numbers/objects 	<ul style="list-style-type: none"> Solve an addition problem where the unknown is one of the terms ($4+x=5$) Solve a subtraction problem where the unknown is one of the terms ($x - 3 = 7$) Solve a multiplication problem ($4 \times 2 = 8$)

General Education Example

Example: Solve the following: $4106 - \nabla = 37$, $5 = \bigcirc + 3$, and $\nabla - \bigcirc = 3$.

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Patterns, Relations, & Algebra	3PRA-5	Extend and recognize a linear pattern by its rules (e.g., the number of legs on a given number of horses may be calculated by counting by 4s or by multiplying the number of horses by 4).	<ul style="list-style-type: none"> ◆ Demonstrate understanding of a mathematical pattern by extending it.
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> ◆ Count by 1's or 2's ◆ Identify numbers in a pattern 	<ul style="list-style-type: none"> ◆ Identify a mathematical pattern ◆ Identify the number/item missing in a pattern ◆ Skip Count by 5's or 10's ◆ Identify patterns on a 100's chart 	<ul style="list-style-type: none"> ◆ Create and explain a pattern using simple addition and subtraction (i.e., adding by 2's, subtracting by 3's) ◆ Extend a pattern using simple addition and subtraction (i.e., adding by 2's, subtracting by 3's) ◆ Describe and extend a pattern using numbers or operations 	

General Education Example

Example: Find the number of legs on 6 dogs. Create a table and extend the pattern. Explain your method (e.g., counted by 4s or multiplied the number of dogs by 4).

Number of dogs	1	3	4	6
Number of dog legs	4		16	

DC CAS-Alt

CONTENT: Mathematics

STRAND: Geometry

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Geometry	3G1	Compare and analyze attributes and other features (e.g., number and shape of sides, faces, corners, right angles) of two-dimensional geometric shapes, especially the attributes of triangles (isosceles, equilateral, right) and quadrilaterals (rectangle, square).	♦ Analyze attributes of 2-dimensional shapes (especially triangles and quadrilaterals)
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
<ul style="list-style-type: none"> ♦ Label a triangle ♦ Count the number of sides of a shape ♦ Match a rectangle to the term ♦ Match a square to the term ♦ Match a triangle to a triangle 		<ul style="list-style-type: none"> ♦ Identify parts of shapes (lines, angles, curves, etc.) ♦ Classify shapes by the number of sides they have ♦ Compare shapes based on number of corners ♦ Identify a right angle ♦ Match a rectangle and square to the term "quadrilateral" 	<ul style="list-style-type: none"> ♦ Sort and compare shapes by three different attributes ♦ Categorize how similar shapes can be different (isosceles triangle vs. equilateral triangle) ♦ Distinguish shapes based on the type of angle it has

DC CAS-Alt

CONTENT: Mathematics

STRAND: Geometry

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Geometry	3G4	Identify and draw lines that are parallel, perpendicular, and intersecting.	◆ Demonstrate understanding of different types of lines
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> ◆ Identify a line ◆ Match a line to its definition ◆ Distinguish between a line and a circle 		<ul style="list-style-type: none"> ◆ Identify a perpendicular line ◆ Identify intersecting lines ◆ Define parallel ◆ Define perpendicular ◆ Define intersecting lines 	<ul style="list-style-type: none"> ◆ Recognize parallel lines in everyday places from their definitions and/or attributes ◆ Identify and label perpendicular lines ◆ Match a parallel line to its term ◆ Use manipulatives to create perpendicular lines

General Education Example

Example: Use the markings on the gymnasium floor to identify two lines that are parallel. Place a jump rope across the parallel lines and identify any obtuse angles created by the jump rope and the lines.

STRAND: Geometry

Grade 3			
Learning Standards as written			Essential and Prioritized Skill
Geometry	3G6	Apply techniques such as reflections (flips), rotations (turns), and translations (slides) for determining if two shapes are congruent.	◆ Apply reflections, rotations, or translations to determine congruency.
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> ◆ Identify shapes ◆ Match shapes that are the same and in the same position 		<ul style="list-style-type: none"> ◆ Use manipulatives to demonstrate a reflection, translation or rotation ◆ Match rotation, reflection or translation to its term 	<ul style="list-style-type: none"> ◆ Use a reflection to determine if a shape is congruent ◆ Use a translation to determine if a shape is congruent ◆ Use rotation to determine if a shape is congruent

Entry Points – Grade 4

ELA

CONTENT Reading/ELA

STRAND Language Development

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Language Development	4LD-V10	Use knowledge of morphology or the analysis of word roots and affixes to determine the meaning of unfamiliar words (e.g., meaning of Greek root "graph" to understand the meaning of the words Telegraph, photographs, and autograph).	<ul style="list-style-type: none"> Analyze the meaning of unfamiliar words using base words and affixes.
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Language Development	<ul style="list-style-type: none"> Match definition/picture to the corresponding word Identify prefixes using words/pictures Identify suffixes using words/pictures Identify base words using words/pictures Locate unfamiliar words/pictures in text 	<ul style="list-style-type: none"> Match definitions to corresponding affixes Create a personal dictionary of words, suffixes and prefixes and the definitions Distinguish between suffixes and prefixes. Identify the base word in series of words with prefixes/suffixes Classify words as having the same or different base 	<ul style="list-style-type: none"> Use base word and add suffixes and/or prefixes to form and define new words (using picture cards, words, or objects) Compare a base word definition with the corresponding definition of the same word with an affix(e.g., match a picture of a happy girl to the base "happy" and a picture of an unhappy girl to the prefix "un")

General Education Example: Students are given a list of words that contain similar Greek roots (e.g., telephone, telescope; photograph, autograph). Students analyze the meanings of words through knowledge of the roots and affixes.

STRAND Language Development

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Language Development	4LD-V13	Recognize and use words with multiple meanings (e.g., sentence, school, hard) and determine which meaning is intended from the context of the sentence.	<ul style="list-style-type: none"> Analyze context clues to determine the correct meaning of a word with multiple meanings.
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Language Development	<ul style="list-style-type: none"> Identify words that have multiple meanings Identify context clues using words/pictures Identify idioms in a story 	<ul style="list-style-type: none"> Match multiple meaning words to definitions Match picture or graphic to corresponding definition Match an idiom to the literal meaning of the word 	<ul style="list-style-type: none"> Determine the correct meaning of a word with multiple meanings (e.g., Complete a sentence with the correct picture/definition with multiple meanings) Identify and use context clues to determine the correct definition of words with multiple meanings (e.g., Given the sentence, "I used a <u>saw</u> to cut the tree" and two picture/word cards (saw –with eyes and saw with a saw) the student would underline "cut" and match the tool saw to the word Given a sentence and two picture cards—one representing the literal and one representing the figurative meaning of an idiom--the student will determine which picture card best fits the sentence.

General Education Example: Students read The King Who Rained by Fred Gwynne. They illustrate the figurative and literal meanings of common idioms and figurative phrases (e.g., "Please give me a hand." "Its raining cats and dogs.") on a folded sheet of paper.

DC CAS-Alt
 STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-C1	Identify similarities and differences between the characters or events in the story and the experiences in an author's life (e.g., Laura Ingalls Wilder and the Little House books.	<ul style="list-style-type: none"> ◆ Compare characters or events in a story to author's life experiences
Less Complex		Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Identify events that could happen in real life and those that could not ◆ List the events that happen in the story ◆ Sequence events in the author's life using a timeline 	<ul style="list-style-type: none"> ◆ Classify events into those that happen in the author's life and those that did not ◆ Use a graphic organizer to identify similarities between the author's life and the text. 	<ul style="list-style-type: none"> ◆ Answer questions about the similarities and differences of the author's life and the characters for the story. ◆ Complete a Venn Diagram (e.g., the student places information from the author's life on one side, the character's life on the other and similarities in the middle.)

General Education *Example: Students read excerpts from a biography of Laura Ingalls Wilder and discuss how she drew upon her personal experiences when she wrote Little House on the Prairie.*

DC CAS-Alt
 CONTENT Reading/ELA
 STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-G2	Distinguish among common forms of literature (poetry, prose, fiction, nonfiction, and drama) using knowledge of their structural elements.	<ul style="list-style-type: none"> ◆ Compare/contrast forms of literature using structural elements
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> ◆ Identify a poem ◆ Identify a stanza ◆ Identify dialogue ◆ Define poetry and prose ◆ Define fiction and nonfiction 	<ul style="list-style-type: none"> ◆ Match a literature form to its appropriate definition ◆ Given two different examples of literary forms, identify the requested form 	<ul style="list-style-type: none"> ◆ Compare and contrast the structural elements of two different literary forms (e.g., use a graphic organizer to compare fiction/nonfiction, poetry/prose, etc.) ◆ Distinguish among literary forms given a selection of structural elements (e.g., real vs. unreal, dialogue, stanzas, etc)

General Education Example: Students read a variety of materials and write a short anthology of works, including several genres of literature on an event or person in American history, or on a topic in science they have studied.

STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-T4	Compare the moral lessons from several fables.	<ul style="list-style-type: none"> ◆ Compare morals of fables
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> ◆ Identify a moral ◆ Identify a fable ◆ Answer who/what questions about a fable 	<ul style="list-style-type: none"> ◆ Identify the moral of fables ◆ Match a familiar fable to the moral of the fable 	<ul style="list-style-type: none"> ◆ Given several fables, identify which fables have morals that are similar or different ◆ Compare and contrast at least three different morals from fables. ◆ Classify fables by their morals

General Education Example: Students show how fables were often told to teach a lesson, as in Aesop's fable The Grasshopper and the Ant. Discuss how legends were often told to explain natural history, as in the stories about Johnny Appleseed or Paul Bunyan and Babe, the Blue Ox. Students use a graphic organizer to compare the morals of various stories.

CONTENT Reading/ELA
 STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-F5	Explain how the plot, setting, or characters influence the events in the story, using evidence from the text.	◆ Understand how story elements influence the events of the story, using specific examples from the text.
Less Complex		Possible Entry Points	
The student will:		The student will:	
Literary Text	<ul style="list-style-type: none"> ◆ Identify the characters of the story (<i>who is in the story</i>) ◆ Identify the setting of the story (<i>where the story takes place</i>) (e.g., Draw a picture of the setting using details from the story.) ◆ Identify the main idea (<i>what happened in the story</i>) ◆ Define the terms plot, character, or setting ◆ Sequence major events of the story ◆ Identify critical details, facts, key events, and/or people involved in a story or read aloud ◆ Answer questions of who, what, where, when, or how 	<ul style="list-style-type: none"> ◆ Match the characters with the appropriate action in the story ◆ Match events of a story with a problem (cause and effect) 	<ul style="list-style-type: none"> ◆ Answer questions about the elements of the story and how they influence the events in the story ◆ Explain how the story would be different if you changed one of the elements of the story (such as if you were the main character) ◆ Compare how two characters would solve a problem differently (e.g., identify a character and one trait of that character (Pippi Longstocking—brave) and then identify a second character and a different trait in that character (Annika—timid). Then, given 3 possible solutions to a problem, match a character to a solution that fits that trait)

General Education Example: The teacher reads The Friendship by Mildred Taylor and illustrates how to make judgments about the plot, setting, characters, and events and support them with evidence from the text. Students then select a book such as The Gold Cadillac, The Well, or Let the Circle be Unbroken by Taylor, and repeat the process. Groups of students share their book with another group.

DC CAS-Alt
 CONTENT Reading/ELA
 STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-F6	Describe a character's traits, relationships, and feelings, using evidence from the text (e.g., thoughts, dialogue, actions).	◆ Describe character's traits, relationships, and feelings supported with text
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> ◆ Locate feeling words/ in a story ◆ Locate pictures expressing feeling in a story ◆ Distinguish between people and places from a story 	<ul style="list-style-type: none"> ◆ Identify a character in a story (e.g. using objects) ◆ Identify a relationship from a story ◆ Identify dialogue from a story ◆ Identify feelings from a story 	<ul style="list-style-type: none"> ◆ Label the character's feelings at various times during the story. ◆ Match the character traits with the correct character of the story ◆ Describe the character traits of the main characters in the text. ◆ Create a socio-gram (character web) of the characters in the text and their relationships. ◆ Describe the feelings or emotions of the characters to specific events that take place in the text ◆ Match the character participating in an event and the feeling of that character associated with it as described in the story.

General Education Example: Teacher gives pairs of students excerpts from Frindle by Andrew Clements. Students describe the major character using the dialogue and actions of the character.

STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-P8	Recognize the similarities of sounds in words (e.g., onomatopoeia, alliteration, assonance) and rhythmic patterns in a poetry selection.	◆ Recognize similarities of sounds in words and rhythmic patterns in poetry
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> ◆ Clap (gesture, eye blinking) the rhythmic pattern of a familiar poem or song ◆ Match words from a poem that have the same initial or final consonant ◆ Match animal sound words with the animal 	<ul style="list-style-type: none"> ◆ Determine rhymes in a poem ◆ Match words with the same sounds (e.g., same vowel sound or same consonant sound) ◆ Define alliteration 	<ul style="list-style-type: none"> ◆ Indicate (through yes or no questions) when a word's pronunciation sounds like its definition (onomatopoeia) ◆ Locate alliterative words in a poem ◆ Locate alliteration in a poem ◆ Find onomatopoeia in a poem (e.g. highlight "galoshes" as an example of onomatopoeia)

General Education Example: Pairs of students are given poems with various rhythmic patterns including onomatopoeia, alliteration, and assonance. Students read the poems and identify the rhythmic pattern, then present it before the class. Classmates identify the pattern. Selections could include "The Fourth" by Shel Silverstein, "Surf" by Lillian Morrison, and "Galoshes" by Rhoda Bacmeister.

CONTENT Reading/ELA
STRAND Literary Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	4LT-P9	Identify characteristics and structural elements (e.g., imagery, rhyme, verse, rhythm, meter) of poetry (narrative poem, free verse, lyrical poem, humorous poem).	<ul style="list-style-type: none"> Identify characteristics or structural elements of poetry
Less Complex		Possible Entry Points	More Complex
Literary Text	The student will:	The student will:	The student will:
	<ul style="list-style-type: none"> Identify key words/pictures as they relate to the topic of a poem (e.g. Langston Hughes' poem "A Dream Deferred") Identify a key word or topic of a poem 	<ul style="list-style-type: none"> Define free verse Define imagery, rhyme or verse Identify rhyming words in a poem 	<ul style="list-style-type: none"> Identify the characteristics of a poetry given examples Identify the structural elements of poetry given examples of each Identify imagery in a poem Classify text as a poem or narrative Identify a rhyme pattern in a poem

General Education Example: Students read a range of poems from Lewis Carroll, Robert Frost, Rachel Field, and Langston Hughes and identify the structural elements and type of poetry.

STRAND Informational Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	4IT-E1	Identify the purpose and main points of a text and summarize its supporting details.	<ul style="list-style-type: none"> Identify purpose or main points and summarize supporting details
Less Complex		Possible Entry Points	More Complex
Informational Text	The student will:	The student will:	The student will:
	<ul style="list-style-type: none"> Identify informational text from non-informational text (stories, plays, poems, etc.) Identify characters in an informational text Identify a key detail (e.g., cats) in an informational text 	<ul style="list-style-type: none"> Identify main point (e.g., Match a cut out of the topic sentence to the topic sentence in the text) Identify the purpose (e.g. Choose the purpose from 3 different choices: to entertain, to inform, or to persuade.) Identify supporting details (e.g., Make an outline of the main idea and supporting details of an informational text.) Identify the purpose and supporting details of informational text Identify the main point and supporting details of informational text Identify critical details, facts, or key events involved in an informational text Identify main topic (e.g., cats make good pets; I hate cats) in an informational text 	<ul style="list-style-type: none"> Summarize the main idea and supporting details from an informational text passage (e.g., choose from a list of 3 different summary choices) Using picture symbols or objects the student will identify the purpose and summarize supporting details

General Education Example: Students read Christopher Columbus by Stephen Krensky. In pairs they summarize important facts about Columbus' voyage, arrival, search for gold, failure to understand the treasures on the island, and return to Spain. Then students revise, edit, and illustrate their reports and display them in the classroom or library.

DC CAS-Alt

CONTENT Reading/ELA

STRAND Informational Text

Grade 4			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	4IT-E2	Distinguish fact from opinion.	◆ Distinguish fact from opinion
Less Complex		Possible Entry Points	More Complex
Informational Text	The student will:	The student will:	The student will:
	<ul style="list-style-type: none"> ◆ Identify a fact or an opinion about a topic (e.g., cats have 4 legs; all cats are mean) from an informational text ◆ Identify words that suggest opinion, (e.g. I like, I think, I believe, perhaps, I don't like, I don't, think, etc.) ◆ Identify words that suggest fact (e.g. the research shows, the author states, the text states) 	<ul style="list-style-type: none"> ◆ State opinion/reaction about a story, character or event in a non-fiction text ◆ Answer questions about facts of a informational text 	<ul style="list-style-type: none"> ◆ Use fact and opinion (e.g., After reading an informational text create two statements one of which is based on facts in the text the other is fiction (made-up)) ◆ Classify statement/picture/object presented as true (fact) or made-up (opinion) (e.g., student listens to biography paired with objects and then classifies statements from the story as fact or opinion) ◆ Determine if events are fact (e.g., Given a list of events from informational text, identify which ones are most likely to happen to them or to someone they know.) ◆ Identify statements that are facts

General Education Example: Students read a passage about President Lincoln. Students then underline the facts in red and the opinions in blue.

DC CAS-Alt

CONTENT Reading/ELA

STRAND Informational Text

Grade 4				
Learning Standards as written			Essential and Prioritized Skill	
Informational Text	4IT-E3	Identify cause-and-effect relationships (stated and implied).	◆ Identify cause and effect relationships(stated and implied)	
Less Complex		Possible Entry Points		More Complex
The student will:		The student will:		The student will:
Informational Text	<ul style="list-style-type: none"> ◆ Sequence events in informational text ◆ Identify the first event from a passage of informational text 	<ul style="list-style-type: none"> ◆ Categorize events from informational text as either cause or effect ◆ Given a specific event, list or match possible effects 	<ul style="list-style-type: none"> ◆ Given a nonfiction passage in which the cause, event or action is implied, give a plausible cause or effect of the event or action. ◆ Match simple cause and effect pictures/concepts in informational text ◆ Identify simple cause and effect action from informational text using pictures or words (e.g., Given a nonfiction passage identify the main action or behavior of the character and the effect on that character and/or other characters) ◆ Given a specific event with facts stated in the text, identify the specific effect of the event. (e.g., Given a short informational text, identify the cause of a character’s action or reaction) 	

General Education Example: Students read David McCauley’s The New Way Things Work, which details new machines and the latest innovations. Students identify what causes the various technologies to work.

STRAND Informational Text

Grade 4				
Learning Standards as written			Essential and Prioritized Skill	
Informational Text	4IT-DP6	Interpret information in graphic representations (e.g., charts, maps, diagrams, illustrations, tables, timelines) of text.	◆ Interpret information in graphic representations	
Less Complex		Possible Entry Points		More Complex
The student will:		The student will:		The student will:
Informational Text	<ul style="list-style-type: none"> ◆ Locate common words, signs, symbols, or pictures that stand for words/have meaning in the environment (McDonalds, KFC, Popeyes, Chuck E. Cheese), (charts, maps and timelines) ◆ Identify graphic representations (charts, maps, timelines) ◆ Identify basic sight words in graphic representations within informational text (Dolch, Edmark, etc.) 	<ul style="list-style-type: none"> ◆ Locate facts from graphic representations such as charts, maps, diagrams, illustrations, tables, timelines found in informational text ◆ Identify information in informational text (e.g., map of Washington, DC locate a monument) 	<ul style="list-style-type: none"> ◆ Use charts, maps, diagrams, illustrations, tables, and/or timelines to answer questions ◆ Interpret key words in graphic representations within informational text (Find the correct Metro stop to go to the zoo) ◆ Answer questions about informational text using graphic representations 	

General Education Example: Students interpret a physical map of Washington D.C. including topography, waters, coastline, and climate.

DC CAS-Alt
 CONTENT Reading/ELA
 STRAND Informational Text

Grade 4				
Learning Standards as written			Essential and Prioritized Skill	
Informational Text	4IT-DP7	Locate specific information from text (e.g., letters, memos, directories, menus, schedules, pamphlets, search engines, signs, manuals, instructions, recipes, labels, forms).	◆ Locate specific information from text (e.g., letters, memos, directories, menus, schedules, pamphlets, search engines, signs, manuals, instructions, recipes, labels, forms).	
Less Complex		Possible Entry Points		More Complex
	<u>The student will:</u>	<u>The student will:</u>		<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Recognize the meaning of symbols, pictures, signs in the environment ◆ Match symbols to corresponding words from the environment ◆ Locate specific vocabulary in informational text (e.g. - c in the word cup) 	<ul style="list-style-type: none"> ◆ Identify a memo ◆ Identify a schedule ◆ Identify a recipe 		<ul style="list-style-type: none"> ◆ Match specific information to informational text (e.g., match the day of the week to the day of the week in the schedule) ◆ Identify words used in daily schedule, recipes, job sequences, safety signs, etc. ◆ Locate information in a transportation schedule ◆ Locate the answer to a question in appropriate informational text from the home, classroom or community environment ◆ Use electronic directory to locate information

General Education Example: Teacher gives students a list of 10 specific things they must find in a phone book (e.g., address to restaurant, phone number of the public library, a listing for a doctor, area code for Virginia, address of a post office close by, the address for CityHall).

Entry Points – Grade 4

Mathematics

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 4

Learning Standards as written		Essential and Prioritized Skill
Number Sense and Operations	4NSO-N1 Exhibit an understanding of the base-10 number system by reading, modeling, and writing whole numbers to at least 100,000; demonstrating an understanding of the values of the digits; and comparing and ordering the numbers.	<ul style="list-style-type: none"> Understand and apply the base ten system (e.g., 10 ones = 1 ten, 10 tens = 100 ones, 10 one hundreds = 1,000, etc.)

Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> Write whole numbers Identify base ten numbers Match numerals to a set of objects 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> Use counting strategy to represent ones, tens, and/or hundreds. Identify the value of each digit in a given number. 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> Identify and order whole numbers Sort numbers in place value chart Write digits on a place value chart

General Education Example

Example: Write the number that has 9 ten thousands, 4 thousands, 8 hundreds, 6 tens, and 2 ones.

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 4

Learning Standards as written

Essential and Prioritized Skill

Number Sense and Operations 4NSO-C19 Demonstrate understanding of and ability to use the conventional algorithms for multiplication of up to a three-digit whole number by a two-digit whole number. Multiply three-digit whole numbers by two digit whole numbers accurately and efficiently.

- ◆ Solve multiplication problems

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

Computation and Operations

- ◆ Identify numbers and symbols(x,=) in a multiplication problem
- ◆ Explain that multiplication is repeated addition.

- ◆ Skip count to get the product
- ◆ Match a multiplication problem to its equivalent repetitive addition problem ($3 \times 2 = 3 + 3$)

- ◆ Solve a multiplication problem (e.g., using a calculator, manipulatives or a multiplication chart)
- ◆ Add equal groups of objects to represent and solve multiplication problems.

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 4

Learning Standards as written

Essential and Prioritized Skill

Number Sense and Operations 4NSO-C25 Select and use appropriate operations (addition, subtraction, multiplication, and division) to solve problems, including those involving money.

- ◆ Apply operations to solve problems

Less Complex **Possible Entry Points** More Complex

The student will:

The student will:

The student will:

Computation and Operations

- ◆ Use objects to represent a simple addition, subtraction, multiplication, or division problem
- ◆ Use/select numbers to make addition, subtraction, multiplication, or division problems

- ◆ Recognize the correct symbol for addition, subtraction, division, or multiplication problems.
- ◆ Recognize key words to identify the operation of addition, subtraction, or multiplication in a word problem.

- ◆ Recognize and use the correct operation for addition, subtraction, multiplication, or division problems.
- ◆ Solve problems involving addition, subtraction, multiplication or division

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 4

Learning Standards as written

Essential and Prioritized Skill

Number Sense and Operations 4NSO-F12 Select, use, and explain models to relate common fractions and mixed numbers (e.g., $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{12}$, and $1\frac{1}{2}$); find equivalent fractions, mixed numbers, and decimals.

- ◆ Demonstrate understanding of equivalent forms of decimals and fractions

Less Complex

Possible Entry Points

More Complex

The student will:

- ◆ Distinguish between parts and a whole.
- ◆ Split groups of objects into two, three, or four equal parts.

The student will:

- ◆ Identify parts of a whole ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{3}$, $\frac{1}{8}$, $\frac{1}{10}$, $\frac{1}{12}$, $1\frac{1}{2}$) written as a fraction
- ◆ Identify parts of each set of fractions in written format
- ◆ Identify mixed numbers or equivalent decimals

The student will:

- ◆ Use a model to represent an equivalent fraction and decimal. (e.g., cutting a cake into equal portions and representing it with equivalent fractions and decimals)
- ◆ Use task analysis to convert fraction to a decimal.
- ◆ Match a mixed number to a visual representation of that number (e.g., $1\frac{1}{2}$ to $1\frac{1}{2}$ apples)
- ◆ Split groups of objects into equal parts and identify the fraction or decimal that matches

Fractions

General Education Example

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

Grade 4

<p>Learning Standards as written</p> <p>Patterns, Relations, & Algebra</p>	<p>4PRA-4</p> <p>Solve problems involving proportional relationships, including unit pricing (e.g., 4 apples cost 80 cents, so 1 apple costs 20 cents) and map interpretation (e.g., 1 inch represents 5 miles, so 2 inches represent 10 miles).</p>	<p>Essential and Prioritized Skill</p> <p>◆ Solve problems involving proportional relationships</p>
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Less Complex	Possible Entry Points	More Complex
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<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Define proportions using fraction manipulatives. ◆ Identify numbers used in a proportion word problem. 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Identify proportions in word problems. ◆ Match a proportion to a graphical representation 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Solve a problem involving proportion (unit price, map interpretation) ◆ Use a formula to translate a number into another ($x = 5$, $2x = 10$, etc.)
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General Education Example

Example: Four apples cost 80 cents, so 1 apple costs ? cents; 1 inch represents 5 miles, so 2 inches represent ? miles.

CONTENT: Mathematics
STRAND: Measurement

Grade 4

Learning Standards as written

Essential and Prioritized Skills

Measurement 4M1 Identify and use appropriate metric and U.S. Customary units and tools (e.g., ruler, protractor, graduated cylinder, thermometer) to estimate, measure, and solve problems involving length, area, volume, weight, time, angle size, and temperature.

Identify and use appropriate units and tools to solve problems involving: length, area, volume, weight, time, angle size and/or temperature.

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

- ◆ Identify different angles.
- ◆ Identify numbers on a ruler in measuring activities
- ◆ Identify which object is longer or shorter
- ◆ Identify which set has more or less
- ◆ Identify which object is heavy or light

- ◆ Label measurement tools (rulers, measuring cups, etc.)
- ◆ Match measurements and their names (one inch to a graphic representation of an inch)
- ◆ Choose the right tool to measure temperature, length (e.g., less than a foot and more than a yard), volume, or angle size
- ◆ Identify time to the minute on analog and digital clock using a.m. and p.m.

- ◆ Identify and use the tool and units to be used to measure items (water, cookies, etc.)
- ◆ Choose the right tool and measure the length, width or height of items using inches
- ◆ Choose the right tool to measure temperature, a variety of lengths (e.g., less than a yard), weight, and volume.

DC CAS-Alt

Entry Points – Grade 5

ELA

CONTENT Reading/ELA
STRAND Language Development

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Language Development	5LD-V8	Identify the meaning of common Greek and Latin roots and affixes to determine the meaning of unfamiliar words.	<ul style="list-style-type: none"> ◆ Use Greek and Latin roots and affixes to define unknown words.
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Language Development	<ul style="list-style-type: none"> ◆ Identify a Greek prefix ◆ Identify a Latin suffix ◆ Identify a Greek root word (using pictures, words or objects) 	<ul style="list-style-type: none"> ◆ Distinguish between suffixes and prefixes. ◆ Match definition to the corresponding Latin or Greek root word ◆ Match the meanings of suffixes and prefixes with the correct suffix or prefix ◆ Make new words by adding Greek or Latin suffixes or prefixes to familiar words 	<ul style="list-style-type: none"> ◆ Identify the meaning of unfamiliar words using knowledge of Greek and Latin roots, suffixes, and prefixes ◆ Use root word and add suffixes and/or prefixes to form new words ◆ Define a new word using knowledge of a familiar Greek/Latin root/affix

General Education Example: Students discuss the meaning of common Greek roots, such as micro- and geo-, to help them understand the meaning of the words such as microscope, microwave, microbe, geometry, geography, and geology.

STRAND Language Development

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Language Development	5LD-V9	Identify and apply the meanings of the terms antonym, synonym, and homophone.	<ul style="list-style-type: none"> ◆ Identify and apply the meaning of the terms antonym, synonym and homophone.
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Language Development	<ul style="list-style-type: none"> ◆ Match a word with the correct definition 	<ul style="list-style-type: none"> ◆ Identify that homophones are words that sound the same but are not spelled the same and have different meanings ◆ Identify that synonyms have the same meaning ◆ Identify that antonyms have opposite meanings 	<ul style="list-style-type: none"> ◆ Match a set of synonyms ◆ Match antonyms ◆ Match homophones ◆ Match pairs of synonyms with their meanings (using objects, words or pictures)

General Education Example: Given a list of paired words, students identify whether each pair of words are antonyms, synonyms, or homophones. Then students take a word and identify its antonym, synonym and homophone

CONTENT Reading/ELA
STRAND Literary Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	5LT-T3	Identify the theme (moral, lesson, meaning, message, view or comment on life) of a literary selection.	◆ Identify theme of a literary selection
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	◆ Answer who or what questions about a literacy selection with a moral theme	◆ Identify whether a literary selection teaches a lesson	◆ Find and label the theme of a literary text (e.g., match a picture of good vs. evil to an adapted passage from Harry Potter)
	◆ Define a moral	◆ Find the topic of a literary selection	◆ Match the theme to a selection of text
			◆ Determine the author's view on life (e.g., pro-war vs. anti-war)
			◆ Use a switch to answer yes/no questions about the theme of a story

General Education Example: Students compare books that deal with the theme of the impact of war, both on those who fight in the battles and those who remain at home. Works on this theme include books on the Civil War period, such as Bull Run by Paul Fleischman; books on World War I, such as After the Dancing Days by Margaret Rostkowski; or books about the Vietnam War, such as Park's Quest by Katherine Patterson.

STRAND Literary Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	5LT-F5	Identify the plot and its components (e.g., main events, conflict, resolution).	◆ Identify plot and its components
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	◆ Identify the characters in a fictional story (<i>who is in the story</i>)	◆ Sequence events from a fictional story	◆ Identify conflict or resolution in a fictional story
	◆ Identify the setting in a fictional story (<i>where the story takes place</i>) e.g., Draw a picture of the setting using details from the story.	◆ Identify the main idea of a fictional story (<i>what happened in the story</i>)	◆ Answer questions about the plot of a fictional story
	◆ Define conflict		◆ Identify the main event and conflict of a fictional story
	◆ Define resolution		◆ Match the conflict and resolution with a story (e.g., choose from a list of three different resolutions)

General Education Example: After reading Sarah, Plain and Tall, by Patricia MacLachlan, students discuss the causes and effects of the main event of the plot when the father in the story acquires a mail-order bride. Students describe the effects of this event, including adjustments that the children make to their new stepmother and that Sarah makes to living on the prairie. They plot the story onto a story map, and write a sentence identifying the major theme.

CONTENT Reading/ELA
STRAND Literary Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	5LT-P7	Respond to and analyze the effects of the sounds in words (alliteration, onomatopoeia, rhyme scheme), form (free verse, couplets), and figurative language (metaphor, simile) to uncover the meaning of a poem.	<ul style="list-style-type: none"> Analyze sound effects in words, form and figurative language to interpret a poem
Less Complex		Possible Entry Points	
<u>The student will:</u>		<u>The student will:</u>	
Literary Text	<ul style="list-style-type: none"> Identify alliteration, onomatopoeia, or rhyme scheme in a poem Find the word “like” or “as” in a poem 	<ul style="list-style-type: none"> Draw a picture illustrating the meaning of a metaphor or simile Distinguish between a simile and metaphor Match a poem form to its definition 	<ul style="list-style-type: none"> Categorize poems into the type of forms Classify words as alliteration or onomatopoeia

General Education Example: Students read poetry from a cross-section of authors such as Nikki Giovanni, Gary Soto, Leslie Marmon Silko. Then, students discuss the reason for the variations in language.

STRAND Literary Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	5LT-S9	Identify and draw conclusions about the author's use of sensory details, imagery, and figurative language.	<ul style="list-style-type: none"> Identify and critique author's use of sensory details, imagery, and figurative language
Less Complex		Possible Entry Points	
<u>The student will:</u>		<u>The student will:</u>	
Literary Text	<ul style="list-style-type: none"> Match a picture of an image to the portion of text Match sensory details to the sense the author is trying to invoke (e.g., she smelled as sweet as a daisy—to the nose) 	<ul style="list-style-type: none"> Find sensory details in a text Locate imagery in a short text Label figurative language 	<ul style="list-style-type: none"> Identify imagery and state whether they like the author's use of it. Compare two authors' uses of figurative language (e.g., the student places figurative language from each author in a Venn diagram-on one side, the 1st author, the 2nd author on the other and similarities in the middle.)

General Education Example: Students read and listen to an audiotape of Dr. Martin Luther King's “I Have A Dream” speech and identify the features that appeal to them and the rhetorical/figurative devices that make the speech effective.

CONTENT Reading/ELA
 STRAND Informational Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	5IT-E1	Identify the author's purpose and summarize the critical details of expository text, maintaining chronological or logical order.	◆ Identify author's purpose, summarize critical details in sequence
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Informational Text	<ul style="list-style-type: none"> ◆ List details found in an expository text ◆ Answer questions of who, what, where, when, and how in relation to expository text ◆ Identify words that assist in determining the author's purpose ("believe, think, entertain, persuade, inform, etc.) ◆ Use a timeline to sequence events from informational text 	<ul style="list-style-type: none"> ◆ Identify the author's purpose of expository text (newspapers, magazines, maps, schedules, pamphlets, etc.) ◆ List important details in order from expository text ◆ Identify the supporting details of an expository text (choose the correct summary of supporting details from 3 choices) ◆ Identify the purpose of an expository text (e.g., Choose the purpose from 3 different choices—e.g., to inform, to entertain, to persuade OR Match a cut out of the topic sentence to the topic sentence in the text.) 	<ul style="list-style-type: none"> ◆ Summarize an expository text by stating the author's purpose and identifying the important details in order from journals, newspapers, booklets, etc. ◆ Make an outline of the author's purpose and supporting details of an expository text

General Education Example: Students read African Beginnings by James Haskins. In pairs, they summarize important facts about how early civilizations have had a lasting impact on the world's history, and on American culture. Then students revise, edit, rewrite, and illustrate their reports and display them in the classroom or library.

CONTENT Reading/ELA
STRAND Informational Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	5IT-E2	Distinguish fact from opinion in expository text, providing supporting evidence from text.	◆ Distinguish fact from opinion and support with text
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Define fact and opinion ◆ Identify the word “fact” and the word “opinion” ◆ Identify types of information that may signify facts or opinions (e.g., data from an experiment, an opinion poll) 	<ul style="list-style-type: none"> ◆ Label fact and opinion when given a statement. ◆ State opinion/reaction about a story, character or event in a non-fiction text ◆ Answer questions about facts from an expository text 	<ul style="list-style-type: none"> ◆ Label fact and opinion when given a statement from an expository text ◆ Classify statement/picture presented as true (fact) or made-up (opinion) ◆ Given a list of statements from an expository text, identify which are facts and which are opinions

General Education Example: In reading an article about how snowshoe rabbits change colors, students distinguish facts (i.e., Snowshoe rabbits change color from brown to white in the winter) from opinions (i.e., Snowshoe rabbits are very pretty animals because they can change colors).

STRAND Informational Text

Grade 5			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	5IT-A7	Determine an author's position (i.e., what the author is arguing), providing supporting evidence from the text.	◆ Determine author's position and support with text
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Identify the topic of an article from the editorial section of a newspaper ◆ 	<ul style="list-style-type: none"> ◆ Match the author to her/his argument (e.g., choose from 3 possible choices summarizing the author's argument) ◆ Choose the author's argument from a set of 3 possible arguments 	<ul style="list-style-type: none"> ◆ Choose the author's argument from a set of 3 possible arguments and find words in the text to support their choice. ◆ Identify the author's position and 1 sentence to support the position

General Education Example: Students read their local newspaper and describe a columnist's opinion, providing supporting evidence from the column to back up their assertions.

DC CAS-Alt

Entry Points – Grade 5

Mathematics

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 5

Learning Standards as written

Number 5NSO-N1 Estimate, round, and manipulate very large (e.g., billions) and very small (e.g., thousandths) numbers; demonstrate an understanding of place value to billions and thousandths.

Sense and Operations

Essential and Prioritized Skill

◆ Apply knowledge of number concepts to very large or very small numbers (including decimals) to estimate, round and manipulate numbers

Less Complex

The student will:

- Number Sense
- ◆ Locate numbers on a number line
 - ◆ Match a numeral to its number word
 - ◆ Identify which set has more or less

Possible Entry Points

The student will:

- ◆ Write, read, and name decimals to tenths (.1, .2, .3)
- ◆ Write, read, and name 100s and 1000s
- ◆ Use place value graphic organizer to write numbers (e.g., 10 is zero ones and 1 ten)
- ◆ Use manipulatives to represent numbers

More Complex

The student will:

- ◆ Compare numbers using symbols (>, <, =) including decimals, small and large numbers
- ◆ Create a number line using integers(+, -)
- ◆ Estimate and round money to the nearest dollar
- ◆ Determine if a number is closer to zero or 10

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 5

Learning Standards as written
 Number 5NSO-N3
 Sense and
 Operations

Find and position integers, fractions, mixed numbers, and decimals (both positive and negative) on the number line.

Essential and Prioritized Skill

Use a number line to demonstrate understanding of integers, decimals, mixed numbers, or fractions.

	Less Complex	Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Number Sense	◆ Recognize numbers get larger or smaller on the number line	◆ Compare numbers (e.g., using manipulatives) on a number line	◆ Place positive numbers, fractions and decimals on the <u>number line</u> in the correct position
	◆ Find numbers on a number line	◆ Determine what numbers come before or after a given set of numbers	◆ Place mixed numbers on a number line
	◆ From a set of three possible choices, identify a number line		◆ Construct a number line, placing fractions in the correct position

General Education Example

Example: Arrange in order $9/4$, 35% , 0.3 , -3 , $2\ 1/2$ on a number line.

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 5

Learning Standards as written
 Number Sense 5NSO-E23
 and Operations

Estimate sums and differences of whole numbers, positive fractions, and positive decimals. Estimate products of whole numbers and products of positive decimals with whole numbers. Use a variety of strategies and judge reasonableness of answers.

Essential and Prioritized Skill

- ◆ Use estimation to solve problems involving addition, subtraction, or multiplication.

	Less Complex	Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Estimation	<ul style="list-style-type: none"> ◆ Name numbers in an equation. ◆ Determine if a number is closer to 5 or 10 ◆ Identify when to add or subtract ◆ From a set of three numbers, identify the fraction 	<ul style="list-style-type: none"> ◆ Round a number up to the closest 10 ◆ Solve addition problems 	<ul style="list-style-type: none"> ◆ Round numbers in an equation to the closest group of 10 (10, 20, 30) and then solve ◆ Use estimation to solve problems (addition, subtraction or multiplication) ◆ Use estimation to add, subtract, or multiply

General Education Example

Example: A box of 6 ice cream bars weighs 10.65 oz. Approximately what is the net weight of 49 boxes?

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 5

Learning Standards as written

Number 5NSO-C13 Add and subtract fractions (including mixed numbers) with like and unlike denominators (of 2, 3, 4, 5 and 10), and express answers in the simplest form.

Essential and Prioritized Skill

- ◆ Solve addition and subtraction problems involving fractions and express them in simplest form

	Less Complex	Possible Entry Points	More Complex
Computation	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
	<ul style="list-style-type: none"> ◆ Create a number line to order fractions. ◆ Identify fractions ◆ Identify like or unlike denominators (e.g., match like denominators) 	<ul style="list-style-type: none"> ◆ Simplify fractions ◆ Identify fractions and equivalent mixed numbers ◆ Identify a mixed number ◆ Identify an improper fraction (e.g., Identify when the numerator (top number) is larger than the denominator) 	<ul style="list-style-type: none"> ◆ Add and subtract fractions and simplify if necessary ◆ Add fractions and simplify (e.g., using manipulatives) ◆ Subtract fractions and simplify (e.g., using manipulatives)

General Education Example

Example: $3 \frac{4}{5} - 2 \frac{2}{3} = ?$

Example: Draw a square and then slide it 3 inches horizontally across your page. Draw the new square in a different color.

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 5

Learning Standards as written
 Number 5NSO-F8
 Sense and
 Operations

Explain different interpretations of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, as division of whole numbers by whole numbers, and as locations on the number line.

Essential and Prioritized Skill

- ◆ Understand different interpretations of fractions

	Less Complex	Possible Entry Points	More Complex
Fractions	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
	<ul style="list-style-type: none"> ◆ Identify fractional parts ◆ Identify numerator and denominator in a fraction 	<ul style="list-style-type: none"> ◆ Write a fraction ◆ Represent a part of a whole with manipulatives 	<ul style="list-style-type: none"> ◆ Represent fractions as a ratio of a whole, parts of a collection, or as division of a whole number by a whole number ◆ Represent fractions as a ratio of whole numbers using a model ◆ Place fractions on a number line ◆ Model fractions as part of a whole. ◆ Model fractions as part of a collection

General Education Example

Example: First, $2/3$ means "2 divided by 3" and is located between 0 and 1 on the number line. A car moving at a constant speed travels 130 miles in 2 hours. Write the ratio of distance to time and use it to find how far the car will travel in 5 hours.

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

• **Grade 5**

Learning Standards as written
 Patterns, Relations, & Algebra

• 5PRA1

Analyze and determine the rules for extending symbolic, arithmetic, and geometric patterns and progressions (e.g., ABCCCC ...; 1, 5, 9, 13, ...; 3, 9, 27, ...).

Essential and Prioritized Skill

- ◆ Analyze patterns to determine their rules

Less Complex

Possible Entry Points

More Complex

The student will:

- ◆ Identify a pattern (e.g., in the classroom environment)
- ◆ Label shapes as same or different
- ◆ Identify a non-pattern

The student will:

- ◆ Describe two different types of patterns (abab/abbabb)
- ◆ Using manipulatives, make a pattern.

The student will:

- ◆ Extend a mathematical pattern
- ◆ Match a pattern (e.g.abbabb) to an example
- ◆ Describe the rules that govern a specific pattern

General Education Example

Example: Triangles and trapezoids were used to make a pattern.



1. If the pattern above continues, how many black triangles are needed to build level 10?
 2. If the pattern above continues, how many white trapezoids are needed to build level 10?
- Explain how you know you are correct.

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

Grade 5		
Learning Standards as written Patterns, <small>5PRA3</small> Relations, & Algebra	Use the properties of equality to solve problems with whole numbers.	Essential and Prioritized Skill ♦ Use properties of equality to solve problems
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ List the symbols which can be used to illustrate equality and inequality (>, <, =, and ≠) ♦ Use manipulatives to demonstrate one-to-one correspondence of numbers in an equation 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Define equality by using symbols (>, <, =, and ≠) and manipulatives ♦ Use equal and unequal symbols with manipulatives to show problems as equal or unequal 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Use properties of equality to solve an equation ♦ Determine which equations are equal

General Education Example

Example: If $\square + 7 = 13$, then $\square = 13 - 7$, therefore $\square = 6$; if $3x \square = 15$, then $1/3 \times 3x \square = 1/3 \times 15$, therefore $\square = 5$.

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

Grade 5

Learning Standards as written
 Patterns, 5PRA5
 Relations,
 & Algebra

Interpret and evaluate mathematical expressions that use parentheses; use parentheses to indicate which operation to perform first when writing expressions containing more than two terms and different operations.

Essential and Prioritized Skill

- ◆ Apply order of operations to solve a problem

Less Complex

The student will:

- ◆ Describe an equation using manipulatives
- ◆ Complete a simple addition problem
- ◆ Solve a simple subtraction problem

Possible Entry Points

The student will:

- ◆ Explain the order of operations using manipulatives
- ◆ Compare order of operations to parts of an equation

More Complex

The student will:

- ◆ Apply order of operations to solve a problem
- ◆ Use task analysis to solve a problem using order of operations

General Education Example

Example: Find the values of $10 - (7 - 3)$ and of $(10 - 7) - 3$. Write in symbols: add 19 and 34 and double the result.

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

Grade 5										
Learning Standards as written Patterns, Relations, & Algebra 5PRA6	Solve problems involving proportional relationships using concrete models, tables, graphs, and paper-pencil methods.	Essential and Prioritized Skill ♦ Use various methods to solve proportional problems								
Less Complex	Possible Entry Points	More Complex								
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ List numbers in a proportional problem (e.g., ○□□ circles to squares) ♦ Recognize proportional tables, models or graphs 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Distinguish proportional problems using a table, model or graph ♦ Match proportional problems to their graphic representations (e.g., 3 men to 4 women – 3:4, $\frac{3}{4}$, or 3 to 4) 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Solve a proportional problem using a table ♦ Solve a proportional problem using a model (e.g., find the unknown length in a similar pair of figures) <div style="text-align: center;"> </div> <p>length of sides:</p> <table style="margin-left: auto; margin-right: auto;"> <tr> <td>JK = 18 ft</td> <td>DA = 54 ft</td> </tr> <tr> <td>IJ = 12 ft</td> <td>BC = 54 ft</td> </tr> <tr> <td>LI = 18 ft</td> <td>CD = _____</td> </tr> <tr> <td>KL = 12 ft</td> <td>AB = 36 ft</td> </tr> </table>	JK = 18 ft	DA = 54 ft	IJ = 12 ft	BC = 54 ft	LI = 18 ft	CD = _____	KL = 12 ft	AB = 36 ft
JK = 18 ft	DA = 54 ft									
IJ = 12 ft	BC = 54 ft									
LI = 18 ft	CD = _____									
KL = 12 ft	AB = 36 ft									
		<ul style="list-style-type: none"> ♦ Solve a proportional problem using a graph 								

General Education Example

Example: An official U.S. flag uses 19 to 10 as a ratio of length to width. Create a table to illustrate five flag sizes that could be used.

CONTENT: Mathematics
STRAND: Geometry

Grade 5		
Learning Standards as written Geometry 5G1	Identify polygons based on their properties, including types of interior angles, perpendicular or parallel sides, and congruence of sides (e.g., squares, rectangles, rhombuses, parallelograms, and trapezoids: isosceles, equilateral, and right triangles).	Essential and Prioritized Skill ♦ Identify polygons based on their properties
Less Complex	Possible Entry Points	More Complex
<ul style="list-style-type: none"> • <u>The student will:</u> ♦ Define parallel ♦ Define perpendicular 	<ul style="list-style-type: none"> • <u>The student will:</u> ♦ Name a square ♦ Name a right triangle ♦ Identify parallel lines ♦ Identify perpendicular sides ♦ Match two congruent sides of a rectangle (e.g., long side to long side) 	<ul style="list-style-type: none"> • <u>The student will:</u> ♦ Sort shapes by the number of sides ♦ Sort shapes by the number of parallel sides ♦ Classify shapes by types of interior angles

CONTENT: Mathematics
STRAND: Geometry

Grade 5		
Learning Standards as written Geometry 5G2	Identify, describe, and compare special types of three-dimensional shapes (e.g., cubes, prisms, spheres, cones, and pyramids) based on their properties, such as edges and faces.	Essential and Prioritized Skill ♦ Compare three-dimensional shapes based on their properties
Less Complex	Possible Entry Points	More Complex
<u>The student will:</u> ♦ Identify 2 and 3 dimensional shapes ♦ Distinguish between 2 and 3 dimensional shapes	<u>The student will:</u> ♦ Match 2 and 3 dimensional shapes (e.g., square to a cube) ♦ Identify face ♦ Identify edge ♦ Count edges ♦ Count faces	<u>The student will:</u> ♦ Sort 3 dimensional objects by the number of edges ♦ Match 3 dimensional shapes by number of faces ♦ Complete a Venn Diagram comparing 3 dimensional shapes

CONTENT: Mathematics
STRAND: Geometry

Grade 5		
Learning Standards as written Geometry 5G3	Identify relationships among points, lines, and planes (e.g., intersecting, parallel, perpendicular).	Essential and Prioritized Skill ♦ Identify relationships among points, lines, and planes
Less Complex	Possible Entry Points	More Complex
<u>The student will:</u> ♦ Distinguish a line from a point ♦ Recognize a plane ♦ Identify a point ♦ Identify a line	<u>The student will:</u> ♦ Compare parallel and intersecting lines ♦ Define perpendicular planes	<u>The student will:</u> ♦ Locate points to create a line ♦ Draw lines to create a plane ♦ Show parallel lines ♦ Construct intersecting lines ♦ Use perpendicular lines to explain points, lines, and planes

CONTENT: Mathematics
STRAND: Geometry

Grade 5		
Learning Standards as written Geometry 5G6	Predict, describe, and perform transformations on two-dimensional shapes (e.g., translations, rotations, and reflections).	Essential and Prioritized Skill ♦ Perform transformation on two-dimensional shapes
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Identify two dimensional shapes ♦ Name a transformation for a two dimensional shape 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Tell the difference between the transformations by using the definition of each to match the two dimensional shape ♦ Choose a reflection, translation or a rotation to describe a transformation on a 2 dimensional shape 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Rotate a square ♦ Translate a triangle ♦ Perform a reflection on a quadrilateral ♦ Match a two-dimensional shape to its reflection

DC CAS-Alt

Entry Points – Grade 5

Science

CONTENT Science
STRAND Science and Technology

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Scien&^A^ aA V^&@ [[* ^	5.FE	Evaluate the validity of claims based on the amount and quality of the evidence cited.	♦ Judge the validity of claims based on the amount and quality of the evidence from an investigation
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Scien&^A^ aA^ &@E	<ul style="list-style-type: none"> ♦ Name and sequence the steps of an investigation ♦ Based on an investigation sort valid and invalid claims 	<ul style="list-style-type: none"> ♦ Define validity, evidence, and quality as scientific terms ♦ Use data presented in an investigation to support scientific outcomes ♦ Use charts, tables, or graphic organizers to show data from a scientific investigation 	<ul style="list-style-type: none"> ♦ Evaluate the design of an experiment based on amount and quality of evidence ♦ Analyze the data presented in the investigation to determine whether claims are valid

CONTENT Science

STRAND Science and Technology

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Scien&^A^ à V^&@ [[[* ^	5.G1	Recognize and describe how results of similar scientific investigations may turn out differently because of inconsistencies in methods, materials, and observations, or because of limitations of the precision of the instruments used.	♦ Analyze how inconsistencies and limitations of investigations affect the results
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Scien&^A^ à V^&@ [[[* ^	<ul style="list-style-type: none"> ♦ List the different steps in the scientific method ♦ Define scientific investigation 	<ul style="list-style-type: none"> ♦ Sequence the scientific method for simple investigation ♦ Define the meaning of consistencies and inconsistencies and limitations ♦ Record the step by step instructions when performing new investigation including outcomes and predictions 	<ul style="list-style-type: none"> ♦ Use the scientific method to complete a simple investigation and explain limitations ♦ Explain how to avoid inconsistencies or limitations in a simple investigation

CONTENT Science

STRAND Science and Technology

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Scien&^A&@ [* ^	5.CE	Identify the controlled variable and at least one independent variable in a scientific investigation, when appropriate.	◆ Identify controlled and independent variables in an experiment
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Scien&^A&@ [* ^	<ul style="list-style-type: none"> ◆ Identify things that can control the outcome of an investigation ◆ Identify things that can change the outcome of an investigation 	<ul style="list-style-type: none"> ◆ Define scientific variable ◆ Recognize if a scientific investigation is using a controlled variable or an independent variable (e.g., a plant with sunlight verses a plant without sunlight) ◆ Define independent and controlled variables 	<ul style="list-style-type: none"> ◆ Locate controlled variables and independent variables in a scientific investigation ◆ Locate examples of independent and controlled variables

CONTENT Science

STRAND Earth and Space Science

Grade 5					
Learning Standards as written		Essential and Prioritized Skill			
Earth & Space Science 5.ESS.1	Describe the Earth as part of a system called the solar system, which includes the sun (a star), planets, comets, asteroids, and many moons.	♦ Explain what a solar system is and how the earth fits into it (the Earth as part of a system called the Solar System)			
Less Complex		Possible Entry Points		More Complex	
The student will:		The student will:		The student will:	
Earth & Space Science	<ul style="list-style-type: none"> ♦ Identify the sun (a star), planets, comets, asteroids, or moons (e.g., use flash- card, manipulatives) ♦ Name and describe the largest body in the solar system ♦ Represent in diagram the solar system 	<ul style="list-style-type: none"> ♦ Sequence the Earth and planets in ordinal pattern in the solar system ♦ List the distance of the planets from the earth. ♦ Compare the features of the Earth to the features of other planets ♦ Distinguish among the sun (a star), planets, comets, asteroids, or moons (e.g., use flashcards, manipulatives) 	<ul style="list-style-type: none"> ♦ Describe the order of the planets according to their distance from the sun (e.g., using different size ball or NASA pictures) ♦ Describe the properties of a planet (e.g., explain why Pluto is not a planet) ♦ Describe the properties of a solar system (e.g., explain why Pluto is a part of the solar system) 		

CONTENT Science

STRAND Earth and Space Science

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Earth Science	5.1.3	Demonstrate how the Earth orbits the sun in a year's time and Earth rotates on its axis about once every 24 hours.	◆ Demonstrate how the Earth orbits and rotates
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Earth & Space Science	<ul style="list-style-type: none"> ◆ Identify the moon, sun, and the Earth ◆ Describe day and night (e.g., using pictures and other materials) ◆ List the seasons 	<ul style="list-style-type: none"> ◆ Distinguish day from night ◆ Differentiate the seasons ◆ Represent in a diagram day and night (e.g., pictures, drawings) ◆ Represent in diagrams the seasons ◆ Compare the Earth and the sun or the Earth and the moon ◆ Using a picture/model, construct a model illustrating how the Earth orbits and rotates 	<ul style="list-style-type: none"> ◆ Construct a model from memory illustrating how the Earth orbits and rotates ◆ Explain how the Earth's rotation affects the time or seasons ◆ Cite evidence that the Earth's rotation affects the time or season ◆ Design how the Earth's rotation causes day and night ◆ Design how the sun's rays strike the Earth to cause seasons

CONTENT Science

STRAND Life Science

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Life Science	5.FG2	Identify organisms that are not native to the Washington, DC, area and how they undergo changes to increase their chance of survival in the area.	<ul style="list-style-type: none"> Identify non-native organisms and explain how they adapt to Washington, DC
Less Complex		Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Life Science	<ul style="list-style-type: none"> Define/illustrate “adaptation” Classify organisms as native or non-native to Washington, DC 	<ul style="list-style-type: none"> Identify different samples of organisms not native to Washington, DC (e.g., snake fish) Identify ways that organisms not native to Washington, DC affect our environment Complete sentences or picture graphics telling how non-native organisms maintained their chance of survival in the Washington, DC area 	<ul style="list-style-type: none"> Describe how organisms not native to Washington, DC change Classify types of organisms which are likely to survive in a particular environment Match non-native organisms to the way they changed to survive in Washington, DC Use a Venn Diagram to compare native and non-native organisms

General Education Examples: Student compares and contrasts at least three native and three **non-native** plants. The diagram shows at least five similarities and differences (e.g., size, shape, competition or cooperation with other species, possibilities for extinction, water and nutrition sources, human uses, etc.)

Student creates a one minute informational TV advertisement about **non-native** plants and their effect on the native environment. The ad must address at least three ways that the **non-native** plants effect the native environment

CONTENT Science

STRAND Life Science

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Life Science	5.FG4	Explain that organisms fit enough to survive in a particular environment will typically produce offspring fit enough to survive and reproduce in that particular environment. Over time, these inherited characteristics are carried as the predominant forms (e.g., adaptations such as shape of beak, length of neck, shape of teeth).	<ul style="list-style-type: none"> ◆ Explain survival and inherited characteristics
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Life Science	<ul style="list-style-type: none"> ◆ Define organisms ◆ Identify characteristics of living things ◆ Group organisms into categories using their characteristics (e.g., living things, plants and animals) 	<ul style="list-style-type: none"> ◆ Match an organism’s survival characteristic to its environment (e.g., giraffe’s long neck— Sahara where leaves are only high up) ◆ Identify characteristics that can be inherited (e.g., eye color, height, shape of beak, etc.) ◆ Match an organism to its habitat 	<ul style="list-style-type: none"> ◆ Describe the survival needs of different organisms based on their environments ◆ Compare and contrast the differing ways an organism interacts with its surroundings (e.g., how a frog and a butterfly get food, protect themselves, etc.) ◆ Explain how different organisms use their unique adaptations to meet their needs

CONTENT Science

STRAND Life Science

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Life Science	5.FG5	Explain how changes in an organism's habitat are sometimes beneficial and sometimes harmful, and how changes in the environment (drought, cold) have caused some plants and animals to die, migrate, or become extinct.	◆ Explain effects of habitat change
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Life Science	<ul style="list-style-type: none"> ◆ Describe habitat ◆ Define environment ◆ Identify different environments 	<ul style="list-style-type: none"> ◆ Explain how animals and plants use resources in their environments ◆ List examples of how habitat can be affected by the weather ◆ Describe major dry-land environments (e.g., plants and animals that live in the desert, rainforest, arctic, etc.) 	<ul style="list-style-type: none"> ◆ Match a habitat change with an outcome (or likely outcome) for particular plants and animals (e.g., using objects, pictures, or symbols) ◆ Describe the effects of flood, disease and erosion on organisms and habitat

CONTENT Science

STRAND Life Science

Grade 5			
Learning Standards as written			Essential and Prioritized Skill
Life Science	5.FG9	Examine the information that fossils provide us about living things that inhabited the Earth in the distant past, and describe how they can be compared both with one another and with living organisms according to their similarities and differences.	<ul style="list-style-type: none"> Understand what fossils tell us about the past in general and about living organisms
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Life Science	<ul style="list-style-type: none"> Define a fossil Describe how a fossil is formed Identify a fossil Label different types of fossils (e.g., cast, molds, trace, and imprints) 	<ul style="list-style-type: none"> List similarities between fossils and living organisms Use fossils to describe animals that lived in the distant past Match fossils (scientific pictures) with a specific geology (e.g., a nautilus is found in the ocean) 	<ul style="list-style-type: none"> Compare and contrast today's living things with fossils (e.g., use a graphic organizer to compare and contrast) Summarize the differences and similarities of fossils and living organisms Illustrate how geology has changed over time based on the fossil record (e.g., oceans where now there are mountains, etc.)

DC CAS-Alt

Entry Points – Grade 6

ELA

CONTENT Reading/ELA

STRAND Language Development

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Language Development	6LD-V7	Determine the meaning of unfamiliar words using knowledge of English language structure, Greek and Latin roots (e.g., annus, aqua) suffixes (e.g., -itis, -osis, and prefixes (e.g., multi-, dis-, anti-, hyper-, syn-).	<ul style="list-style-type: none"> Define unfamiliar words using English language structure, Greek and Latin roots or affixes
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Language Development	<ul style="list-style-type: none"> Categorize affixes as prefix or suffix Locate prefixes and suffixes in a text Identify prefixes Identify suffixes Identify roots 	<ul style="list-style-type: none"> Create a collection of words, suffixes and prefixes and the definitions Match definition to the corresponding Latin or Greek roots Match the meanings of Greek or Latin suffixes and prefixes with the correct suffix or prefix (e.g., given a choice of two texture symbols, student will touch a texture symbol meaning "not" when presented with the prefix "anti") 	<ul style="list-style-type: none"> Identify the meaning of unfamiliar words using knowledge of Greek and Latin roots, suffixes, or prefixes Define a new word with a familiar Greek or Latin prefix or suffix Make new words by adding Greek or Latin suffixes and prefixes to familiar words

STRAND Language Development

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Language Development	6LD-V9	Determine the meaning of figurative language, including similes, metaphors, personification, and grade-appropriate idioms.	<ul style="list-style-type: none"> Interpret figurative language
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Language Development	<ul style="list-style-type: none"> Define similes, metaphors, personification or idioms 	<ul style="list-style-type: none"> Identify metaphors Identify similes Categorize phrases into idioms and non-idioms. Categorize phrases into similes and non-similes Categorize phrases into metaphors and non-metaphors Identify examples of personification 	<ul style="list-style-type: none"> Illustrate the "real" meaning of an idiom Match the meaning of common idioms to an appropriate picture, phrase or sentence. Match a metaphor with a phrase with the same meaning Match similes with phrases with the same meaning (e.g., given two object choice—one being wet and one a cat, the student will touch the wet one when asked the meaning of "it's raining cat's and dogs")

General Education Example: Students identify similes, such as Twinkle, twinkle little star ... like a diamond in the sky; metaphors, such as You were the wind beneath my wings; hyperbole, such as Cleaner than clean, whiter than white; and personification, such as The North Wind told the girl that he would blow so hard it would be impossible to walk up the steep hill.

CONTENT Reading/ELA
STRAND Literary Text

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	6LT-C1	Analyze the relevance of the setting (e.g., time, place, and situation) to the mood and tone of the text.	<ul style="list-style-type: none"> Analyze how setting affects mood and tone of text
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> Identify the setting of a text. Match a picture of the setting or situation to a selection of the text Illustrate the setting of a text (e.g., match a picture of the setting or situation to a selection of the text) 	<ul style="list-style-type: none"> Identify the mood or tone of a text. Describe the setting (time & place) of a story (e.g., use pictures or words to describe the setting) Classify the mood (e.g., happy, sad, or scary, etc.) 	<ul style="list-style-type: none"> Compare the setting to the mood/tone (e.g., match a dark forest to a scared face) Explain how the setting affects the text Classify the mood (e.g., happy, sad, or scary, etc.) and explain the reason for choice

General Education Example: Students read excerpts from *I Know Why the Caged Bird Sings* by Maya Angelou. Students examine the relevance of the setting to the mood in the text.

STRAND Literary Text

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	6LT-G2	Identify the characteristics of different forms of prose (short story, novel, novella, essay).	<ul style="list-style-type: none"> Identify characteristics of different forms of prose
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> Identify a short story Identify a novel Identify an essay 	<ul style="list-style-type: none"> Sort texts into appropriate categories (essay, novel). Define the various prose forms (novel, short story) Sort selections of different literary forms into the appropriate category Match literary forms with the appropriate definition 	<ul style="list-style-type: none"> Compare and contrast the structural elements of different literary forms (e.g., short story/novel/novella) Make an outline listing all the prose forms and give the characteristics of each

General Education Example: Students read different forms of prose. They describe the characteristics of a short story and provide an example, such as *"The Night the Bed Fell"* by James Thurber. They describe the characteristics of a novel and provide an example, such as *The Westing Game* by Ellen Raskin. They describe a novella as a short novel and provide an example, such as *The Gold Cadillac* by Mildred Taylor. Finally, they describe an essay as a short piece of writing on one subject or theme and provide an example, such as an essay by Ralph Waldo Emerson.

CONTENT Reading/ELA
STRAND Literary Text

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	6LT-T3	Apply knowledge that theme, whether stated or implied, refers to the basic meaning of a literary text.	◆ Identify themes in literary text and explain the meaning of the themes using supporting details from the text.
Less Complex		Possible Entry Points	More Complex
Literary Text	The student will:	The student will:	The student will:
	<ul style="list-style-type: none"> ◆ Identify characters in a story ◆ Identify the setting of a story ◆ Summarize the plot 	<ul style="list-style-type: none"> ◆ Identify the theme of a story ◆ Distinguish between plot and topic (e.g., see footnote) ◆ Distinguish between plot and theme (e.g., see footnote) ◆ After reading or listening to a theme based story, create a picture depicting the theme(s) ◆ Distinguish between topic and theme (e.g., <i>Students often have difficulty distinguishing amongst the main topic, plot, and story themes. The following example should provide clarity. The plot: A boy meets a girl, the boy loses the girl, and the boy finds the girl. The theme is that "love conquers all." The topic is love.</i>) 	<ul style="list-style-type: none"> ◆ Compare/contrast two different themes for two different stories after listening to each story that address a topic ◆ Understand that the same story can have multiple themes (e.g., select two themes from a single text) ◆ Understand that multiple stories can have the same theme (e.g., after reading several texts, determine a common theme) ◆ Select a story and write an essay that identifies the theme and explain how the theme relates to the text

General Education Example: Students explore the theme "Heroism demands unusual courage and risk-taking" in King Arthur and the Knights of the Round Table and The Adventures of Robin Hood and write paragraphs explaining how each author illustrates this theme in different ways.

CONTENT Reading/ELA
STRAND Literary Text

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	6LT-P7	Respond to and analyze the effects of figurative language (personification, metaphor, simile, hyperbole) and graphics (capital letters, punctuation) to uncover the meaning of the poem.	<ul style="list-style-type: none"> Respond to and analyze figurative language and graphics to interpret the meaning of a poem
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> Label hyperbole, simile etc., from a poem Match the definitions with the appropriate figurative language 	<ul style="list-style-type: none"> Given figurative language from a poem, the student will indicate how it makes them feel Select the meaning of figurative language in a poem from 3 choices Rephrase figurative language using your own words(e.g., student may choose the appropriate picture/object to represent the symbol of Robert Frost’s “The Road not Taken” –for instance, a question mark to indicate a possible path or what might have been) Choose the meaning of a poem from a list of 3 possible choices Draw an illustration representing figurative language 	<ul style="list-style-type: none"> Determine which words are important to the meaning of a poem and explain why Analyze how figurative language helps create the meaning of a poem Match figurative language to appropriate aspects of the meaning of the poem (e.g., Langston Hughes’ “Dreams” students will compare the metaphor “life is a broken winged bird that cannot fly” to an appropriate moral/lesson – such as “don’t give up”)

General Education Example: Students describe the features of a poem, such as “Mother to Son” by Langston Hughes, that illustrate many kinds of figurative language.

CONTENT Reading/ELA

STRAND Informational Text

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	6IT-E1	Identify and analyze the author's stated purpose, main ideas, supporting ideas, and supporting evidence.	◆ Identify and analyze stated purpose, main ideas, or supporting details
Less Complex		Possible Entry Points	
The student will:		The student will:	
Informational Text	◆ Answer questions of who, what, where, when, or how in relation to an expository text	◆ Identify the author's stated purpose of expository text (newspapers, pamphlets, etc.) ◆ Identify main ideas in informational text ◆ List supporting details in informational text ◆ Identify the purpose of an expository text (e.g., choose the purpose from 3 different choices)	◆ Draw conclusions about the author's stated purpose by identifying the main idea and supporting details ◆ Categorize information into main idea or supporting evidence

General Education Example: Students describe Leonardo da Vinci's greatest achievements after reading Leonardo da Vinci: Artist, Inventor, and Scientist of the Renaissance by Francesca Romei. They provide important information detailed in the text.

STRAND Informational Text

Grade 6			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	6IT-E3.	Identify and use organizational structures in text, including chronological order, comparison and contrast, cause and effect, logical order, and classification schemes.	◆ Identify and use organizational structure in text
Less Complex		Possible Entry Points	
The student will:		The student will:	
Informational Text	◆ Finish cause and effect scenarios from a text using pictures or words ◆ Identify what comes next on a timeline from a choice of 3 events ◆ Identify words that give clues to text structure (If...then, because, since, then, first, next, lastly, ...)	◆ Explain cause and effect relationships in a text. ◆ Identify chronological order in informational text ◆ Highlight cause and effect in a text.	◆ Sequence events from a text in chronological order to answer a question ◆ Order events in chronological order on a historical timeline ◆ Use graphic organizers to illustrate the structure of the text. ◆ Use a Venn diagram to compare and contrast information in a text

General Education Example: Students evaluate how well the comparison and contrast organizational structure of their English textbook (e.g., a section that distinguishes similes from metaphors) serves the reader's comprehension.

DC CAS-Alt

Entry Points – Grade 6

Mathematics

CONTENT Mathematics
 STRAND Number Sense & Operations

Grade 6

Learning Standards as written

Number Sense and Operations
 6NSO-N5 Identify and determine common equivalent fractions, mixed numbers, decimals, and percentages.

Essential and Prioritized Skill

- ◆ Recognize and understand common equivalent fractions, mixed numbers, decimals, or percentages.

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

Number Sense

- ◆ Identify place value of digits in a decimal (ones and tenths place)
- ◆ Use place value chart to identify the value of each digit in a decimal to the hundredths place
- ◆ Identify a decimal
- ◆ Identify a percent (%)

- ◆ Use manipulative (pictures) to order fractions
- ◆ Match a fraction to a model
- ◆ Match a decimal to a model
- ◆ Order numbers on a number line, including fractions and decimals

- ◆ Use visual representations (i.e. money) to compare equivalent fractions and decimals
- ◆ Model equivalent fractions, mixed numbers, percentages or decimals
- ◆ Use visual representations (pictures, models, etc.) to compare equivalent decimals and percents

General Education Example

Example: Look at the following four fractions:

$27/12$ $4/3$ $36/27$ $20/15$

Three of the fractions are equivalent in the sense that they can all be simplified to the same fraction. Which fraction is not equal to the others?

(See also 6.NSO-N.2)

CONTENT Mathematics
 STRAND Number Sense & Operations

Grade 6

Learning Standards as written

Number Sense and Operations ^{6NSO-N6} Apply number theory concepts — including prime and composite numbers; prime factorization; greatest common factor; least common multiple; and divisibility rules for 2, 3, 4, 5, 6, 9, and 10 — to the solution of problems.

Essential and Prioritized Skill

- ◆ Use prime or composite numbers, factorization, greatest and least common multiples, or divisibility rules to solve problems.

	Less Complex	Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Number Sense	<ul style="list-style-type: none"> ◆ Identify prime numbers ◆ Use a number line to identify and order prime numbers ◆ Count by 5s ◆ Count by 3s 	<ul style="list-style-type: none"> ◆ Use a model to identify multiples of two-digit numbers ◆ Sort objects into even groups to determine common multiples 	<ul style="list-style-type: none"> ◆ Use a model to illustrate prime factorization ◆ Use pictures and manipulatives to determine which numbers are divisible by another number (e.g., sort a group of 6 and a group of 8 by 3 to determine which is divisible by 3) ◆ Create a factor tree for a number

General Education Example

Example: Circle the number(s) in the following list that are divisible by 3.

35 43 51 60 111 160 4,380

CONTENT Mathematics
STRAND Number Sense & Operations

Grade 6

Learning Standards as written

Number Sense and Operations ^{6NSO-E18} Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals, and percentages. Determine reasonableness of estimates.

Essential and Prioritized Skill

- ◆ Estimate to solve problems involving fractions, mixed numbers, decimal or percentages.

Less Complex

The student will:

- ◆ Identify positive numbers on a number line.
- ◆ Solve simple real life addition and subtraction problems involving whole numbers
- ◆ Identify mixed numbers

Possible Entry Points

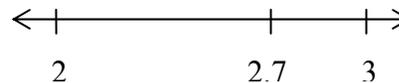
The student will:

- ◆ Use manipulative to solve simple real life whole number addition or subtraction problems using estimation strategy
- ◆ Use a number line to round a decimal to the nearest whole number. See example provided below:

More Complex

The student will:

- ◆ Use an estimation strategy (i.e. number line) to solve a real life problem with percentages
- ◆ Solve real life fraction addition or subtraction problems using pictorial examples and/or manipulatives by estimating to the closest whole number



Is 2.7 closest to 2 or 3?

Answer: 3

Estimation

General Education Example

Example: If you started counting your heartbeats at midnight on January 1, 2000, when would you count the millionth beat? The billionth beat?

CONTENT Mathematics
 STRAND Number Sense & Operations

Grade 6

Learning Standards as written

Number Sense and Operations 6NSO-C8 Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers and with positive fractions, mixed numbers, decimals, and percentages.

Essential and Prioritized Skill

- ◆ Solve addition, subtraction, multiplication, and division problems with whole numbers, mixed numbers, fractions, decimals, or percentages using order of operations.

Less Complex

The student will:

- ◆ Construct a number line demonstrating positive numbers
- ◆ Solve multiplication problems using manipulatives or repeated addition
- ◆ Illustrate a word problem with manipulatives

Possible Entry Points

The student will:

- ◆ Recognize that there is a correct order of operations to solve a problem (PEMDAS)
- ◆ Identify key words to determine correct operation (e.g., all together, half, etc.).
- ◆ Use a chart or model of operations to help determine the order while solving real life problems
- ◆ Solve addition and subtraction problems with whole numbers and mixed numbers

More Complex

The student will:

- ◆ Given a simple equation, use the order of operations to obtain the correct answer (i.e., multiplication before addition)
- ◆ Solve problems involving fractions, mixed numbers, decimals and percentages using order of operations. For instance, figuring out the sales tax for a loaf of bread, and then determine how much change you will get from \$2.00
- ◆ Solve a word problem that requires two different operations

Computation

General Education

Example: Suppose that when a positive number n is divided by 7, the result is a, and when the same number is divided by 8, the result is b. How do a and b compare?

A) $a < b$

B) $a = b$

C) $a > b$

D) It depends on the value of n.

CONTENT Mathematics
 STRAND Number Sense & Operations

Grade 6

Learning Standards as written

Number Sense and Operations 6NSO-C13 Calculate given percentages of quantities, and solve problems involving discounts at sales, interest earned, and tips.

Essential and Prioritized Skill

- ◆ Solve problems involving the calculation of percentages

	Less Complex	Possible Entry Points	More Complex
Computation	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Use visual representations to order percents ◆ Identify 25%, 50% and 100% using a model ◆ Write, read, or name decimals to tenths (.1, .2, .3) ◆ Write, read, or name percents 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Convert one number form to another to solve a problem (e.g., convert a decimal to a percent) ◆ Rename a decimal as a percent by multiplying by 100 and adding the percent sign ◆ Rename a percent as a decimal by dividing by 100 and delete the percent sign 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Calculate percentages using a calculator and task analysis to solve a problem ◆ Calculate discount price using a percentage chart

General Education Example

Example: Suppose that the cost for a new piano is \$5000 and that the piano loses 20% of its current value each year.

a. After how many years will the piano first be valued at less than \$500? Show or explain how you obtained your answer.

b. What will the value of the piano be after 16 years? Show or explain how you obtained your answer.

(See also 6.NSO-C.14)

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 6

Learning Standards as written

Patterns, 6PRA1 Use the properties of equality to solve problems using letter name variables (e.g., $1/4 + x = 7/12$).
 Relations, and Algebra

Essential and Prioritized Skills

- ◆ Solve problems of equality using letter name variables

Less Complex

The student will:

- ◆ Distinguish between variables and numbers in an equation
- ◆ Distinguish between an equation and an expression
- ◆ Recognize inverse (opposite) operations (addition (+) is the inverse of subtraction (-) and vice versa)

Possible Entry Points

The student will:

- ◆ Solve an equation with a letter name variable as the solution (e.g., $4 + 1 = x$)
- ◆ Label a problem as equal or unequal
- ◆ Match two equations that are equal

More Complex

The student will:

- ◆ Solve an equation with a letter name variable in a position other than the solution (e.g., $9 + x = 10$)
- ◆ Use algebra tiles or other manipulatives to represent and solve variable expressions

General Education Example

Example: Ralph gets on his bike at 10 A.M. and rides towards his friend's house 9 miles away. At 10:12 A.M. he has ridden 3 miles. If he keeps going at the same rate, when will he arrive at his friend's house?

- A. 10:21 A.M.
- B. 10:24 A.M.
- C. 10:36 A.M.
- D. 10:48 A.M.

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 6

Learning Standards as written
 Patterns, 6PRA4 Simplify expressions of the first degree by combining like
 Relations, and terms, and evaluate using specific values.
 Algebra

Essential and Prioritized Skills

- ◆ Simplify and solve equations given x

Less Complex

The student will:

- ◆ Identify variables in an equation
- ◆ Replace variable with a given number

Possible Entry Points

The student will:

- ◆ Match like terms ($4x + x + 7$)
- ◆ Simplify an expression
- ◆ Replace variable with a given number and solve the equation

More Complex

The student will:

- ◆ Simplify an expression and then solve given x
- ◆ Use algebra tiles or other manipulatives to represent and/or solve variable expressions

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 6

Learning Standards as written

Patterns, Relations, and Algebra
 6PRA9 Produce and interpret graphs that represent the relationship between two variables (x and y) in everyday situations.

Essential and Prioritized Skills

- ◆ Create and interpret graphs that represent the relationship between variables

Less Complex	Possible Entry Points	More Complex
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The student will:

- ◆ Identify (by pointing, matching, or listing) one or both variables in a table
- ◆ Identify (by pointing, matching, or listing) one or both variables on a graph

The student will:

- ◆ Answer questions about points on a graph
- ◆ Answer questions based on a data table

The student will:

- ◆ Create a table that represents a set of related variables
- ◆ Translate information from a graph into an equation

General Education Examples

Example: Marion wants to rent a bicycle to go out on a lake. The cost is \$2.00 plus \$1.50 for each hour.

a. Make a table showing how much it would cost to rent a bicycle for 1, 2, 3, and 4 hours.

b. Using numbers, symbols, and the variable n , write an expression for how much it would cost to rent the bicycle for n hours.

c. Marion has \$14.00. What is the greatest number of hours for which she can rent the bicycle? Show your work or explain how you found your answer.

CONTENT: Mathematics

STRAND: Measurement

Grade 6

Learning Standards as written

6M3 Develop strategies to find the area and perimeter of complex shapes (e.g., subdividing them into basic shapes such as quadrilaterals, triangles, circles).

Essential and Prioritized Skills

- ◆ Understand how to find the area or perimeter of complex shapes.

Less Complex

The student will:

- ◆ Use two basic shapes to make another basic shape (two triangles to make a square)
- ◆ Categorize shapes as simple or complex
- ◆ Match simple shapes to complex shapes (in the diagram below match circle to circle and rectangle to rectangle)

Possible Entry Points

The student will:

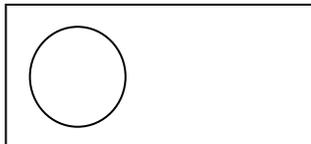
- ◆ Using ruler or manipulatives measure the perimeter of basic shapes
- ◆ Compute the area of basic shapes
- ◆ Demonstrate understanding of perimeter (e.g., by placing one inch tiles around the outside of a desk)

More Complex

The student will:

- ◆ Using manipulatives subdivide complex shapes into basic shapes and calculate area or perimeter
- ◆ Use formulas for area or perimeter to solve real life problems involving complex shapes

Example: Hot tub on a rectangular deck



General Education Example

Example: Show how to find the area of the isosceles trapezoid by decomposing and rearranging it into a rectangle with the same area.



CONTENT: Mathematics

STRAND: Measurement

Grade 6

Learning Standards as written

6M6 Identify, measure, describe, classify, and construct various angles, triangles, and quadrilaterals; measure the interior angles of various polygons.

Essential and Prioritized Skills

◆ Identify, measure, describe, classify, and construct various two-dimensional polygons and measure angles

Less Complex

The student will:

- ◆ Identify triangles and quadrilaterals
- ◆ Sort shapes into polygons vs. non-polygons

Possible Entry Points

The student will:

- ◆ Identify 90, 45, or 180 degree angles
- ◆ Classify shapes as two or three dimensional
- ◆ Make/describe models of the different two-dimensional shapes and name them
- ◆ Measure angles
- ◆ Classify polygons by their characteristics (e.g. number of sides and number of angles)

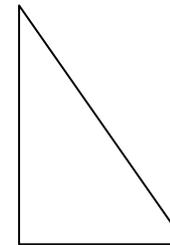
More Complex

The student will:

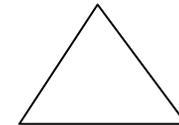
- ◆ Choose a quadrilateral from several different shapes, name it, and measure angles
- ◆ Construct a triangle by tracing a manipulative (30-60-90, 45-45-90, 60-60-60 triangles) and measure the angles using cut-outs (30°, 45°, 60° and 90° angles.)

Sample Table:

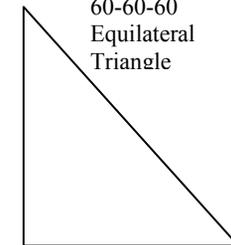
Name of Polygon	Number of Sides	Number of Angles
Triangle	3	3
Quadrilateral	4	4
Pentagon	5	5
Hexagon	6	6
Septagon	7	7
Octagon	8	8
Nonagon	9	9
Decagon	10	10



30-60-90
Right Triangle



60-60-60
Equilateral
Triangle



45-45-90
Right Triangle

CONTENT: Mathematics

STRAND: Measurement

Grade 6		
Learning Standards as written	Essential and Prioritized Skills	
Measurement 6M8 Know and use the formulas for the volumes and surface areas of cubes and rectangular prisms, given the lengths of their sides.	♦ Understand and use formulas to find volume or surface area	
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Distinguish between a 2-dimensional and 3-dimensional shapes ♦ Identify 3-dimensional shapes 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Define surface area ♦ Define volume 	<p><u>The student will:</u></p> <p>Given a diagram:</p> <ul style="list-style-type: none"> ♦ Calculate surface area and volume ♦ Use task analysis to calculate surface area ♦ Use task analysis to calculate volume ♦ Calculate the volume and/or surface area using task analysis and given values <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p>Volume = length x width x height</p> <p>$V = l \times w \times h$</p> <p>$V = \square \times \square \times \square$</p> <p>e.g. $l = 2; w = 3; h = 4$</p> <p>$V = 2 \times 3 \times 4$</p> <p>$V = \underline{24}$</p> </div>

General Education Example

Example: Storage boxes are cube shaped and measure 4 inches on an edge. How many of these storage boxes are needed for 300 small cubes, 2 inches on an edge?

(See also 6.NSO-E.18)

DC CAS-Alt

Entry Points – Grade 7

ELA

CONTENT Reading/ELA
 STRAND Language Development

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Language Development	7LD-V7	Use Greek and Latin roots and affixes to determine the meaning of content area vocabulary (e.g., in readings on pioneers of space, determine the meaning of words astronaut and nautical using knowledge of Greek and Latin roots).	<ul style="list-style-type: none"> ◆ Apply knowledge of Greek and Latin roots and affixes to define content vocabulary.
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Language Development	<ul style="list-style-type: none"> ◆ Underline the roots (or base word) ◆ Categorize affixes as prefix or suffix ◆ Identify prefixes ◆ Identify suffixes ◆ Identify roots 	<ul style="list-style-type: none"> ◆ Give the meanings of some common Greek and Latin roots ◆ Give the meanings of some common Greek and Latin prefixes ◆ Give the meaning of some common Greek and Latin suffixes ◆ Recognize words in a text with a Greek or Latin root ◆ Match definition to the corresponding Latin or Greek root ◆ Match the definition of a word to a word that includes a Greek or Latin roots (use pictures or words) ◆ Match the meanings of Greek or Latin affixes with the correct affix 	<ul style="list-style-type: none"> ◆ Use affixes to define new words ◆ Identify the meaning of unfamiliar words using knowledge of Greek and Latin roots, suffixes, and prefixes ◆ Match the definition of a word (expressed in pictures or words) to a word that uses Greek or Latin roots.

General Education Example: In readings on pioneers of space, students determine the meanings of the words "astronaut" and "nautical" using knowledge of Greek and Latin roots. They compile a list of words they find in their science materials that are based on other common Greek and Latin roots.

CONTENT Reading/ELA
 STRAND Language Development

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Language Development	7LD-V8	Use such clues as cause and effect and comparison and contrast to identify the meaning of unfamiliar words and words with multiple meanings in context.	<ul style="list-style-type: none"> ◆ Use context clues to define unknown words and words with multiple meanings
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Language Development	<ul style="list-style-type: none"> ◆ Use a dictionary to define words from grade level text ◆ Identify words with multiple meanings ◆ Identify comparisons (e.g., match two objects that represent the comparison in the text—given the sentence paired with objects “most living things breathe air, but some living things are anaerobic, student will choose objects symbolizing breathing air and not breathing air) 	<ul style="list-style-type: none"> ◆ Recognize words with multiple meanings when used in the context of the sentence ◆ Match words with multiple meanings to various pictures or words illustrating those meanings from grade level text ◆ Select correct picture among multiple meaning words that correctly completes a given sentence ◆ Students compile a list of words and phrases that cue contrast clues (but, however, on the other hand, except) or cause and effect clues (because, since, as a result, or therefore). 	<ul style="list-style-type: none"> ◆ Determine which meaning of a multiple meaning word to use based on the context. (match pictures of a skirt –piece of clothing and moving around an object-- to appropriate sentences) ◆ Using context clues, define unknown words in reading selections ◆ Students use the list of words/phrases that cue cause and effect to define a new word in a text (e.g., define unknown word in a text and highlight the cue word)

General Education Example: Students collect examples of sentences that contain comparison and contrast or cause and effect clues, such as “Most organisms need oxygen to survive but many types of bacteria are anaerobic,” (contrast); or, “Because so much of the town was destroyed, rebuilding it will be an arduous task,”(cause and effect). Students compile a list of words and phrases that cue contrast clues (but, however, on the other hand, except) and cause and effect clues (because, since, as a result, or therefore).

CONTENT Reading/ELA
 STRAND Literary Text

Grade 7			
Learning Standards as written		Essential and Prioritized Skills	
Literary Text	7LT-G3	Identify various genres of fiction (e.g., mysteries, science fiction, historical fiction, adventures, fantasies, fables, myths) based on their characteristics.	◆ Identify genres of fiction based on their characteristics
Less Complex		Possible Entry Points	
<u>The student will:</u>		<u>The student will:</u>	
Literary Text	<ul style="list-style-type: none"> ◆ Determine if characters or setting are real or imaginary ◆ Identify as fictional or not fictional texts 	<ul style="list-style-type: none"> ◆ Match different fictional genre to its appropriate definition ◆ Define the genres of fiction (e.g., mysteries, science fiction, historical fiction, adventures, fantasies, fables, myths) 	<ul style="list-style-type: none"> ◆ Identify various genres based on characteristics (for example, historical fiction takes place in the past) ◆ Given two different examples of fictional genre forms, identify the requested form (e.g., Is this genre science fiction or historical fiction?) ◆ In a short composition, identify your favorite genre and explain why you prefer this genre

General Education Example: Students read a variety of fiction (such as Orwell's Animal Farm; Buchi Emecheta's The Wrestling Match; or Nancy Farmer's The Ear, The Eye, and The Arm) and develop a class-written anthology

CONTENT Reading/ELA
STRAND Literary Text

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	7LT-F5	Analyze the plot development (e.g., conflict, rising action, falling action, resolution, subplots, flashbacks, parallel episodes) to determine whether and how conflicts are resolved.	<ul style="list-style-type: none"> Analyze plot development as it relates to conflict resolution.
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> Identify or define flashbacks Identify the characters in a fictional story (<i>who is in the story</i>) Identify the setting in a fictional story (<i>where the story takes place</i>) e.g., Draw a picture of the setting using details from the story. Identify or define conflict Define parallel episodes (two story lines happening at the same time; e.g. the story <u>Tangerine</u> by Edward Bloom) List the different types of conflict: Internal conflict (man vs. himself), external conflict (man vs. man, man vs. nature, man vs. society) 	<ul style="list-style-type: none"> Draw a plot diagram and label the parts (rising action, climax, falling action) Match a story to the type of conflict: internal (man vs. himself), external (man vs. man, man vs. nature, man vs. society) Explain how the conflict was resolved 	<ul style="list-style-type: none"> Distinguish which parts of a the plot led to (and did not lead to) a solution to the conflict Answer “yes – no” questions about how the conflict in a fictional story was resolved Answer “yes-no” questions about how flashbacks assist with the plot development Sequence events of a story on a plot diagram Determine how the events of the story created conflict Compare how the main character resolved the conflict with how you would have handled the same situation

General Education Example: Students read short stories such as Toni Cade Bambara’s “Raymond’s Run” to explore the development of characters, various plots, and conflicts. As a result of their analyses, students create a fictional story as a class.

CONTENT Reading/ELA
 STRAND Literary Text

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Literary Text	7LT-F7	Analyze the ways characters change or interact with others over time and give supporting evidence from the text.	<ul style="list-style-type: none"> Analyze ways a character changes and interacts over time and give supporting evidence
Less Complex		Possible Entry Points	More Complex
Literary Text	The student will:	The student will:	The student will:
	<ul style="list-style-type: none"> Identify an episode of characters interacting with each other Identify the characters of the story and explain how they are connected Identify major events of the story 	<ul style="list-style-type: none"> Identify a character's actions in two separate interactions (fight, talk, etc.) Describe the major character's personality and give examples from the story (using pictures or words) (e.g., given a picture of Scrooge, the student will choose (from 3 choices) the picture representing mean and a picture representing him yelling at Bob Cratchit) Match the characters with the appropriate action in the story Identify how a character feels at a particular point in a story 	<ul style="list-style-type: none"> Compare a character's actions in two or more interactions Explain how the character changes over the course of the story and give supporting evidence from the text Identify how a character feels at 2 different points in a story to illustrate the character's change Answer questions about how the character changed based on events in the story

General Education Example: Students read A Christmas Carol by Charles Dickens and describe Ebenezer Scrooge's change of heart.

CONTENT Reading/ELA

STRAND Informational Text

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	7IT-E1	Identify the author's purpose(s) in a text when it is not stated.	◆ Identify the author's implied purpose
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Find key words to help determine the author's stated purpose ◆ Identify a stated purpose of a text 	<ul style="list-style-type: none"> ◆ Find key words to help determine the author's implied purpose ◆ Determine whether the author's purpose is stated or implied ◆ Identify the main points of the informational text 	<ul style="list-style-type: none"> ◆ Select the author's implied purpose from a choice of 3 potential purposes (e.g., to inform, to persuade, to entertain) ◆ Identify the author's purpose (e.g., after listening to a selection, choose whether it was meant to inform the reader or entertain the reader)

General Education Example: Students write logical, one-paragraph summary reports about an author's purpose after identifying and arranging the most important points made by the author.

STRAND Informational Text

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	7IT-E2	Identify and use knowledge of common textual features (paragraphs, topic sentences, concluding sentences, glossary, index, bibliography, footnotes, introduction, conclusion).	◆ Identify and use common text features
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ Differentiate between a sentence and a fragment ◆ Identify the parts of a paragraph ◆ Use a glossary to find the definition of a word ◆ Identify a topic sentence (e.g., by indicating some words in the sentence) 	<ul style="list-style-type: none"> ◆ Identify the bibliography ◆ Identify footnotes ◆ Identify the index ◆ Identify the topic sentence in a paragraph 	<ul style="list-style-type: none"> ◆ Identify footnotes and find the source in the bibliography ◆ Find the conclusion and use it to answer questions ◆ Identify the index and use it to locate information ◆ Differentiate among the various sources for citing sources (footnotes, endnotes, parenthetical, etc.) ◆ Create a paragraph that includes appropriate text features (e.g., topic sentence, supporting details, concluding sentence, etc.) ◆ Use the footnoted vocabulary to enhance text comprehension

General Education Example: Using their textbooks, pairs of students identify each of the textual features and its purpose (e.g., glossary, index, bibliography, footnotes, introduction, conclusion).

CONTENT Reading/ELA

STRAND Informational Text

Grade 7			
Learning Standards as written			Essential and Prioritized Skills
Informational Text	7IT-E3	Apply knowledge of organizational structure of text to aid comprehension, including chronological order, comparison and contrast, cause and effect, logical order, and classification schemes.	◆ Apply knowledge of organizational structures to aid comprehension
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Informational Text	<ul style="list-style-type: none"> ◆ Identify what comes next on a timeline from a choice of 3 events ◆ Given the cause of a situation in text, the student will identify the effect from a choice of 2 events ◆ Compare and contrast two objects based on characteristics (e.g., point to tall objects, point to tallest object, etc.) 	<ul style="list-style-type: none"> ◆ Finish cause and effect scenarios using pictures or words from informational text ◆ Identify cause and effect in a text ◆ Identify chronological order in a text ◆ Using a Venn diagram, compare and contrast two items ◆ Given a scenario from the text the student will identify the organizational structure (e.g., cause & effect or comparison & contrast) 	<ul style="list-style-type: none"> ◆ Sequence events from a text to answer a question ◆ Use a graphic organizer to illustrate cause and effect (e.g., T-chart) ◆ Using a Venn diagram, compare and contrast information in a text

General Education Example: Students read various essays, articles, and short stories such as Ted Poston's "The Revolt of the Evil Fairies" in small groups. They write a series of essays that employ the relationships and usage of the different organizational structures. Students use Venn diagrams and other organizational structures to report to the class. They use a comparison chart, such as a T-chart, to illustrate causes and effects.

DC CAS-Alt

Entry Points – Grade 7

Mathematics

CONTENT Mathematics
 STRAND Number Sense & Operations

Grade 7		
Learning Standards as written	Essential and Prioritized Skill	
Number Sense and Operations 7NSO-N1 Compare, order, estimate, and translate among integers, fractions, mixed numbers (i.e., rational numbers), decimals, and percents.	♦ Compare, order, estimate and translate integers, fractions, mixed numbers, decimals, and percents.	
Less Complex	Possible Entry Points	More Complex
<u>The student will:</u> <ul style="list-style-type: none"> ♦ Define integers, fractions, mixed numbers, decimals and percents. ♦ Classify integers, fractions, mixed numbers, decimals and percents. 	<u>The student will:</u> <p>Using a number line:</p> <ul style="list-style-type: none"> ♦ Order fractions <u>and/or</u> mixed numbers. ♦ Order integers ♦ Order decimals <u>and/or</u> percents 	<u>The student will:</u> <ul style="list-style-type: none"> ♦ Compare <u>and/or</u> order <u>integers</u>, <u>fractions (mixed numbers)</u> <u>and</u> <u>decimals</u> ♦ Compare and order <u>percents</u> <u>and</u> <u>decimals</u> ♦ Estimate using fractions, decimals, and/or percents ♦ Translate (convert) between decimals and percents; decimals and fractions; <u>and/or</u> fractions and percents
Number Sense		

CONTENT: Mathematics

STRAND: Number Sense & Operations

Grade 7

Learning Standards as written

Number Sense and Operations 7NSO-N7 Apply number theory concepts, including prime factorization and relatively prime numbers, to the solution of problems (e.g., find the prime factorization of whole numbers, and write the results using exponents: $24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3$).

Essential and Prioritized Skill

- ◆ Use prime or composite numbers, factorization, greatest and least common multiples, or divisibility rules to solve problems.

	Less Complex	Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Number Sense	<ul style="list-style-type: none"> ◆ Use models and/or manipulatives to identify factors of one and/or two-digit numbers ◆ Identify prime numbers ◆ Sort objects into even groups 	<ul style="list-style-type: none"> ◆ Use a model to identify factors of two-digit numbers ◆ Convert from one number form to another (expanded form to exponent form to standard form.) ◆ List prime numbers up to 29 	<ul style="list-style-type: none"> ◆ Complete a factorization tree for two or three-digit numbers ◆ Use a model to illustrate prime factorization ◆ Determine which numbers are divisible by another number (e.g., sort a group of 6 and a group of 8 by 3 to determine which is divisible by 3)

General Education Examples

Example: Find the prime factorization of whole numbers, and write the results using exponents:

$$24 = 2 \times 2 \times 2 \times 3 = 2^3 \times 3.$$

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 7

Learning Standards as written

Patterns, Relations, and Algebra 7PRA1 Extend, represent, analyze, and generalize a variety of patterns with tables, graphs, words, and, when possible, symbolic expressions. Include arithmetic and geometric progressions (e.g., compounding).

Essential and Prioritized Skills

- ◆ Identify and extend a variety of grade-level patterns

Less Complex

The student will:

- ◆ Identify sets as patterns or non-patterns
- ◆ Recognize the sequence of a pattern

Possible Entry Points

The student will:

- ◆ Match a pattern to its mathematical expression
- ◆ Explain a geometrical pattern and an arithmetic pattern

More Complex

The student will:

- ◆ Extend a compounding pattern (e.g., 3, 5, 7, __)
- ◆ Translate and extend an arithmetic pattern into a visual representation
- ◆ Translate and extend geometric pattern

General Education Example

Example: Use the given table to answer the following question:

Term	1st	2nd	3rd	4th	5th	6th
Value	?		24	35	48	63

The 3rd, 4th, 5th, and 6th terms of the sequence are given in the table. What number belongs in the first and second positions of the sequence?

Example: Which table is based on the following rule?

First, square the number and then subtract the input number from its square.

A.	Input (x)	1	2	5
	Output (y)	1	4	20
B.	Input (x)	1	2	5
	Output (y)	0	4	25
C.	Input (x)	1	2	5
	Output (y)	1	2	25
D.	Input (x)	1	2	5
	Output (y)	0	2	20

(See also 7.PRA.2)

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 7		
Learning Standards as written Patterns, Relations, and Algebra 7PRA3	Use the correct order of operations to evaluate expressions (e.g., $3(2x) = 5$).	Essential and Prioritized Skills ♦ Use order of operations to solve an equation
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ List the sequence of the order of operations ♦ Identify the operations (e.g. $3(2) = 3 \cdot 2$ <i>this means multiplication</i>) 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Solve a simple equation involving two or three operations ♦ Identify the correct order of operations for a given expression 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Use order of operations to solve an equation ♦ Use task analysis to follow order of operations and solve an equation

General Education Example

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 7		
Learning Standards as written Patterns, Relations, and Algebra 7PRA4	Create and use symbolic expressions for linear relationships, and relate them to verbal and graphical representations.	Essential and Prioritized Skills ♦ Use symbolic expressions for linear relationships and relate them to graphic or verbal expressions.
Less Complex	Possible Entry Points	More Complex
<u>The student will:</u> ♦ Identify numbers in an ordered pair (x,y) ♦ Graph a point	<u>The student will:</u> ♦ Given verbal data represent the data in a table, as a graph, or as an equation. ♦ Interpret (explain) the graph	<u>The student will:</u> ♦ Graph a set of ordered pairs ♦ Use manipulative to show data on a graph ♦ Use information in a T-table to create a graph

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 7

Learning Standards as written

Patterns, 7PRA6
Relations,
and
Algebra

Write and solve two-step linear equations and check the answers.

Essential and Prioritized Skills

- ◆ Solve linear equations and check answers

Less Complex

Possible Entry Points

More Complex

The student will:

- ◆ Identify a linear equation
- ◆ Identify the variables in a linear equation.

The student will:

- ◆ Check the answer to an equation
- ◆ Write a linear equation using manipulatives
- ◆ Solve a linear equation using manipulatives

The student will:

- ◆ Solve one-step linear equations using manipulatives and check the answer
- ◆ Solve two-step linear equations using manipulatives and check the answer

Example: $5x = 20$
 $x = 20/5$
 $x = 4$

General Education Example

Example: Which of the following describes one way to solve the given equation?

$12 - 3x = 5$

- A. Add $3x$ to both sides, then divide both sides by 3.
- B. Subtract $3x$ from both sides, then multiply both sides by 3.
- C. Add 12 to both sides, then multiply both sides by -3 .
- D. Subtract 12 from both sides, then divide both sides by -3 .

(See also 7.NSO-C.17, 7.PRA.9)

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 7

Learning Standards as written
 Patterns, Relations, and Algebra
 7PRA7

Identify, describe, and analyze linear relationships between two variables. Compare positive rate of change (e.g., $y = 3x + 1$) to negative rate of change (e.g., $y = -3x + 1$).

Essential and Prioritized Skills

- ◆ Analyze linear relationships between two variables

Less Complex

The student will:

- ◆ Identify linear relationships
- ◆ Identify variables in a linear relationship
- ◆ Complete a table for a linear relationship

Example: $y = 3x + 1$

x	1	2	3	4
y	4	7	10	13

Possible Entry Points

The student will:

- Using a number line and/or manipulatives describe linear relationships:
- ◆ Solve a linear equation
 - ◆ Describe a pattern of rate of change
 - ◆ Draw a graph of a linear relationship

More Complex

The student will:

- ◆ Analyze linear relationships using a graph
- ◆ Using a number line or manipulatives, complete a table solving for x and y and describe the pattern
- ◆ Compare positive rate of change to negative rate of change (see example below)

$y = 3x + 1$

x	1	2	3	4
y	4	7	10	13

$y = -3x + 1$

x	1	2	3	4
y	-2	-5	-8	-11

CONTENT: Mathematics

STRAND: Data Analysis, Statistics & Probability

Grade 7		
Learning Standards as written Data Analysis 7DASP1 Statistics & Probability	Find, describe, and interpret appropriate measures of central tendency (mean, median, and mode) and spread (range) that represent a set of data.	Essential and Prioritized Skills ♦ Calculate and interpret central tendency
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Match a set of data to its graphical representation ♦ Define the terms median, mean, mode, maximum, minimum, and/or range 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Answer questions about a set of data (e.g., did more people bring lunch or buy lunch?) ♦ Given a representative data sample and conclusions, select the most likely conclusion ♦ Answer questions about measures of central tendency of given data sets and graphic representation. (mean, median, and mode) ♦ Use a template or task analysis to determine the mean (average) of a data set. ♦ Using a calculator, find the mean for a set of scores 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Use a calculator to find the mean of a data set and make observations about the data set ♦ Use task analysis to determine the range and answer yes/no questions about range ♦ Determine the mean and median

CONTENT: Mathematics

STRAND: Data Analysis, Statistics & Probability

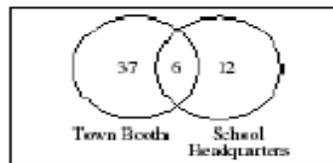
Grade 7		
Learning Standards as written		Essential and Prioritized Skills
Data Analysis, 7DASP2 Statistics & Probability	Select, create, interpret, and use various tabular and graphical representations of data (e.g., circle graphs, Venn diagrams, stem-and-leaf plots, histograms, tables, and charts)	♦ Select, create, interpret, and use tables, charts or graphs to represent data
Less Complex	Possible Entry Points	More Complex
The student will:	The student will:	The student will:
<ul style="list-style-type: none"> ♦ Match a set of data to its graphical representation ♦ Answer questions about data presented on graphs and charts. ♦ Identify different ways to collect data 	<ul style="list-style-type: none"> ♦ Classify data based on similarities and differences using a graphic organizer ♦ Given a representative data sample and conclusions, select the most likely conclusion ♦ Identify and label a variety of tabular and graphical representations ♦ Answer questions about a specified data set presented in a chart ♦ Answer questions based on a Venn diagram. 	<ul style="list-style-type: none"> ♦ Collect and represent a data sample and make observations about data ♦ Make a graph and answer questions based on the data (e.g., make a graph of student attendance based on the daily attendance chart and indicate who came to school the most)

General Education Example

Example: Last weekend, Lauren helped organize some students to participate in a fundraiser for charity. The students had a choice of working one shift at the information booth in town or one shift at the school headquarters. Students could also choose to work 2 shifts, one in town and one at school.

After the fundraiser, Lauren prepared a report for the school board. In her report, she drew the Venn diagram below to show where the students worked.

Students Working at the Fundraiser



- a) Based on the Venn diagram, how many students worked shifts at the Town Booth?
- b) Based on the Venn diagram, how many students participated in the fundraiser?
- c) Lauren could have drawn a bar graph to represent the same information as the Venn diagram. Create a bar graph that contains the same information as the Venn diagram.

CONTENT: Mathematics

STRAND: Data Analysis, Statistics & Probability

Grade 7

Learning Standards as written
Data Analysis, 7DASP4
Statistics &
Probability

Use tree diagrams, tables, organized lists, and area models to compute probabilities for simple compound events (e.g., multiple coin tosses or rolls of dice).

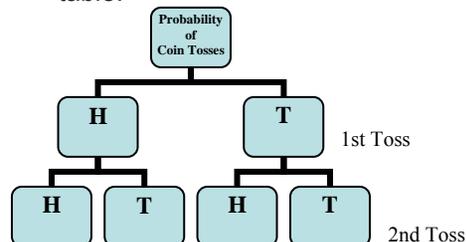
Essential and Prioritized Skills

- ◆ Compute probabilities

Less Complex

The student will:

- ◆ Identify a tree diagram or a data table.



Possible Entry Points

The student will:

- ◆ Answer questions about the completed probability activity using your data
- ◆ Use various ways to display a data set for determining probability
- ◆ Match the probability to the correct data
- ◆ Use a table to tally and record the results of a compound event (e.g., multiple coin tosses or rolls of dice).

More Complex

The student will:

- ◆ Determine the probability of an event occurring using strategies or graphic organizers
- ◆ Answer questions about the data collected and compute the probability of specific events occurring
- ◆ Determine the probability of an event occurring using a tree diagram to demonstrate the possible combinations (e.g., how many ways can you combine three types of ice cream toppings with two flavors of ice cream?)

$$P(\text{event}) = \frac{\text{Number of favorable outcomes}}{\text{Number of possible outcomes}}$$

Examples: coin toss, roll of a die, spinner, etc.

General Education Example

Example: Luis is going to toss two coins. What is the probability that he will get one head and one tail?

DC CAS-Alt

Entry Points – Grade 8

ELA

CONTENT Reading/ELA
STRAND Language Development

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Language Development	8LD-V9	Monitor text for unknown words or words with novel meanings, using word, sentence, and paragraph clues to determine meaning.	<ul style="list-style-type: none"> Identify unknown words or words with novel meanings in text and use text clues to determine the meaning.
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Language Development	<ul style="list-style-type: none"> Identify unknown words in a text Match contextual pictures with unknown words with the words (ex. word is hurricane; display several pictures, including a hurricane and have students pick) Complete a sentence by matching a word/picture Match words with multiple meanings to various pictures or words illustrating those meanings from grade level text 	<ul style="list-style-type: none"> Select correct picture among multiple meaning words, to complete a given sentence correctly Select correct word (or picture) among words with novel meanings to complete a given sentence Underline words with multiple meaning in sentences containing words with multiple meanings 	<ul style="list-style-type: none"> Underline unknown words (or words with novel meanings) in a selection and determine its meaning from the context (from a choice of 3) Determine which meaning of a multiple meaning word to use based on the context. (match pictures/object representing "skirt" –piece of clothing and moving around an object-- to appropriate sentences) 1.



General Education Example: Students work to understand the meaning of pickle in a sentence, such as “The pickle was an important part of metal working.” They use a dictionary to help clarify the use of the word “pickle” in this context.

DC CAS-Alt

CONTENT Reading/ELA
STRAND Language Development

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Language Development	8LD-V10	Understand and explain "shades of meaning" for related words (e.g., annoyed, irritated, aggravated, irked, miffed, peeved, angry, irate, furious, enraged).	◆ Understand and explain "shades of meaning" for related words
Less Complex		Possible Entry Points	More Complex
Language Development	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
	<ul style="list-style-type: none"> ◆ Match illustration/object to words that have similar meanings (e.g., the same object may be used to represent walk and amble) ◆ Given a list of words select those that do not belong (e.g., mad, angry irritated, happy) 	<ul style="list-style-type: none"> ◆ Differentiate between words by matching illustrations to the words (e.g., illustrations should indicate clear degree level: walk, jog, trot, race, etc.) ◆ Replace a word in a sentence with a related word (ex: Gloria is <u>angry</u>.) ◆ Match words with similar shades of meaning 	<ul style="list-style-type: none"> ◆ Write a continuum of words to help describe "shades of meaning" (e.g., irritated, miffed, angry, enraged) ◆ Complete a sentence using the word/picture with the best connotation ◆ Replace a word in a sentence with a similar word and identify how it changed the meaning of the sentence (from a choice of 3)

General Education Example: Students experiment with the power of words in their writing. Students are asked to re-write sentences with related words. For example, they substitute the word "mad" with such words as annoyed, irritated, aggravated, irked, miffed, peeved, angry, irate, furious, enraged.

CONTENT Reading/ELA
STRAND Literary Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	8LT-G2	Identify and analyze how the different genres (e.g., poetry, short story, biography, drama) used by one particular author accomplish different aesthetic purposes.	◆ Identify and analyze different genres used by an author to accomplish different aesthetic purposes
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Identify the genre of a selection by an author (poetry or short story) ◆ Match the genre with its definition (e.g., poetry, short story, drama, biography) ◆ Given a text, identify the author's purpose (from a choice of 2) 	<ul style="list-style-type: none"> ◆ Given several texts from the same author, match the genre of a passage to the passage ◆ Given several passages from different texts of the same author, indicate how the purposes of each are different/similar ◆ Match a genre with a purpose ◆ Given two texts from the same author, match the genre with the text (e.g., using object representing adventure and one representing mystery, student will match that genre to texts) ◆ Given two text from the same author match the purpose with the text ◆ Define aesthetic purposes 	<ul style="list-style-type: none"> ◆ Given several passages from one author with different genres, explain how the author's purpose is different for each ◆ Match a genre with a purpose and one reason why that genre is best for that purpose. ◆ Identify different aesthetic purposes and details that help accomplish that purpose

General Education Example: Students read several selections from Avi, including an adventure story, a mystery, and several works of historical fiction. Titles could include Crispin: Cross of Lead, Nothing But the Truth, The Escape from Home, The True Confessions of Charlotte Doyle, and The Man Who Was Poe.

CONTENT Reading/ELA
STRAND Literary Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	8LT-F5	Interpret the character's traits, emotions, or motivations, and provide supporting evidence from a text.	◆ Analyze a character's traits, emotions, or motivations and support with text
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Identify characters and their roles ◆ Identify a character's emotions ◆ Identify a character's motivations 	<ul style="list-style-type: none"> ◆ Given a character map, record the character's traits on the map ◆ Given a descriptive passage, describe a character's traits, emotions, or motivations within the passage ◆ Develop a character web ◆ Describe a character using supporting evidence from text 	<ul style="list-style-type: none"> ◆ Analyze text to explain characters motivation (highlight motivations in the text) ◆ Complete a graphic organizer detailing the character's emotions and traits ◆ Answer questions to analyze a character's emotions

General Education Example: Students analyze the way a theme is developed throughout a book, such as the themes of prejudice and criticism of others shown throughout the events and characters in Summer of My German Soldier by Bette Greene.

STRAND Literary Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	8LT-F6	Analyze the influence of setting (e.g., time of day, place, historical period, situation) on the problem and resolution.	◆ Analyze the influence of setting on the problem and resolution
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Match pictures with the setting, the problem, and resolution of familiar passages ◆ Identify the problem and resolution ◆ Identify the setting 	<ul style="list-style-type: none"> ◆ Describe the problem and resolution of a passage ◆ Describe/illustrate the setting ◆ Write/draw a description of the setting from a familiar passage ◆ Answer yes/no questions about the problem/resolution from a passage 	<ul style="list-style-type: none"> ◆ Describe the setting of a passage and explain how that setting influences the problem of the passage ◆ Given a passage, change the setting and describe how the problem and resolution would change ◆ Given a familiar passage written in the context of a different setting, identify how the problem and resolution have changed. ◆ Answer yes/no questions about how the outcome would be different if the setting were different

General Education Example: Students recognize the influence of the settings in a book, such as the role of the North and South in the book The Watsons Go to Birmingham — 1963 by Christopher Paul Curtis, in which an African American family from Michigan goes to visit relatives in Alabama in the summer of 1963.

CONTENT Reading/ELA
STRAND Literary Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	8LT-P8	Analyze the effects of sound (alliteration, internal rhyme, rhyme scheme), figurative language (personification, metaphor, simile, hyperbole), and graphics (capital letters, line length, word position) on the meaning of a poem.	◆ Analyze the effects of sound, figurative language, and graphics to interpret the meaning of a poem
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Identify figurative language in given poem (personification, metaphor, simile, hyperbole) ◆ Given a familiar poem, identify the graphic features (capitol letters, line length, word position) of a poem ◆ Identify sound effects in a given poem (ex: alliteration) 	<ul style="list-style-type: none"> ◆ Identify(highlight) the figurative language that supports the meaning of the poem ◆ Explain the meaning of figurative language in a poem (select meaning from a choice of 3) ◆ Arrange a poem by rhyme scheme 	<ul style="list-style-type: none"> ◆ Explain how the figurative language affects the meaning of a poem ◆ Show how changing the graphics would change the meaning of the poem ◆ Write an original poem using figurative language, sound effects, or graphics ◆ Compare how the reader feels when reading a silly alliterative poem (Ogden Nash) vs. a serious alliterative poem (Robert Frost)

General Education Example: Students explore ways in which poets use sound (as accompaniment) in humorous poems by authors such as Langston Hughes, Laura Richards, Lewis Carroll, Maya Angelou, Ogden Nash, Nikki Giovanni, or Shel Silverstein; or (as reinforcement of meaning) in serious poems by such writers as Robert Louis Stevenson, Rita Dove, Edna St. Vincent Millay, Sonia Sanchez, Ai Young, Marianne Moore, or Alfred Noyes. Students compose individual poems and incorporate the above effects.

STRAND Literary Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	8LT-S10	Draw conclusions about style, mood, tone, and meaning of prose, poetry, and drama based on the author's word choice and use of figurative language.	◆ Draw conclusions about style, mood, tone, and meaning of prose, poetry, and drama based on author's word choice and use of figurative language
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Define mood ◆ Define style ◆ Define tone ◆ Identify the meaning of a poem from a choice of 3 ◆ Differentiate between prose, Poetry, and drama 	<ul style="list-style-type: none"> ◆ Select words that create mood in a given text ◆ Select words that give clues to the tone of a given work ◆ Explain/illustrate figurative language in a given text ◆ Identify figurative language in prose, poetry, and/or drama 	<ul style="list-style-type: none"> ◆ Explain how an author's word choice affected the mood of a literary work ◆ Explain how an author's word choice determine the tone of a literary work ◆ Classify mood or tone of a literary text through the expression of feelings invoked

General Education Example: Students read or listen to three poems from Stephen Dunning's anthology, Reflections On a Gift of Watermelon Pickle that employ extended metaphor. They discuss the effect of extended metaphor poems on the reader or listener.

CONTENT Reading/ELA
STRAND Informational Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	8IT-E1	Compare and contrast the central ideas, problems, or situations from readings on a specific topic selected to reflect a range of viewpoints.	◆ Compare and contrast central ideas, problems, or situations from readings on a specific topic
Less Complex		Possible Entry Points	More Complex
Informational Text	The student will:	The student will:	The student will:
	<ul style="list-style-type: none"> ◆ Match problems stated in a reading passage to the passage ◆ Identify the topic of an article ◆ Match central idea to the correct reading or passage 	<ul style="list-style-type: none"> ◆ Use graphic organizer to compare author's purpose in two readings on the same topic ◆ Categorize central ideas, problems, or situations from various readings on a topic (ex: pros and cons of smaller class size in schools) 	<ul style="list-style-type: none"> ◆ Use graphic organizer to compare and contrast ideas, problems or situations from readings on the same topic ◆ Complete a Venn Diagram to demonstrate the relationship between the central ideas in two articles on the same topic (e.g., given two editorials, one for the Iraq surge and one against it, students will place the details for each argument on either side of the Venn Diagram and the common ideas in the middle) ◆ Use a graphic organizer to compare two problems or situations on the same topic from 2 readings [e.g., after completing a reading paired with objects, using objects to represent the effects of global warming for polar bears (ice melting → not enough food (seals, fish)) and the effects of global warming on some islands (water covering the islands) students will place objects in a graphic organizer to represent the common cause and different effects of global warming]

General Education Example: Students read articles on the same current topic in magazines, such as Time and Newsweek, and editorials in national or local newspapers. They compare and contrast the texts in how they present the issue.

CONTENT Reading/ELA
 STRAND Informational Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	8IT-E2	Explain how an author uses word choice and organization of text to achieve his purposes.	◆ Explain author's word choice and organization of text to achieve his/her purpose
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Informational Text	◆ Using context clues identify the meaning of unfamiliar words	◆ Identify the organizational method used in the text	◆ Describe an author's word choice within a passage
	◆ Identify words with multiple meanings	◆ Underline/highlight/point to words or sentences that support the author's purpose	◆ Describe the organization of the text and why the author chose it
	◆ List and define the different organizational patterns (ex: chronology, comparison, contrast, enumeration, etc.)	◆ Identify author's purpose	◆ Explain how the author's word choice enables him to achieve his/her purpose (e.g., students describe Langston Hughes' purpose in "I Too, Sing America" and then explain how changing key words would change the meaning of the poem—such as, if "dining room table" replaces "kitchen table")

General Education Example: Students read works by authors such as Maya Angelou and Langston Hughes to look at how each author uses language to achieve his or her purposes.

DC CAS-Alt

CONTENT Reading/ELA
STRAND Informational Text

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	8IT-E3	Distinguish between the concept of theme in a literary work and the author's explicit or implicit purpose in an expository text.	◆ Distinguish between theme in literary text and author's purpose in expository text
Less Complex		Possible Entry Points	
The student will:		The student will:	
Informational Text	◆ Distinguish between two passages, one expository and one literary	◆ Identify author's purpose implicit or explicit in expository text	◆ Fill in a graphic organizer comparing theme and author's purpose (e.g., good vs. evil and to entertain)
	◆ Define implicit purpose	◆ Identify theme in literary text (e.g., from a choice of 3 picture cards representing theme, student will identify the theme)	
	◆ Define explicit purpose	◆ Given two literary passages, match the theme with the passage	◆ Given familiar text, distinguish between the purpose of an expository text and the theme of the literary text
	◆ Define theme	◆ Given two expository passages, match the purpose with the passage	◆ Given two familiar texts one expository and one literary, match the theme and purpose to the appropriate passage

DC CAS-Alt

Entry Points – Grade 8

Mathematics

CONTENT: Mathematics

STRAND: Number Sense & Operations

Grade 8		
Learning Standards as written		Essential and Prioritized Skill
Number Sense and Operations	8NSO-N7 Demonstrate an understanding of the properties of arithmetic operations on rational numbers.	<ul style="list-style-type: none"> ◆ Apply the properties of arithmetic operations on rational numbers.
Less Complex	Possible Entry Points	More Complex
<p style="text-align: center;"><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ From an array of number sentences, locate the one that illustrates associative property ("$a + (b + c) = (a + b) + c$" or "$a(bc) = (ab)c$") ◆ From an array of number sentences, locate the one that illustrates commutative property ("$a + b = b + a$ or $ab = ba$") ◆ From an array of number sentences, locate the one that illustrates distributive property ("$a(b + c) = ab + ac$") 	<p style="text-align: center;"><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Given 3 choices, select the property illustrated in a number sentence ◆ Classify number sentences according to the property illustrated 	<p style="text-align: center;"><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Use associative, commutative or distributive property to solve problems. ◆ Create a number sentence that demonstrates commutative property, associative property, and/or distributive property

CONTENT: Mathematics

STRAND: Number Sense & Operations

Grade 8

Learning Standards as written

Number Sense 8NSO-E17 Determine estimates to a certain stated accuracy.

and Operations

Essential and Prioritized Skill

- ◆ Estimate to a stated accuracy.

Less Complex

The student will:

- ◆ Locate numbers on a number line
- ◆ Identify if a number is closer to 5 or zero on a number line
- ◆ Identify if a number is closer to 5 or 10 on a number line

Possible Entry Points

The student will:

- ◆ Round a number to the nearest tenth (e.g., **.158 to .16**)
- ◆ Estimate if you can have enough money to purchase a specific item

More Complex

The student will:

- ◆ Estimate to the nearest whole dollar
- ◆ Use estimation to determine if a product should be larger or smaller than the terms (factors that are being multiplied)
- ◆ Use estimation to determine if a quotient should be larger or smaller than the terms (divisor and dividend)

CONTENT: Mathematics

STRAND: Number Sense & Operations

Grade 8

Learning Standards as written
Number Sense and Operations

8NSO-C9

Solve problems involving ratio units such as miles per hour, dollars per pound, or persons per square mile.

Essential and Prioritized Skill

- ◆ Solve problems involving ratio units.

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

Computation

- ◆ Given an array of number sentences and ratio units, select the ratio unit (350.6 lbs., 5 mi per hour.).
- ◆ Complete the ratio unit by selecting the correct unit from an array (60 mi/(lb,\$,hr)).

- ◆ Identify a ratio unit.
- ◆ Match a ratio unit with the words describing it

- ◆ Solve problems involving ratio units.
- ◆ Use task analysis to solve problems involving ratio units.

CONTENT: Mathematics

STRAND: Number Sense & Operations

Grade 8		
Learning Standards as written Number Sense and Operations	8NSO-C11 Solve problems that involve markups, commissions, profits, and simple and compound interest.	Essential and Prioritized Skill ♦ Apply markups, commissions, profits and simple and/or compound interest
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Identify the simple interest formula from the three choices ♦ Using a picture sentence depicting the sequence of events involving mark-up, profits and interest, select the transaction 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Define the variables in the simple interest formula ♦ Given a word problem, select the appropriate formula to be used to solve a problem (Formula may be expressed pictorially) 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Given the whole sale price and markup value of an item, determine the retail price by using task analysis ♦ Given the formula, $I = prt$, compute the interest of an investment.

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 8

Learning Standards as written
Patterns, Relations,
& Algebra

8PRA2

Set up and solve linear equations and inequalities with one or two variables using algebraic methods and graphs.

Essential and Prioritized Skill

◆ Set up and solve linear equations and inequalities.

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

- ◆ Identify all six inequality symbols.
- ◆ Fill in the blank with the appropriate inequality symbol.

- ◆ Set up linear equations
- ◆ Solve linear equations

- ◆ From word problem (may be expressed pictorially), set up and solve linear equations using algebraic methods
- ◆ From a word problem (maybe expressed pictorially), set up and solve linear equations using graphs

General Education Example

Example: Al got an estimate for repairs on his bike. The parts will cost \$17.50, and the parts and labor together will not be more than \$40. Which inequality shows the possible labor costs, L?

- A. $40 + 17.50 \geq L$
- B. $40 + L \geq 17.50$
- C. $17.50 + L \leq 40$
- D. $L - 17.50 \leq 40$

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

Grade 8		
Learning Standards as written Patterns, Relations, & Algebra 8PRA3	Use linear equations to model and analyze problems involving proportional relationships.	Essential and Prioritized Skill ♦ Use linear equations to model and analyze proportional relationships
Less Complex	Possible Entry Points	More Complex
<p style="text-align: center;"><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Identify a proportion ♦ Fill in the missing number in a given proportion 	<p style="text-align: center;"><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Match a proportion to it's graphical representation ♦ Given a ratio, select an equivalent ratio 	<p style="text-align: center;"><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Model proportional relationship with a linear equation ♦ Analyze problems involving proportional relationship ♦ Given a recipe, use proportional relationship to increase or decrease the amount of ingredients to arrive at a specific number of servings.

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 8		
<p>Learning Standards as written Patterns, Relations, & Algebra</p>	<p>8PRA7 Interpret the formula $(-x)(-y) = xy$ in calculations involving such things as distance, speed, and time, or in the graphing of linear functions. Use this identity to simplify algebraic expressions [e.g., $(-2)(-x + 2) = 2x - 4$].</p>	<p>Essential and Prioritized Skill Apply the rules of integers to the formula $(-X)(-Y) = XY$ in the real world calculations (distance, speed and time) or in graphing linear equations.</p>
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Identify negative and positive numbers ◆ Recognize the difference between positive and negative integers by sorting them into two groups ◆ Given a clear representation of a negative action (losing money, reducing speed limit, dropping temperature), match the representation to the negative sign ◆ Given a clear representation of a positive action (earning money, increasing speed limit, raising temperature), match the representation to the positive sign 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Using manipulatives (algebra tiles) that represent negative numbers, show that the product is positive ◆ Using task analysis, multiply two negatives and select the correct (positive) product from an array ◆ Given different situations (distance, time or money), determine if the situation is positive or negative 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Compare the time lines of historical periods that include A.D. and B.C.. ◆ Using a pictorial situation involving distance or time, demonstrate that neither can be a negative value

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 8		
<p>Learning Standards as written Patterns, Relations, & Algebra</p> <p>8PRA8</p>	<p>Explain and analyze – both quantitatively and qualitatively, using pictures, graphs, charts, and equations – how a change in one variable results in a change in another variable in functional relationships e.g., $C = \pi d$, $A = \pi r^2$ (A is a function of r), $A \text{ rectangle} = lw$ (A rectangle as a function of l and w).</p>	<p>Essential and Prioritized Skill</p> <p>Explain and analyze functional relationships both quantitatively and qualitatively using pictures, graphs, charts, and equations.</p>
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p>	<p><u>The student will:</u></p>	<p><u>The student will:</u></p>
<ul style="list-style-type: none"> ◆ Given a function table with the missing values, select from an array of numbers the correct value that makes the function true. ◆ Using manipulatives, recognize that a function has increase or decrease. 	<ul style="list-style-type: none"> ◆ Given two rectangles with the same lengths but different widths, determine the difference of their areas (adding a leaf of a table). ◆ Complete a function table that has missing values. 	<ul style="list-style-type: none"> ◆ Given a circle, determine the change of its circumference and area using pictures or graphs when its radius is halved, doubled or tripled. ◆ Given several rectangles, determine the outcome when the width is changed by different factors and identify the functional relationship (increasing the width = large area). ◆ Given two rectangles with the same lengths and different widths, use task analysis to determine the difference between the two areas.

CONTENT: Mathematics

STRAND: Data Analysis, Statistics, & Probability

Grade 8

Learning Standards as written

Essential and Prioritized Skill

Data Analysis, 8DASP3
Statistics, &
Probability

Recognize practices of collecting and displaying data that may bias the presentation or analysis.

◆ Recognize practices that bias the presentation or analysis of data.

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

- ◆ Given three scenarios, recognize the one that represents bias
- ◆ Given two graphs and their data points, identify which one is incorrect

- ◆ Given two data displays, select the one which demonstrates bias (e.g. a graph obviously skewed.)
- ◆ Given pictorial representation of different groups of people, select the group that would generate the least biased information when a demographic question such as: How often do you go clubbing? is asked. (This represents younger people.)

- ◆ From a list of data collecting practices, select the ones that would bias the analysis
- ◆ From a list of data collecting practices, select the ones that would bias the presentation analysis (scale, dimension, omitted info.)

DC CAS-Alt

Entry Points – Grade 8

Science

CONTENT Science

STRAND Structure of Matter

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Structure of Matter	8.H2	Construct a model of an atom and know the atom is composed of protons, neutrons, and electrons.	◆ Know what comprises an atom and construct a model
Less Complex		Possible Entry Points	More Complex
Structure of Matter	<u>The student will:</u>		<u>The student will:</u>
	<ul style="list-style-type: none"> ◆ Define atom ◆ Name simple elements (hydrogen, oxygen, carbon) 	<ul style="list-style-type: none"> ◆ Name each particle of the atom using different size models for each particle of the atom (protons, electrons, neutrons) ◆ Understand simple elements (carbon, hydrogen, oxygen) have a certain number of atoms C =6 O =8 H=1 ◆ Locate the particles of an atom using a model 	<ul style="list-style-type: none"> ◆ Construct a model of an atom ◆ Combine shapes to make the “Modern Model of an Atom”

CONTENT Science
STRAND Structure of Matter

Grade 8			
Learning Standards as written		Essential and Prioritized Skill	
Structure of Matter	8.1 E/M Using a periodic chart, explain that the atoms of any element are similar to each other, but they are different from atoms of other elements. Know that the atoms of a given isotope are identical to each other.	<ul style="list-style-type: none"> ◆ Explain similarities and differences of atoms among elements 	
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Structure of Matter	<ul style="list-style-type: none"> ◆ Using the periodic table and charts, identify the atomic number (C, H, O) ◆ Find a specific element on the periodic table 	<ul style="list-style-type: none"> ◆ Classify the isotopes of common atoms (C,H,O) ◆ Distinguish between a family (down on a periodic chart) and a period (across on a periodic chart) ◆ Identify characteristics of a family on the periodic table. 	<ul style="list-style-type: none"> ◆ Calculate the differences of atoms and their isotopes of simple elements C,H,O (C=6 H=1, O=8) ◆ Determine which atom is heavier and which atom is lighter by the atomic weight of the isotope <div style="border: 1px solid black; padding: 5px; width: fit-content; margin: 10px auto;"> $\text{C} \begin{matrix} 6 \\ 7 \end{matrix} = 13$ </div>

CONTENT Science

STRAND Structure of Matter

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Structure of Matter	8.1.E.A	Understand how an ion is an atom or group of atoms (molecule) that has acquired an electric charge by losing or gaining one or more electrons.	<ul style="list-style-type: none"> Understand what makes up an ion and how an ion becomes charged
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Structure of Matter	<ul style="list-style-type: none"> Identify electron, proton, neutron Define and locate ions (negative and positive) 	<ul style="list-style-type: none"> Recognize the perfect rule of eight (octet) in the Noble Gas Family (Happy Family) Identify the magic number (perfect 8) transfer of electrons to make magic eight (e.g., Sort using a puzzle piece of (Na⁺) ion and (Cl⁻) ion students will find how ions come together to make a compound) 	<ul style="list-style-type: none"> Using a model or manipulatives student will explain how ions are formed from atoms (ions gain or lose electrons) Use a model to explain covalent and electrovalent bonds

CONTENT Science
STRAND Reactions

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Reactions	8.1.E	Explain how the idea of atoms explains the fact that in chemical reactions, the number of atoms stays the same no matter how they are arranged, and the mass of atoms does not change significantly in chemical reactions, so their total mass stays the same.	<ul style="list-style-type: none"> ◆ Explain conservation of matter using Dalton's idea of the atom
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Reactions	<ul style="list-style-type: none"> ◆ When given a basic compound, identify the number of atoms that remain the same ◆ List and match the basic elements to their Atomic Identity (<i>Atomic Identity equals Atomic Number it never changes</i>) 	<ul style="list-style-type: none"> ◆ Compare the size of atomic masses (e.g., using pictures or models) ◆ Using models, label the different elements that make up given basic compounds [H₂O, CH₄, CO₂] 	<ul style="list-style-type: none"> ◆ Explain Dalton's Atomic Theory (e.g, Produce a model that demonstrates that atoms of the same element have the same atomic number but different atomic mass or that different elements have different atomic masses and different atomic numbers) ◆ Using Dalton's Theory, distinguish the difference between an element and a compound

CONTENT Science
STRAND Reactions

Grade 8		
Learning Standards as written		Essential and Prioritized Skill
Reactions	8.1 E / W Explain that reactions occur at different rates, slow to fast, and that reaction rates can be changed by changing the concentration of reactants, the temperature, the surface areas of solids, and by using a catalyst.	<ul style="list-style-type: none"> ◆ Explain what changes reaction rates
Less Complex		Possible Entry Points
<u>The student will:</u>		<u>The student will:</u>
Reactions	<ul style="list-style-type: none"> ◆ Distinguish between a slow reaction and fast reaction ◆ Define reaction rate ◆ Define catalyst 	<ul style="list-style-type: none"> ◆ Identify ways to change reaction rates (e.g., changing concentration of reactants, changing the temperature, changing the surface area of a solid or by using a catalyst) ◆ Using pictures, identify catalysts that change the rate of reaction (e.g., salt added to water will result in water boiling faster) ◆ Identify how different surface areas can change the rate of a reaction {Example: Using a colored solution such as: Kool-Aid, sugar, and water at different temperatures observe the solubility of sugar}
		More Complex
		<u>The student will:</u>
		<ul style="list-style-type: none"> ◆ Describe different types of reactions using pictures, diagrams, and/or videos to demonstrate rates of reaction ◆ Explain how concentration of water and rate of reaction can change (e.g., different pots of water boiling with different concentrations)

CONTENT Science
STRAND Reactions

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
Reactions	8.1.E	Recognize that solutions can be acidic, basic, or neutral, depending on the concentration of hydrogen ions in the solution. Understand that because this concentration can vary over a very large range, the logarithmic pH scale is used to describe how acidic or basic a solution is (<i>each increase of one in the pH scale is an increase of 10 times in concentration</i>).	<ul style="list-style-type: none"> ◆ Understand logarithmic pH scale as it relates to acidic, basic, and neutral solutions
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Reactions	<ul style="list-style-type: none"> ◆ Classify solutions as acidic (such as vinegar), basic, (soap) neutral (water) ◆ Classify common foods that are basic, acidic, neutral 	<ul style="list-style-type: none"> ◆ Interpret pH strips identifying acid, base, and neutral ◆ Identify the pH scales 	<ul style="list-style-type: none"> ◆ Distinguish the differences between acidic, basic, neutral solutions ◆ Establish the pH of different solutions by comparing each solution on a pH scale ◆ Explain how the amount of hydrogen ion determines the pH using a colored pH scale, Physical Science page 245 milk-ph-6

CONTENT Science
STRAND Energy and Waves

Grade 8		
Learning Standards as written		Essential and Prioritized Skill
8.FG2	Describe kinetic energy as the energy of motion (e.g., a rolling ball), and potential energy as the energy of position or configuration (e.g., a raised object or a compressed spring).	<ul style="list-style-type: none"> ◆ Describe kinetic and potential energy
Less Complex	Possible Entry Points	More Complex
<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> ◆ Using words, objects, or pictures, match energy to a definition of energy ◆ Define potential and kinetic 	<ul style="list-style-type: none"> ◆ Demonstrate kinetic (roll ball) ◆ Demonstrate potential energy (about to roll a ball) ◆ Define kinetic energy and give an example ◆ Define potential energy and give an example 	<ul style="list-style-type: none"> ◆ Classify pictures of kinetic energy (e.g., ball rolling and roller coaster) and potential energy (e.g., a person about to shoot a basketball or a person about to dive) ◆ Demonstrate an understanding of potential and kinetic energy (e.g. given a ball, student will push the ball when asked to demonstrate kinetic energy)

CONTENT Science
STRAND Energy and Waves

Grade 8		
Learning Standards as written		Essential and Prioritized Skill
8.F.1.1	Know that the sun's radiation consists of a wide range of wavelengths, mainly visible light, infrared and ultraviolet radiation.	<ul style="list-style-type: none"> Describe the different wavelengths of the sun's radiation
Less Complex	Possible Entry Points	More Complex
<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> Describe how the primary colors or secondary colors relate to visible light through a prism Identify visible light, ultra-violet light, or florescent light 	<ul style="list-style-type: none"> Using the appropriate equipment (prisms, mirrors, sun light, and kaleidoscopes) identify sun as the source of the most visible light Order the wavelengths from shortest to longest (infrared light, visible light, ultra-violet light) 	<ul style="list-style-type: none"> Know the different types of wavelengths that are emitted by the sun compared to other forms of light (e.g., artificial light, gamma rays, microwaves, x-rays) Describe the different sources of electromagnetic waves (sun and artificial light)

CONTENT Science
STRAND Energy and Waves

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
8.F.5.G	Investigate and explain that heat energy is a common product of an energy transformation, such as in biological growth, the operation of machines, the operation of a light bulb, and the motion of people.		<ul style="list-style-type: none"> ◆ Explain heat energy is often a product of energy transformation
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> ◆ Define heat energy ◆ Define energy transformation 	<ul style="list-style-type: none"> ◆ List the machines used in the room and explain how heat energy is transferred while machines are doing work (e.g., pencil sharpener, computer, etc.) ◆ Plant a seed in soil and record the change in temperature over a period of time 	<ul style="list-style-type: none"> ◆ Explain how living things (plants or animals), machines (objects) can transform energy to heat ◆ Explain using graphic organizers how energy is transformed ◆ Plant a seed in soil and compare the temperature of the soil and growth of the plant to the transformation of energy 	

CONTENT Science

STRAND Energy and Waves

Grade 8			
Learning Standards as written			Essential and Prioritized Skill
8.F.5.1	Compare and contrast how heat energy can be transferred through radiation, convection, or conduction.		◆ Compare and contrast how heat energy is transferred (radiation, convection, and conduction)
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
◆ Match the term 'radiation' with examples of radiation energy using pictures or words	◆ Match the term 'conduction' with examples of conduction energy using pictures or words	◆ Match the term 'convection' with examples of convection energy using pictures or words	◆ Using a graphic organizer, describe similarities and differences of heat energy
◆ Match the term 'radiation' with examples of radiation energy using pictures or words	◆ Match the term 'conduction' with examples of conduction energy using pictures or words	◆ Match the term 'convection' with examples of convection energy using pictures or words	◆ Show the similarities and differences of the forms of heat energy using a graphic organizer

CONTENT Science
STRAND Energy and Waves

Grade 8				
Learning Standards as written		Essential and Prioritized Skill		
8.FI.E.1	Explain that in processes at the scale of atomic size or smaller, matter cannot be created or destroyed but only changed from one form to another.	<ul style="list-style-type: none"> ◆ Explain the law of conservation of energy 		
Less Complex	Possible Entry Points	More Complex		
<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>		
<ul style="list-style-type: none"> ◆ Define potential energy ◆ Define kinetic energy ◆ Match the term 'potential' with examples potential energy ◆ Match the term 'kinetic' with examples kinetic energy 	<ul style="list-style-type: none"> ◆ Use different objects to demonstrate kinetic energy (e.g., balloons, fur, feathers, etc.) by running object across different surfaces ◆ Using pictures, classify different types of energy produced 	<ul style="list-style-type: none"> ◆ Create a diagram (using a graphic organizer) and identify the different forms of energy <table border="1" style="margin-left: 20px;"> <tr> <td>Example:</td> </tr> <tr> <td>potential energy → kinetic energy → thermal energy</td> </tr> </table> <ul style="list-style-type: none"> ◆ Define the law of conservation of energy 	Example:	potential energy → kinetic energy → thermal energy
Example:				
potential energy → kinetic energy → thermal energy				

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Entry Points – Grade 10

ELA

CONTENT Reading/ELA
 STRAND Language Development

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Language Development	10LD-V9	Distinguish between the denotative and connotative meanings of words, and interpret the connotative power of words.	◆ Distinguish between the literal and figurative meaning of words
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Language Development	<ul style="list-style-type: none"> ◆ Given a definition of a word, identify the word ◆ Identify the denotative meaning of a word (e.g., choose the appropriate object from a choice of three when asked for the meaning of a word) ◆ Identify the connotative meaning of a word 	<ul style="list-style-type: none"> ◆ Given a word, identify the figurative and literal meanings of the word used in the context of a passage and illustrate the feeling ◆ Given a word in context, identify the emotion or feeling of the word as used in the passage. 	<ul style="list-style-type: none"> ◆ Given a word used in the context of a passage, compare the literal and figurative meaning of a word ◆ Given a word used in the context of a passage, identify implied meaning of the word and determine if the implied meaning is negative or positive

General Education Example: Students watch televised political advertisements, pointing out which words have denotative meanings and which ones have connotative meanings per their own interpretation. Students describe how the connotative words affected their overall opinion of the message and the effects those words had on the persuasiveness of the message (e.g., does it make the message stronger; was the connotation negative, therefore knnning you against the message?).

CONTENT Reading/ELA
STRAND Literary Text

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	10LT-T3	Analyze the way in which the theme or meaning of a selection represents a view or comment on life, providing textual evidence for the identified theme.	<ul style="list-style-type: none"> Analyze theme as it relates to real life situations, supported with text evidence.
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> Given a passage with a familiar text with a single theme the student will identify the theme. Recognize that theme is the point of the story. Identify the theme of a story (e.g., After reading or listening to a theme based story, identify a picture depicting the theme from a choice of 2.) 	<ul style="list-style-type: none"> Match each theme to its appropriate story. Classify passages by theme using a graphic organizer. Given examples of text, identify dual themes (e.g., life/death, love/hate, society/individual, known/unknown) or single themes (e.g., love, friendship, adventure) 	<ul style="list-style-type: none"> Compare the theme (a word or phase of a given passage to the student's life and support it with text (Text to Self). Given a passage from a grade level literary text that can be modified to illustrate the theme (love, envy and Coming of Age) student will compare a theme of a text with a universal view on life and support it with text.

General Education Example: Students read Macbeth to analyze the theme of power or gender. They read Go Tell it on the Mountain by James Baldwin to analyze the theme of the role of the church (and more specifically religion and subcultures).

CONTENT Reading/ELA
STRAND Literary Text

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	10LT-F4	Analyze such events in fiction such as foreshadowing, flashbacks, suspense, and irony.	◆ Analyze literary techniques of fiction
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> ◆ Match the definition to the correct literary technique (e.g., flashbacks, foreshadowing, suspense or irony) ◆ Identify flashbacks in a text ◆ Distinguish between flashbacks and foreshadowing from a given literary text. 	<ul style="list-style-type: none"> ◆ Given passages from familiar literary text, classify the passage based on the literary technique used (e.g., foreshadowing/flashback) ◆ Describe how foreshadowing is used in a text ◆ Describe how irony is used in a text ◆ Determine the correct use of irony in a given passage (dramatic, situational and verbal) ◆ Paraphrase an example of foreshadowing from a given literary text. 	<ul style="list-style-type: none"> ◆ Evaluate whether the suspense in a story worked ◆ Compare two examples of irony to determine which one is more powerful ◆ Analyze the author's use of irony in a given literary work (e.g., how is the Scarlet Letter ironic?) ◆ Create a graphic organizer that illustrates the effect of foreshadowing ◆ Justify your choice of the most suspenseful event(s) in a given text

General Education Example: Students analyze elements of foreshadowing and flashbacks in The Scarlet Letter. How are these devices useful in books where the narrative (plot) is essential to the state of mind of the characters?

CONTENT Reading/ELA
STRAND Literary Text

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	10LT-F5	Explain how a narrator's point of view affects tone, characterization, and plot (e.g., Harper Lee's <i>To Kill a Mockingbird</i> or Richard Wright's <i>Native Son</i>).	◆ Explain how narrator's point of view affects tone, characterization, and plot
Less Complex		Possible Entry Points	More Complex
	The student will:	The student will:	The student will:
Literary Text	<ul style="list-style-type: none"> ◆ Identify characteristics of text written in 1st person (e.g., "I", "we" focus on feelings, limited point of view, etc.) ◆ Define point of view ◆ Identify characteristics of text written in 3rd person ◆ Identify the tone (the words the author uses to convey his attitude about the subject) of the literary text. ◆ Identify the plot of the a literary text ◆ Identify the characters and their traits from a literary text 	<ul style="list-style-type: none"> ◆ Indicate whether a selection is written in 1st or 3rd person ◆ Given various passages from familiar texts, determine the point of view for each. ◆ Locate key words in a selection that assist in the determination of the narrator's point of view (1st or 3rd person) ◆ Match the narrator's point of view to a familiar story. 	<ul style="list-style-type: none"> ◆ Describe how point view (first or third person) affects the tone of a piece. ◆ Explain how point of view (1st or 3rd person) effects the characterization of a piece ◆ Explain how the point of view (1st or 3rd person) affects the plot of a story ◆ Compare how two different narrators (1st or 3rd person) would describe the same character ◆ Given selections of the narrator's point of view (first or third person); describe how they affect the plot (e.g. by selecting the description of a choice of 3).

General Education Example: Students analyze the impact of the narrator in Ernest Hemingway's *After the Storm* (first person) and Nathaniel Hawthorne's *Scarlet Letter* (third person).

CONTENT Reading/ELA
STRAND Literary Text

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Literary Text	10LT-S10	Analyze the author's use of figurative language, including personification, symbolism, simile, metaphor, hyperbole, (a poetry selection).	◆ Identify and explain the poet's use of figurative language.
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Literary Text	<ul style="list-style-type: none"> ◆ Distinguish between types of figurative language. ◆ Match definitions to the correct type of figurative language (e.g., simile, metaphor, symbolism, irony, personification, imagery) 	<ul style="list-style-type: none"> ◆ Draw a picture illustrating the figurative and literal meaning of a metaphor ◆ Identify different forms of figurative language (metaphors, symbolism, irony) in poems ◆ Given a poem, describe the poet's use of figurative language 	<ul style="list-style-type: none"> ◆ Analyze how hyperbole (exaggeration to express strong emotion or to create a comic effect), effects a poem's purpose. ◆ Given several choices explain the poet's use of symbolism ◆ Identify personification and explain how it helps the poem make its point (giving human characteristics to non human things, such as the tree wept). ◆ Answer questions to analyze the poet's use of figurative language

General Education Example: Students read several selections from Robert Frost and identify the many types of figurative language evident in his poetry. For example, students read "Devotion" (metaphor), "Mending Wall" (simile and apostrophe), "Stopping by Woods" (symbol, synecdoche, and hyperbole), and "The Road Not Taken" (irony and symbol).

CONTENT Reading/ELA
 STRAND Informational Text

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	10IT-E2	Explain the authors stated or implied purpose(s) for writing expository text.	◆ Explain the author's purpose (stated or implied) in expository text.
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Informational Text	<ul style="list-style-type: none"> ◆ List details found in an expository text ◆ Answer questions of who, what, where, when, and how in relation to expository text ◆ Identify as expository or not expository texts ◆ Identify the three main purposes of writing (to entertain, to persuade, to inform) (e.g., via the use of objects, pictures symbols, or words) 	<ul style="list-style-type: none"> ◆ Identify the author's purpose of expository text (newspapers, magazines, maps, schedules, pamphlets, etc.) ◆ Make an outline of the author's purpose and supporting details of an expository text ◆ Match excerpts writing to the purposes (inform, persuade or entertain) 	<ul style="list-style-type: none"> ◆ Summarize an expository text by stating the author's purpose and identifying the important details from journals, newspapers, booklets, etc. (to inform, to persuade or to entertain) ◆ Given a list of statements decide which 3 statements support an author's purpose in an expository text ◆ Generate 3-5 statements that support an author's purpose in a given expository text ◆ Given an expository text, explain the author's purpose.

General Education Example: After reading a piece of historical nonfiction, such as When Justice Failed: The Fred Korematsu Story by Steven A. Chin about the internment of Japanese Americans during World War II, students describe the author's purpose for writing.

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CONTENT Reading/ELA

STRAND Informational Text

Grade 10			
Learning Standards as written			Essential and Prioritized Skill
Informational Text	10IT-E5	Make relevant inferences by synthesizing concepts and ideas from a single reading selection.	◆ Make relevant inferences based on the text
Less Complex		Possible Entry Points	More Complex
	<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
Informational Text	Given informational text: <ul style="list-style-type: none"> ◆ Predict what will happen next in a text ◆ Answer who - what questions about informational text to make inferences 	<ul style="list-style-type: none"> ◆ Given informational text, compare known information to unknown information through the use of a graphic organizer and pre-reading activities. ◆ Use relevant inferences based on information from the text to relate to life experiences (text to self) 	Given informational text: <ul style="list-style-type: none"> ◆ Make inferences based on the text ◆ Identify the evidence used to make a specific inference about the text

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CONTENT Reading/ELA

STRAND Informational Text

Grade 10				
Learning Standards as written			Essential and Prioritized Skill	
Informational Text	10IT-A9	Analyze the logic and use of evidence in an author's argument.	♦ Analyze logic and use evidence an author uses.	
Less Complex		Possible Entry Points		More Complex
<u>The student will:</u>		<u>The student will:</u>		<u>The student will:</u>
Informational Text	♦ Given a sentence, identify if the statements is true or false	♦ Given a passage, identify whether an argument is true or false	♦ Given a passage or text, determine if the author's argument is valid or invalid (e.g., identifying specific sentences as fact or opinion and then determining if the argument is more fact than opinion)	
	♦ Identify evidence that support s the premise	♦ Define circular reasoning or linear reasoning (e.g., use a graphic organizer to illustrate the difference between circular reasoning and linear reasoning)	♦ Given a passage or text, identify common fallacy such as intentional fallacy, biological fallacy such as intentional fallacy or circular reasoning (e.g., biological fallacy—all women are better nurturers than men because they are able to give birth; circular reasoning the sky is blue because it is blue)	
	♦ Identify the author's argument by choosing the correct argument summary from a choice of 2	♦ Given a passage or text, identify the evidence used in the author's argument and list evidence to support the argument		
	♦ Identify references in an argument	♦ Determine whether references are from a trusted source or not (e.g., a scientific organization vs. Joe Schmoie's blog)		
	♦ Look up references from an argument			

General Education Example: Students evaluate articles by judging the references, the author's presentation of facts and opinions, and the date of publication.

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Entry Points – Grade 10

Mathematics

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 10

Learning Standards as written

Patterns, Relations, & Algebra A1.P.5 Demonstrate an understanding of the relationship between various representations of a line. Determine a line's slope and x- and y-intercepts from its graph or from a linear equation that represents the line.

Essential and Prioritized Skill

◆ Translate various representations of a line and demonstrate an understanding of line's slope.

Less Complex

The student will:

- ◆ Identify the different types of slope (zero, positive, negative and undefined)
- ◆ Match ordered pairs of the point in the coordinate plane.
- ◆ Locate the x and y axis on a graph

Possible Entry Points

The student will:

- ◆ Determine which ordered pair is described by the given line (e.g., from a set of 3 sets of ordered pairs, choose the pair that is represented).
- ◆ Determine which line is described by the given points.
- ◆ Define slope (match to definition)
- ◆ Define intercept (match to definition)

More Complex

The student will:

- ◆ Use task analysis to determine the slope of the line from a linear equation and/or from its graph.
- ◆ Determine a line's slope from a graph and its x and y intercepts
- ◆ Graph a line from a two sets of ordered pairs

General Education Example

Example: What is the slope of the line with equation $3x + 4y = 12$.

Example: Find the equation for the line that contains the points (5, 3) and (7, 4). Where does the line intersect the y-axis? What is the slope of the line?

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 10		
<p>Learning Standards as written Patterns, AI.P.8 Relations, and Algebra</p>	<p>Add, subtract, and multiply polynomials with emphasis on 1st- and 2nd-degree polynomials.</p>	<p>Essential and Prioritized Skill</p> <ul style="list-style-type: none"> ◆ Add, subtract, and multiply polynomials
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Identify numbers, exponents, or symbols within a polynomial equation ◆ Distinguish between like and unlike terms 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Add polynomials (combine like terms) ◆ Subtract polynomials ◆ Solve an equation that includes an exponent ($4 + 3^2$). ◆ Solve for an exponent 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ◆ Multiply polynomials (Use laws of exponents) ◆ Add, subtract and multiply polynomials ◆ Add, subtract and multiply 2nd degree polynomials

General Education Example

Example: Simplify the following expression: $(3x + 1)(x - 2) + (4x + 1)$.

CONTENT: Mathematics

STRAND: Patterns, Relations, & Algebra

Grade 10

Learning Standards as written

Patterns, Relations, and Algebra AI.P.9 Demonstrate facility in symbolic manipulation of polynomial and rational expressions by rearranging and collecting terms, factoring [e.g., $a^2 - b^2 = (a + b)(a - b)$, $x^2 + 10x + 21 = (x + 3)(x + 7)$, $5x^4 + 10x^3 - 5x^2 = 5x^2(x^2 + 2x - 1)$], identifying and canceling common factors in rational expressions, and applying the properties of positive integer exponents.

Essential and Prioritized Skill

◆ Apply knowledge of symbolic manipulation by using factors and positive integer exponents to simplify polynomials and rational expressions.

Less Complex

Possible Entry Points

More Complex

The student will:

The student will:

The student will:

- ◆ Identify numbers, exponents or symbols in a polynomial equation
- ◆ Identify the factors of a number
- ◆ Select from an array the factors of a given number

- ◆ Match factors to the corresponding polynomials
- ◆ Identify common factors of a polynomial in a rational expression

- ◆ Identify and cancel out common factors in rational expressions
- ◆ ***Simplify an equation that includes an exponent ($4 + 3^2$)***
- ◆ Simplify an equation that requires factorization

CONTENT: Mathematics
STRAND: Patterns, Relations, & Algebra

Grade 10

Learning Standards as written

Patterns, Relations and Algebra
 AI.P.13 Solve equations and inequalities, including those involving absolute value of linear expressions (e.g., $|x - 2| > 5$), and apply to the solution of problems.

Essential and Prioritized Skill

- ◆ Solve equations and inequalities

Less Complex

The student will:

- ◆ Distinguish between the six inequality symbols.
- ◆ Match absolute value to various representations
- ◆ Sort the different graphs of inequality (i.e., $<$, \leq , $>$, and \geq)

Example: Solve for x: $5x - 2 \leq -3(x - 2) + x$.

Possible Entry Points

The student will:

- ◆ Identify whether or not a given graph is a solution of an inequality.
- ◆ Match the inequalities represented by a number sentence to corresponding graphs.

More Complex

The student will:

- ◆ Solve equations and/or inequalities
- ◆ Graph equation and/or inequality.

CONTENT: Mathematics

STRAND: Patterns, Relations, and Algebra

Grade 10

Learning Standards as written

Patterns, AI.P.14 Relations, and Algebra Solve everyday problems (e.g., compound interest and direct and inverse variation problems) that can be modeled using linear or quadratic functions. Apply appropriate graphical or symbolic methods to the solution.

Essential and Prioritized Skill

Apply appropriate graphical or symbolic methods to solve problems that can be modeled using linear or quadratic functions.

Less Complex

The student will:

- ◆ Define a linear function
- ◆ Identify the salient features of a linear function
- ◆ Identify a quadratic function from a choice of 3

Possible Entry Points

The student will:

- ◆ Match a word problem to the correct function table or linear equation
- ◆ Translate a word problem that can be modeled with linear or quadratic methods into an equation

More Complex

The student will:

- ◆ Solve a compound interest problem using appropriate graphical methods
- ◆ Using a function table to solve linear functions
- ◆ Complete a function table to represent word problems

General Education Example

Example: One business telephone service has a fixed monthly cost of \$3 per month and then 4 cents per minute for long-distance calls. A second service has no fixed monthly cost but the long-distance calls cost 16 cents per minute. Which service is a better choice? When? (The monthly costs are equal if the company uses 2,500 minutes each month.)

Example: A train travels at 30 miles per hour for one mile. How fast must the train go in the next mile in order to average 60 miles per hour for the full two miles? (Note: This is a tricky problem.)

CONTENT: Mathematics

STRAND: Algebra

Grade 10

Learning Standards as written

Patterns, Relations, and Algebra AI.P.15 Solve everyday problems (e.g., mixture, rate, and work problems) that can be modeled using systems of linear equations or inequalities. Apply algebraic and graphical methods to the solution.

Essential and Prioritized Skill

- ◆ Apply graphical and algebraic methods to solve systems of linear equations and inequalities.

Less Complex

The student will:

- ◆ Solve a problem involving a specified unknown
- ◆ Identify an inequality by locating (circling, marking, pointing to) the salient features of inequalities
- ◆ Given an array of systems of linear equations and systems of linear inequalities, sort into correct groups.

Possible Entry Points

The student will:

- ◆ Use task analysis to solve a work problem using a function table (Dewayne takes 2 hours to paint the fence, Shannon takes 1 hour. How long do they take together?)
- ◆ Use task analysis to solve a rate problem
- ◆ Use task analysis to solve a mixture problem

More Complex

The student will:

- ◆ Apply graphical methods to solve systems of linear equations and/or inequalities.
- ◆ Apply algebraic methods to solve systems of linear equations and/or inequalities.

General Education Example

Example: Mary drove to work on Monday at 40 mph and arrived 5 minutes late. She left at the same time on Friday, drove at 45 mph, and arrived 3 minutes early. How far does Mary drive to work?

Example: Amtrak sells two types of tickets for train service between Boston and Washington, D.C. Tickets for the (really fast) Acela Express sell for \$176. Tickets for the (really slow) regular train sell for \$91. How many of each type of ticket must Amtrak sell each day if the net revenue for the day must be at least \$44,750? What if you add the constraint that the company must sell at least twice as many regular tickets as Acela tickets?

Example: Sketch a graph of the values of x and y that satisfy both of the following inequalities: $3x + 2y \geq 3$ and $-2x + y \geq 5$.

CONTENT: Mathematics

STRAND: Algebra I

Grade 10

Learning Standards as written
Algebra I AI.D.1

Select, create, and interpret an appropriate graphical representation (e.g., scatter plot, table, stem-and-leaf plots, circle graph, line graph, and line plot) for a set of data, and use appropriate statistics (e.g., mean, median, range, and mode) to communicate information about the data. Use these notions to compare different sets of data.

Essential and Prioritized Skill

- ◆ Interpret graphical representations of data using statistics to compare data.

Less Complex

Possible Entry Points

More Complex

The student will:

- ◆ Locate information on a circle graph
- ◆ Locate information on a mathematical table
- ◆ Define the mean
- ◆ Match terms mean, median and mode with correct definitions

The student will:

- ◆ Calculate the mean of a given set of numbers
- ◆ Create a stem and leaf plot from a list of two digit numbers.
- ◆ Match a circle graph to the correct data

The student will:

- ◆ Compare and contrast data from two different graphical representations
- ◆ Using a graphical representation, identify which data to use and then calculate the mean
- ◆ Find data on a graph and calculate the mean
- ◆ Interpret the mean after looking at a line graph (e.g., given a line graph, identify the mean)

General Education Example - See following page

DC CAS-Alt

Grade 10 Algebra 1: Al.D.1 (continued)

Example: According to the 1990 U.S. Census, 27.2% of State X residents over the age of 25 had graduated from a 4-year college. In a circle graph representing all state residents over the age of 25, about how many degrees should be in the sector representing these 4-year college graduates?

Example: The math teacher wants to show his class their grades on a test. Here is a list of the scores:

50, 54, 70, 70, 72, 72, 72, 76, 80, 81, 86, 86, 90, 90, 92, 95, 100

Which of the following types of graphs would give the best picture of the data: scatter plot, stem-and-leaf plot, or a line plot? Pick your favorite and make it.

What is the median score for the class? What is the mean score?

Example: A class of 25 students is asked to determine approximately how much time the average student spends on homework during a one-week period. Each student is to ask one of his/her friends for the information, making sure that no one student is asked more than once. The number of hours spent on homework per week are as follows:

*8, 0, 25, 9, 4, 19, 25, 9, 9, 8, 0, 8, 25, 9, 8, 7, 8, 3, 7, 8, 5,
3, 25, 8, 10*

(a) Find the mean, median, and mode for these data. Explain or show how you found each answer.

(b) Based on this sample, which measure (or measures) that you found in part (a) best describes the typical student? Explain your reasoning.

(c) Describe a sampling procedure that would have led to more representative data.

CONTENT: Mathematics
STRAND: Geometry

Grade 10

Learning Standards as written

Geometry G.G.3 Apply properties of sides, diagonals, and angles in special polygons; identify their parts and special segments (e.g., altitudes, midsegments); determine interior angles for regular polygons.

Essential and Prioritized Skill

◆ Apply properties of sides, diagonals, and angles in special polygons (including being able to calculate interior angles, identify parts and special segments)

Less Complex	Possible Entry Points	More Complex
<u>The student will:</u>	<u>The student will:</u>	<u>The student will:</u>
<ul style="list-style-type: none"> ◆ Identify sides and angles in triangles ◆ Sort polygons by the number of sides. ◆ Define polygon 	<ul style="list-style-type: none"> ◆ Given one angle in an equilateral triangle, determine the measure of the other angles. ◆ Identify the different parts of a polygon (sides, interior/exterior angles, diagonals and/or altitudes). ◆ Classify polygons with similar parts (e.g., interior angles of 90 degrees, diagonals of similar length, etc.) ◆ List three angles that could make up a triangle the sum equals 180 degrees). 	<ul style="list-style-type: none"> ◆ Calculate the third angle of a triangle given the other two angles. ◆ Determine which sides are equal given an isosceles triangle (e.g., from an array of different types of triangles find two sides of one of these triangles that are of equal length) ◆ Use properties of sides, angles and diagonals of polygons to solve problems (e.g., if a square is bisected by a diagonal, do the two resulting shapes have equal or unequal sides).

General Education Example

Example: Find the interior angles of a regular pentagon.

(See also G.G.2, G.G.4)

Example: How is the measure of the interior angles in a regular polygon related to the number of sides in the polygon?

CONTENT: Mathematics

STRAND: Geometry

Grade 10

Learning Standards as written

Geometry G.G.15 Use the properties of special triangles (e.g., isosceles, equilateral, 30°-60°-90°, 45°-45°-90°) to solve problems.

Essential and Prioritized Skill

◆ Apply the knowledge of special triangles (isosceles and equilateral) to solve problems

Less Complex

Possible Entry Points

More Complex

The student will:

- ◆ Identify a triangle regardless of their difference in size and shape.
- ◆ Distinguish between isosceles, equilateral, and right triangles.

The student will:

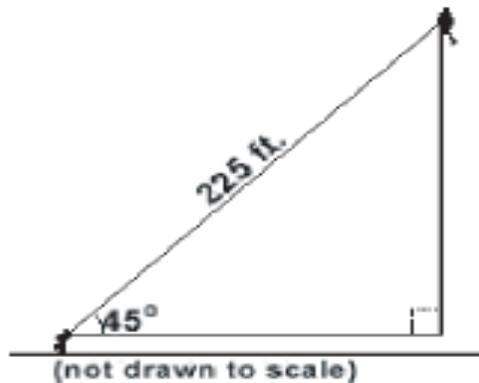
- ◆ Classify triangles by the number of equal sides.
- ◆ Classify triangles by the number of equal angles.

The student will:

- ◆ Given one angle in an equilateral triangle determine the measure of the third.
- ◆ Calculate the measure of one acute angle in a right triangle when the other acute angle is given.
- ◆ Determine the measurements of the sides and/or angles of special triangles using their properties.

General Education Example

Example: Use the diagram below to answer the following question.



It is believed that the best angle to fly a kite is 45°. If you fly a kite at this angle and let out 225 feet of string, approximately how high above the ground will the kite be?

CONTENT: Mathematics

STRAND: Geometry

Grade 10

Learning Standards as written

Geometry G.G.20

Draw the results and interpret transformations on figures in the coordinate plane such as translations, reflections, rotations, scale factors, and the results of successive transformations. Apply transformations to the solution of problems.

Essential and Prioritized Skill

- ◆ Analyze and apply transformations such as translation, reflections, rotations, and scale factors to solve problems.

Less Complex

The student will:

- ◆ Identify a reflection, translation, rotation and /or dilation (e.g., given a figure and an array of transformations, select the one that is a reflection, rotation, translation, and/or dilation).
- ◆ Match a reflection and /or rotation (e.g., given a figure and an array of transformations, match the one that is a reflection and/or rotation).

Possible Entry Points

The student will:

- ◆ Match figures that are of the same shapes but of different sizes.
- ◆ Classify shapes as reflections or rotations

More Complex

The student will:

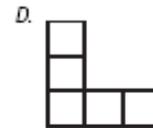
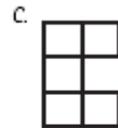
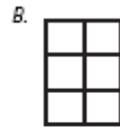
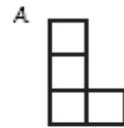
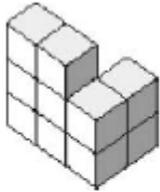
- ◆ Using manipulatives, perform specified transformations that would result in the manipulative fitting into a template (e.g., complete a three dimensional puzzle).
- ◆ Predict what shape will come next in a series of transformations.
- ◆ Given three choices, select shapes that come next in the series of rotations, translations, and/or reflections (e.g., Given a patterned series, select from an array the figure that could come next).

General Education Example - See following page

DC CAS-Alt

Grade 10 Geometry: G.G.20 (continued)

Example: Use the given figure to answer the question below.

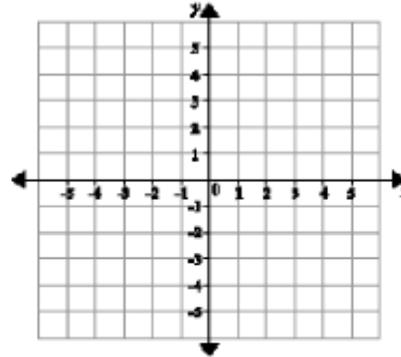


Which diagram could not possibly show how the figure looks when it is viewed directly from above?

Example: You may want to use the following coordinate plane to help answer the question.

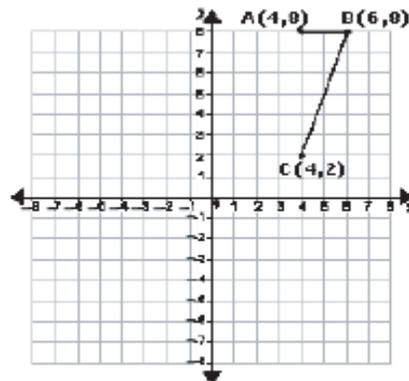
As the result of a transformation, the image of the point $(-1,3)$ is $(-3,1)$.
This is an example of a reflection across the

- A. line $y = x$
- B. line $y = -x$
- C. x -axis
- D. y -axis



Example: Suppose that the figure ABC is reflected over the y -axis.
What are the coordinates of the image of point A ?

- A. $(4, -8)$
- B. $(-4, 8)$
- C. $(-8, 4)$
- D. $(8, -4)$



CONTENT: Mathematics

STRAND: Geometry

Grade 10		
Learning Standards as written	Essential and Prioritized Skill	
Geometry G.G.21 Demonstrate the ability to visualize solid objects and recognize their projections, cross sections, and graph points in 3-D.	♦ Recognize/evaluate projections, cross sections, or graph points in 3-D.	
Less Complex	Possible Entry Points	More Complex
<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Identify 2-D objects from a selection of 2D & 3D objects ♦ Identify 3-D objects from a selection of 2D & 3D objects. ♦ Identify the properties of 2 dimensional objects. 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Define a projection. ♦ Match a solid object with a 3-D representation of that object ♦ Distinguish between a 2 vs. 3 dimensional object 	<p><u>The student will:</u></p> <ul style="list-style-type: none"> ♦ Evaluate by matching solid objects with its projection. ♦ Evaluate by matching solid objects with its cross section. ♦ Evaluate by matching solid objects with the correct graph.

CONTENT: Mathematics

STRAND: Geometry

Grade 10

Learning Standards as written

Geometry G.G.22 Find and use measures of perimeter, circumference, and area of common geometric figures such as parallelograms, trapezoids, circles, and triangles.

Essential and Prioritized Skill

- ◆ Apply measures of perimeter, circumference, and area of common geometric figures.

Less Complex

The student will:

- ◆ Choose the right tool to measure an object
- ◆ Define perimeter
- ◆ Define area.
- ◆ Define circumference.

Possible Entry Points

The student will:

- ◆ Find the perimeter of a square, rectangle (e.g., given the formula, use task analysis to determine the perimeter of a rectangle and choose the correct answer from 3 possible choices).
- ◆ Find the circumference of a circle.
- ◆ Use tiles or other manipulatives to determine the area of a given rectangles, and/or squares.
- ◆ Use task analysis to determine the area of a circle

More Complex

The student will:

- ◆ Use perimeter to solve a problem (e.g., Use perimeter formula to calculate the size of a rug needed to cover the floor.)
- ◆ Given choices, determine whether to use area or perimeter to solve a problem and calculate it.

General Education Example

Example: The endpoints of the chord of circle O are A and B, two vertices of a triangle. The third vertex, C, can be located anywhere along the dashed arc. If you locate the vertex so that it forms a triangle that has the largest possible area, which of the following must be true?

- A. $AB = BC = AC$
- B. $AC < BC$
- C. $AC > BC$
- D. $AC = BC$



DC CAS-Alt

Entry Points – Grade 10

Science – Biology

CONTENT Science

STRAND Scientific Investigation & Inquiry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Scientific Investigation & Inquiry	B.1.10	Select and use appropriate tools and technology to perform tests, collect data, analyze relationships, and display data. (The focus is on manual graphing, interpreting graphs, and mastery of metric measurements and units, supplementary use of computers and electronic data gathering when appropriate.)	Select and use graphs to analyze relationships and display scientific data
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Scientific Investigation & Inquiry	<ul style="list-style-type: none"> ◆ Define scientific data, graphs, and analyze ◆ Locate scientific data graphs in a real world environment (e.g., Newspaper) ◆ Distinguish between the different kinds of graphs used to interpret scientific data 	<ul style="list-style-type: none"> ◆ Select the appropriate graph (e.g., pie chart, line graph, circle graph) to display a set of given scientific data ◆ Explain how graphs are used to interpret scientific data 	<ul style="list-style-type: none"> ◆ Given a set of scientific data, construct a graph (e.g., pie chart, line graph, circle graph) to display the data ◆ Interpret scientific data found on a graph (pie chart, line graph or circle graph)

CONTENT Science

STRAND Scientific Investigation & Inquiry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Scientific Investigation & Inquiry	BB.12	Analyze situations and solve problems that require combining concepts from more than one topic of science and applying these concepts.	Analyze a situation and solve the problem (science project)
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Scientific Investigation & Inquiry	<ul style="list-style-type: none"> ◆ Define terms associated with solving problems (scientific method) ◆ Identify a scientific problem 	<ul style="list-style-type: none"> ◆ Describe steps used to solve problems in the scientific method ◆ Identify a scientific situation and sequence steps used to solve a problem using the scientific method 	<ul style="list-style-type: none"> ◆ Analyze situations, then determine and execute the steps of an experiment using the scientific method to solve a problem ◆ Draw conclusions by collecting, organizing, and analyzing the data

CONTENT Science

STRAND Cell Biology and Biochemistry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Cell Biology	B.2.2	Compare and contrast the general anatomy and constituents of prokaryotic cells and their distinguishing features: Prokaryotic cells do not have a nucleus, and eukaryotic cells do. Know that prokaryotic organisms are classified in the Eubacteria and Archaeobacteria Kingdoms and that organisms in the other four kingdoms have eukaryotic cells.	Compare and contrast anatomy of prokaryotic and eukaryotic cells
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Cell Biology and Biochemistry	<ul style="list-style-type: none"> ◆ Define prokaryotic and eukaryotic cells ◆ Identify prokaryotic and eukaryotic cells ◆ Label a drawing/picture of a prokaryotic or eukaryotic cell 	<ul style="list-style-type: none"> ◆ Classify cells as prokaryotic or eukaryotic ◆ Explain the differences between prokaryotic and eukaryotic cells using key terms ◆ Label the similarities and/or differences between the prokaryotic and eukaryotic cells 	<ul style="list-style-type: none"> ◆ Using technology (e.g., switches, computers, cards, etc.) compare and contrast organisms that have prokaryotic or eukaryotic cells ◆ Distinguish the similarities and differences between prokaryotic and eukaryotic cells (using a graphic organizer)

CONTENT Science

STRAND Cell Biology and Biochemistry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Cell Biology	B.3.3	Demonstrate that most cells function best within a narrow range of temperature and pH; extreme changes usually harm cells by modifying the structure of their macromolecules and, therefore, some of their functions.	<ul style="list-style-type: none"> ◆ Demonstrate that most cells function best within a narrow range of tolerances (temperature and pH)
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Cell Biology and Biochemistry	<ul style="list-style-type: none"> ◆ Define pH, acid (substance that has a low pH level), base (substance that has a high pH level), solution, and temperature ◆ Identify the tools used to measure pH levels (pH scale, pH meter, and litmus paper) and temperature 	<ul style="list-style-type: none"> ◆ Describe how varying temperatures affect human cellular functions ◆ Compare how different pH levels affect cell function 	<ul style="list-style-type: none"> ◆ Demonstrate how the environment affects cell function (e.g., use pH strips to demonstrate how pH levels affect cells) ◆ Compare and contrast how varying pH levels affect different cell functions and identify optimum pH levels

CONTENT Science

STRAND Cell Biology and Biochemistry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Cell Biology	B.3.7	Recognize and describe that cellular respiration is important for the production of adenosine triphosphate (ATP), which is the basic energy source for cell metabolism.	<ul style="list-style-type: none"> Recognize and describe cellular respiration and the production of ATP
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Cell Biology and Biochemistry	<ul style="list-style-type: none"> Define respiration (taking in oxygen and releasing carbon dioxide), cellular respiration (chemical process by which the mitochondria produce energy for the cell), mitochondria (organelle that breakdowns food molecules to produce ATP- the battery of the cell that stores energy), and/or metabolism (activities of living things, e.g., reproduction, respiration, eating, etc.) Match the terms respiration, cellular respiration, ATP, mitochondria, and/or metabolism to the correct definition Explain the basic function of photosynthesis (to make food) 	<ul style="list-style-type: none"> Classify various metabolic activities or uses of energy (growth, reproduction, respiration, etc.) Identify the vital metabolic functions that require ATP energy (e.g., digestion, circulation, reproduction, growth, etc.) 	<ul style="list-style-type: none"> Compare (using a graphic organizer) the relationship between cellular respiration and ATP Describe the role of ATP in metabolism Explain how cells get energy from cellular respiration Describe how the products of photosynthesis are used in cellular respiration to produce ATP (e.g., describe how the glucose is broken down into carbon compounds, ATP, and other energy carriers during the citric acid cycle)

CONTENT Science

STRAND Cell Biology and Biochemistry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Cell Biology	B.4.3	Describe the organelles that plant and animal cells have in common (e.g., ribosomes, golgi bodies, endoplasmic reticulum) and some that differ (e.g., only plant cells have chloroplasts and cell walls).	Compare and contrast plant cell organelles and animal cell organelles
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Cell Biology and Biochemistry	<ul style="list-style-type: none"> ◆ Define or identify the commonly found organelles (wall, no wall, chloroplast, membrane, cytoplasm, nucleus) in plants and/or animal cells ◆ Label the diagrams of a plant and animal cells 	<ul style="list-style-type: none"> ◆ Distinguish between plant and animals cells ◆ Using a graphic organizer classify organelles (wall, no wall, chloroplast, membrane, cytoplasm, nucleus) commonly found in plant and animal cells 	<ul style="list-style-type: none"> ◆ Using a Venn Diagram compare and contrast plant and animal cell organelles (wall, no wall, chloroplast, membrane, cytoplasm, nucleus) ◆ Identify the similarities and differences in plant cell organelles and animal cell organelles

CONTENT Science

STRAND Cell Biology and Biochemistry

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Cell Biology	B.4.4	Describe that the work of the cell is carried out by structures made up of many different types of large (macro) molecules that it assembles, such as proteins, carbohydrates, lipids, and nucleic acids.	<ul style="list-style-type: none"> Describe cellular construction of macromolecules and the jobs of these structures (reproduction, respiration, etc.)
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Cell Biology and Biochemistry	<ul style="list-style-type: none"> Define proteins, carbohydrates, lipids, and/or nucleic acids Define cell function and/or cell structure 	<ul style="list-style-type: none"> Identify the types of macromolecules (lipids, carbohydrates, and nucleic acids) and the function they serve Describe the characteristics of macromolecules 	<ul style="list-style-type: none"> Describe why the body needs macromolecules (lipids, carbohydrates, and nucleic acids) Illustrate cell structure and identify how each molecule contributes to cell function

CONTENT Science

STRAND Genetics and Evolution

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Genetics	B.7.2	Explain how hereditary information is passed from parents to offspring in the form of “genes,” which are long stretches of DNA consisting of sequences of nucleotides. Explain that in eukaryotes, the genes are contained in chromosomes, which are bodies made up of DNA and various proteins.	<ul style="list-style-type: none"> Explain how hereditary information is passed via genes
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Genetics and Evolution	<ul style="list-style-type: none"> Identify that inherited characteristics are called “traits” Identify characteristics that are inherited (passed down from parents) 	<ul style="list-style-type: none"> Explain the role of offspring, genes, DNA, and chromosomes in the heredity process Identify the relationship between offspring and heredity Explain that genes are passed from parent to offspring Explain that sexual reproduction leads to offspring with traits similar to each parent Explain that asexual reproduction results in offspring identical to the parent 	<ul style="list-style-type: none"> Describe the relationship between genes and chromosomes Use manipulatives to demonstrate the relationship between genes and chromosomes Use manipulatives to show the relationship between DNA and chromosomes Describe the structure of chromosomes and explain how hereditary information is passed to offspring in genes Identify and describe similarities and differences among multiple offspring of the same parents (plant or animal) Explain that the cell contains genes that are responsible for characteristics that are passed down from parent to offspring

CONTENT Science

STRAND Genetics and Evolution

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Genetics	B.7.5	Differentiate between the functions of mitosis and meiosis. Mitosis is a process by which a cell divides into each of two daughter cells, each of which has the same number of chromosomes as the original cell. Meiosis is a process of cell division in organisms that reproduce sexually, during which the nucleus divides eventually into four nuclei, each of which contains half of the usual number of chromosomes.	<ul style="list-style-type: none"> ◆ Differentiate between mitosis and meiosis
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Genetics and Evolution	<ul style="list-style-type: none"> ◆ Define mitosis, meiosis, and daughter cells ◆ Identify graphic representations of mitosis and meiosis ◆ Recognize that cells become old and need to be replaced ◆ Recognize that cells reproduce 	<ul style="list-style-type: none"> ◆ Describe each step of mitosis or meiosis (using technology or models) ◆ Explain that mitosis is the division of body cells ◆ Explain that meiosis is the division of sex cells (egg, sperm, etc.) ◆ Determine what kind of cells divide through the process of mitosis and/or meiosis. 	<ul style="list-style-type: none"> ◆ Differentiate between mitosis and meiosis using a graphic organizer ◆ Illustrate or model mitosis and meiosis ◆ Compare and contrast mitosis and meiosis (e.g., using a Venn Diagram)

CONTENT Science

STRAND Genetics and Evolution

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Genetics	B.8.2	Explain how the genetic information in DNA molecules provides the basic form of instructions for assembling protein molecules and that this mechanism is the same for all life forms.	<ul style="list-style-type: none"> ◆ Explain that DNA molecules instruct assembly of protein molecules in all life forms
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Genetics and Evolution	<ul style="list-style-type: none"> ◆ List parts of a DNA molecule (bases- Adenine (A), Guanine (G), Thymine (T) and Cytosine (C), sugar, and phosphate) ◆ Identify DNA and protein molecules 	<ul style="list-style-type: none"> ◆ Explain the relationship between DNA molecules and protein molecules (using a graphic organizer to show/explain the relationship) ◆ Label or color code the parts of a DNA molecule 	<ul style="list-style-type: none"> ◆ Distinguish between a DNA molecule and a protein molecule (using pictures or models) ◆ Describe the make-up of a DNA molecule (sugar made up of hydrogen and protein bases that is a spiral helix)

CONTENT Science

STRAND Genetics and Evolution

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Genetics	B.8.3	Understand and explain that specialization of cells is almost always due to different patterns of gene expression, rather than differences in the genes themselves.	<ul style="list-style-type: none"> Understand and explain the specialization of cells
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Genetics and Evolution	<ul style="list-style-type: none"> Describe cell specialization List different types of cells found in the body (e.g., nerve, muscle, and blood) 	<ul style="list-style-type: none"> Determine that organs of the body have specialized cells (matching, graphic organizer, picture, etc.) Explain the function of specialized cells (nerve, muscle, and blood.) 	<ul style="list-style-type: none"> Use drawings or models to compare the relationship of specialized cells and organs of the body Describe the specific function or job of the cells (e.g., blood cells, muscle cells, nerve cells, etc.)

CONTENT Science

STRAND Genetics and Evolution

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Genetics	B.9.2	Explain the mechanisms of genetic mutations and chromosomal recombinations, and when and how they are passed on to offspring.	◆ Explain that genetic mutations can cause a genetic disorder
Less Complex		Possible Entry Points	More Complex
<u>The student will:</u>		<u>The student will:</u>	<u>The student will:</u>
Genetics and Evolution	<ul style="list-style-type: none"> ◆ Define genetic disorders as a result of genetic mutation ◆ Identify some genetic disorders based on characteristics (Down Syndrome, Cystic Fibrosis, Hemophilia, etc.) 	<ul style="list-style-type: none"> ◆ Explain how and when genetic disorders are passed to offspring, using pictorial representation and technology ◆ Given various diseases and disorders, classify as either genetic or non-genetic (using technology or pictorial representation) ◆ Identify how DNA can change or mutate 	<ul style="list-style-type: none"> ◆ Describe how genetic disorders are caused by genetic mutations (using technology, film, etc.) ◆ Explain how mutations can be harmful or beneficial by using pictorial representations and technology/films (flower, fruits with no seeds, etc.)

CONTENT Science

STRAND Genetics and Evolution

Grade HS			
Learning Standards as written			Essential and Prioritized Skill
Genetics	B.9.3	Explain how the sorting and recombination of genes in sexual reproduction result in a vast variety of potential allele combinations in the offspring of any two parents.	<ul style="list-style-type: none"> ◆ Explain how sexual reproduction results in variety
Less Complex		Possible Entry Points	More Complex
The student will:		The student will:	The student will:
Genetics and Evolution	<ul style="list-style-type: none"> ◆ Define the terms allele /number of allele found in both male and females, (part of the gene that determines traits; every sperm and egg has 23) sexual reproduction (coming together of a sperm and egg which produces a gamete), gamete (the union of a sperm and egg) ◆ List the components of sexual reproduction (sperm, egg, and gamete) ◆ Identify organisms that reproduce sexually (using pictorial representation) 	<ul style="list-style-type: none"> ◆ List and describe the components of sexual reproduction (sperm, egg, and gamete) ◆ Describe how traits of an offspring depend on the combination of dominant and recessive alleles 	<ul style="list-style-type: none"> ◆ Summarize the types of organisms that carry out sexual reproduction using a graphic organizer to describe the sperm (male), egg (female), and gamete of human offspring ◆ Explain how sexual reproduction leads to variation in offspring ◆ Identify single-gene traits and describe all possible genotypic and phenotypic combinations (e.g., choose two traits that follow simple Mendelian inheritance rules)