

Entry Points – Grade 8

ELA

Common Core Crosswalk with DC CAS-Alt Entry Points

August 2012

| ELA | Eighth Grade | | | | | | |
|----------------------|---|--|--|--|---|-----------|---|
| DC Strand | DC Standard* | Essential and Prioritized Skill | Entry Point Less Complex | Entry Point More Complex | Entry Point Most Complex | CC Strand | CC Matched Standard |
| Language Development | 8.LD-V.9. Monitor text for unknown words or words with novel meanings, using word, sentences, and paragraph clues to determine meaning. | Identify unknown words or words with novel meanings in text and use text clues to determine the meaning. | <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 of 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. ◆ Underline words with multiple meanings in a sentence containing words with multiple meanings. | <ul style="list-style-type: none"> ◆ Underline unknown words 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/objects representing "skirt" -piece of clothing and moving around an object-to appropriate sentences). | Language | 8.L.4.a Use context (e.g., the overall meaning of a sentence or paragraph; a word's position or function in a sentence) as a clue to the meaning of a word or phrase. |
| Language Development | 8.LD-V.10. Understand and explain "shades of meaning" for related words. | Understand and explain "shades of meaning" for related words. | <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). ◆ Give synonyms for each word on a list. ◆ 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 angry). ◆ Match word with similar meanings. | <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). | Language | 8.L.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. |

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| DC Strand | DC Standard* | Essential and Prioritized Skill | Entry Point Less Complex | Entry Point More Complex | Entry Point Most Complex | CC Strand | CC Matched Standard |
| Literary Text | 8.LT-G.2. 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. | <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 objects representing adventure and one representing mystery, student will match that genre to texts). ◆ Given two text from the same authors match the purpose with the text. ◆ Define aesthetic purpose. | <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 purpose and details that help accomplish that purpose. | Reading: Literature | 8.R.L.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style. |
| Literary Text | 8.LT-F.5. Interpret a 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. | <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. | Reading: Literature | 8.R.L.3 : Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. |

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| Literary Text | 8.LT-F.6. 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. | <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 | Reading: Literature | 8.R.L.3 : Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. |
| Literary Text | 8.LT-F.8. Analyze the effects of sound (alliteration, internal rhyme, rhyme scheme), figurative language (personification, metaphor, simile, hyperbole), and graphics (capital letters, line length, word positions) on the meaning of a poem. | Analyze the effects of sound, figurative language, and graphics to interpret the meaning of a poem. | <ul style="list-style-type: none"> ◆ Identify figurative language in given poem (personification, metaphor, simile, hyperbole). ◆ Given a familiar poem, identify the graphic features (capital 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 on 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). | Language | 6.L.5.a Interpret figures of speech (e.g., personification) in context. |

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| Literary Text | 8.LT-S.10. 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. | <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. | Reading: Literature | 8.R.L.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. |

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| DC Strand | DC Standard* | Essential and Prioritized Skill | Entry Point Less Complex | Entry Point More Complex | Entry Point Most Complex | CC Strand | CC Matched Standard |
| Informational Text | 8.IT-E.1. 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. | <ul style="list-style-type: none"> ◆ Match problems stated in a reading passage to the passage. ◆ Identify the topic of an article. ◆ Match central ideas to the correct reading or passage. | 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: prose 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}. | Reading: Informational Text | 8.R.1.9 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation. |

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| Informational Text | 8.IT-E.2. Explain how an author uses word choice and organization of text to achieve his purpose. | Explain author's word choice and organization of text to achieve his/her purpose. | <ul style="list-style-type: none"> ◆ Using context clues, identify the meaning of unfamiliar words. ◆ Identify words with multiple meanings. ◆ List and define the different organizational patterns (ex: chronology, comparison, contrast, enumeration, etc). | <ul style="list-style-type: none"> ◆ Identify the organizational method used in the text. ◆ Underline/highlight/point to words or sentences that support the author's purpose. ◆ Identify author's purpose. | <ul style="list-style-type: none"> ◆ Describe an author's word choice within a passage. ◆ Describe the organization of the text and why the author chose it. ◆ 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") | Reading: Informational Text | 8.R.1.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept. |
| Informational Text | 8.IT-E.3. 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. | <ul style="list-style-type: none"> ◆ Distinguish between two passages, one expository and one literary. ◆ Define implicit purpose. ◆ Define explicit purpose. ◆ Define theme. | <ul style="list-style-type: none"> ◆ Identify author's purpose implicit or explicit in expository text. ◆ Identify theme in literary text (e.g., from a choice of 3 picture cards representing theme, student will identify the theme). ◆ Given two literary passages, match the theme with the passage. ◆ Given two expository passages, match the purpose with the passage. | <ul style="list-style-type: none"> ◆ Fill in a graphic organizer comparing theme and author's purpose (e.g., good vs. evil and to entertain). ◆ Given familiar text, distinguish between the purpose of an expository text and the theme of the literary text. ◆ Given two familiar text one expository and one literary, match the theme and purpose to the appropriated passage. | Reading: Informational Text | 8.R.1.3 : Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories). |

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| Language Development | 8.LD-V.10. Understand and explain "shades of meaning" for related words. | Understand and explain "shades of meaning" for related words. | <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). ◆ Give synonyms for each word on a list. ◆ 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 angry). ◆ Match word with similar meanings. | <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). | Language | 8.L.5 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. |

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| Literary Text | 8.LT-G.2. 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. | <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 e same author, match the genre with the text (e.g., using objects representing adventure and one representing mystery, student will match that genre to texts). ◆ Given two text from the same authors match the purpose with the text. ◆ Define aesthetic purpose. | <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 purpose and details that help accomplish that purpose. | Reading: Literature | 8.R.L.5 Compare and contrast the structure of two or more texts and analyze how the differing structure of each text contributes to its meaning and style. |
| Literary Text | 8.LT-F.5. Interpret a 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. | <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. | Reading: Literature | 8.R.L.3 : Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. |

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| Literary Text | 8.LT-F.6. 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. | <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. | Reading: Literature | 8.R.L.3 : Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision. |
| Literary Text | 8.LT-F.8. Analyze the effects of sound (alliteration, internal rhyme, rhyme scheme), figurative language (personification, metaphor, simile, hyperbole), and graphics (capital letters, line length, word positions) on the meaning of a poem. | Analyze the effects of sound, figurative language, and graphics to interpret the meaning of a poem. | <ul style="list-style-type: none"> ◆ Identify figurative language in given poem (personification, metaphor, simile, hyperbole). ◆ Given a familiar poem, identify the graphic features (capital 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 on 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). | Language | 6.L.5.a Interpret figures of speech (e.g., personification) in context. |

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| Literary Text | 8.LT-S.10. 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. | <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. | Reading: Literature | 8.R.L.4 Determine the meaning of words and phrases as they are used in a text, including figurative and connotative meanings; analyze the impact of specific word choices on meaning and tone, including analogies or allusions to other texts. |
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| <p>Informational Text</p> | <p>8.IT-E.1. Compare (and contrast) the central ideas, problems, or situations from readings on a specific topic selected to reflect a range of viewpoints.</p> | <p>Compare and contrast central ideas, problems, or situations from readings on a specific topic.</p> | <ul style="list-style-type: none"> ◆ Match problems stated in a reading passage to the passage. ◆ Identify the topic of an article. ◆ Match central ideas to the correct reading or passage. | <p>Use graphic organizer to compare author's purpose in two readings on the same topic.</p> <p>Categorize central ideas, problems, or situations from various readings on a topic (ex: prose and cons of smaller class size in schools).</p> | <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}. | <p style="text-align: center;">Reading: Informational Text</p> | <p>8.R.1.9 Analyze a case in which two or more texts provide conflicting information on the same topic and identify where the texts disagree on matters of fact or interpretation.</p> |
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| Informational Text | 8.IT-E.2. Explain how an author uses word choice and organization of text to achieve his purpose. | Explain author's word choice and organization of text to achieve his/her purpose. | <ul style="list-style-type: none"> ◆ Using context clues, identify the meaning of unfamiliar words. ◆ Identify words with multiple meanings. ◆ List and define the different organizational patterns (ex: chronology, comparison, contrast, enumeration, etc). | <ul style="list-style-type: none"> ◆ Identify the organizational method used in the text. ◆ Underline/highlight/point to words or sentences that support the author's purpose. ◆ Identify author's purpose. | <ul style="list-style-type: none"> ◆ Describe an author's word choice within a passage. ◆ Describe the organization of the text and why the author chose it. ◆ 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") | Reading: Informational Text | 8.R.1.5 Analyze in detail the structure of a specific paragraph in a text, including the role of particular sentences in developing and refining a key concept. |
| Informational Text | 8.IT-E.3. 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. | <ul style="list-style-type: none"> ◆ Distinguish between two passages, one expository and one literary. ◆ Define implicit purpose. ◆ Define explicit purpose. ◆ Define theme. | <ul style="list-style-type: none"> ◆ Identify author's purpose implicit or explicit in expository text. ◆ Identify theme in literary text (e.g., from a choice of 3 picture cards representing theme, student will identify the theme). ◆ Given two literary passages, match the theme with the passage. ◆ Given two expository passages, match the purpose with the passage. | <ul style="list-style-type: none"> ◆ Fill in a graphic organizer comparing theme and author's purpose (e.g., good vs. evil and to entertain). ◆ Given familiar text, distinguish between the purpose of an expository text and the theme of the literary text. ◆ Given two familiar text one expository and one literary, match the theme and purpose to the appropriated passage. | Reading: Informational Text | 8.R.1.3 : Analyze how a text makes connections among and distinctions between individuals, ideas, or events (e.g., through comparisons, analogies, or categories). |

CONTENT Reading/ELA
 STRAND Language Development

| Grade 8 | | | |
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| 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 | | | |
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| 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.

DC CAS-Alt

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 |
| The student will: | | The student will: | The student will: |
| 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.

DC CAS-Alt

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 | | | |
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| 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 | | | |
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| 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 | | | |
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| 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 |
| <u>The student will:</u> | | <u>The student will:</u> | <u>The student will:</u> |
| Informational Text | <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 | | | |
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| 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) | ◆ Given familiar text, distinguish between the purpose of an expository text and the theme of the literary text |
| | ◆ Define explicit purpose | ◆ Given two literary passages, match the theme with the passage | ◆ Given two familiar texts one expository and one literary, match the theme and purpose to the appropriate passage |
| | ◆ Define theme | ◆ Given two expository passages, match the purpose with the passage | |

Entry Points – Grade 8

Mathematics

| Mathematics | Eighth Grade | | | | | | |
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| DC Strand | DC Standard* | Essential and Prioritized Skill | Entry Point Less Complex | Entry Point | Entry Point More Complex | CCSS Strand | CCSS Matched Standard |
| Number Sense and Operations | 8NSO-N7 Demonstrate an understanding of the properties of arithmetic operations on rational numbers. | Apply the properties of arithmetic operations on rational numbers. | <p>*From an array of number sentences, locate the one that illustrates associative property ("$a + (b + c) = (a + b) + c$" or "$a(bc) = (ab)c$")</p> <ul style="list-style-type: none"> • Form 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>*Given 3 choices, select the property illustrated in a number sentence</p> <ul style="list-style-type: none"> • Classify number sentences according to the property illustrated | <p>*Use associative, commutative or distributive property to solve problems.</p> <ul style="list-style-type: none"> • Create a number sentence that demonstrates commutative property, associative property, and/or distributive property | Number and Operations in Base Ten Operations and Algebraic Thinking | <p>2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations.</p> <p>3.OA.5 Apply properties of operations as strategies to multiply and divide.2 Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.)</p> |

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| Number Sense and Operations | 8NSO-E17 Determine estimates to a certain stated accuracy. | Estimate to a stated accuracy. | <p>*Locate numbers on a number line</p> <ul style="list-style-type: none"> • 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 | <p>*Round a number to the nearest tenth (e.g., .158 to .16)</p> <ul style="list-style-type: none"> • Estimate if you can have enough money to purchase a specific item | <p>*Estimate to the nearest whole dollar</p> <ul style="list-style-type: none"> • 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) | Equations and Expressions | <p>7.EE.3 Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</p> |
| Number Sense and Operations | 8NSO-C9 Solve problems involving ratio units such as miles per hour, dollars per pound, or persons per square mile. | Solve problems involving ratio units. | <p>*Given an array of number sentences and ratio units, select the ratio unit (350.6 lbs., 5 mi per hour.).</p> <ul style="list-style-type: none"> • Complete the ratio unit by selecting the correct unit from an array (60 mi/(lb,\$,hr). | <p>*Identify a ratio unit.</p> <ul style="list-style-type: none"> • Match a ratio unit with the words describing it | <p>*Solve problems involving ratio units.</p> <ul style="list-style-type: none"> • Use task analysis to solve problems involving ratio units. | Ratios and Proportional Relationships | <p>7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</p> <p>7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error.</p> |

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| Number Sense and Operations | 8NSO-C11 Solve problems that involve markups, commissions, profits, and simple and compound interest. | Apply markups, commissions, profits and simple and/or compound interest | *Identify the simple interest formula from the three choices <ul style="list-style-type: none"> Using a picture sentence depicting the sequence of events involving mark-up, profits and interest, select the transaction | *Define the variables in the simple interest formula <ul style="list-style-type: none"> Given a word problem, select the appropriate formula to be used to solve a problem (Formula may be expressed pictorially) | *Given the whole sale price and markup value of an item, determine the retail price by using task analysis <ul style="list-style-type: none"> Given the formula, $I = prt$, compute the interest of an investment. | Ratios and Proportional Relationships | 7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour. 7.RP.3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. |
| Patterns, Relations & Algebra | 8PRA2 Set up and solve linear equations and inequalities with one or two variables using algebraic methods and graphs. | Set up and solve linear equations and inequalities. | *Identify all six inequality symbols. <ul style="list-style-type: none"> Fill in the blank with the appropriate inequality symbol. | *Set up linear equations <ul style="list-style-type: none"> Solve linear equations | *From word problem (may be expressed pictorially), set up and solve linear equations using algebraic methods <ul style="list-style-type: none"> From a word problem (maybe expressed pictorially), set up and solve linear equations using graphs | Equations and Expressions | 8.EE.7 Solve linear equations in one variable. 8.EE.7.a Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers). |

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| Patterns, Relations & Algebra | 8PRA3 Use linear equations to model and analyze problems involving proportional relationships. | Use linear equations to model and analyze proportional relationships | *Identify a proportion <ul style="list-style-type: none"> • Fill in the missing number in a given proportion | *Match a proportion to its graphical representation <ul style="list-style-type: none"> • Given a ratio, select an equivalent ratio | *Model proportional relationship with a linear equation <ul style="list-style-type: none"> • 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. | Ratios and Proportional Relationships | 7.RP.1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour. |
| Patterns, Relations & Algebra | 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., $(-2)(-x + 2) = 2x - 4$]. | 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. | *Identify negative and positive numbers <ul style="list-style-type: none"> • 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 | *Using manipulatives (algebra tiles) that represent negative numbers, show that the product is positive <ul style="list-style-type: none"> • 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 | *Compare the time lines of historical periods that include A.D. and B.C.. <ul style="list-style-type: none"> • Using a pictorial situation involving distance or time, demonstrate that neither can be a negative value | The Number System | 7.NS.1.a. Describe situations in which opposite quantities combine to make 0. For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged. 7.NS.1.c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. |

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| Patterns, Relations & Algebra | 8PRA8 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 rectangle = lw (A rectangle as a function of l and w). d | Explain and analyze functional relationships both quantitatively and qualitatively using pictures, graphs, charts, and equations. | *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. | *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. | *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. | Functions | 8.F.3. Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear. For example, the function $A = s^2$ giving the area of a square as a function of its side length is not linear because its graph contains the points (1,1), (2,4) and (3,9), which are not on a straight line. |
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| <p>Data Analysis, Patterns & Relations</p> | <p>8DASP2 Select, create, interpret, and use various tabular and graphical representations of data (e.g., scatter plots, box-and-whisker plots).</p> | <p>Create and interpret graphical or tabular representations of data.</p> | <p>*Given several graphs, select the one that matches a set of data points</p> <ul style="list-style-type: none"> • From four different types of graphs, select two that represent the same set of data points | <p>*Interpret data in a graph</p> <ul style="list-style-type: none"> • Match a graph with appropriate data | <p>*Create a tabular representation of data and answer questions about the data</p> <ul style="list-style-type: none"> • Create a graph and describe the data within it | <p>Measurement and Data Statistics and Probability Functions</p> | <p>3.MD.1. Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.SP.1 Construct and interpret scatter plots for bivariate measurement data to investigate patterns of association between two quantities. Describe patterns such as clustering, outliers, positive or negative association, linear association, and nonlinear association.</p> <p>8.F.2 Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions). For example, given a linear function represented by a table of values and a linear function represented by an algebraic expression, determine which function has the greater rate of change.</p> |
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| Data Analysis, Patterns & Relations | 8DASP3 Recognize practices of collecting and displaying data that may bias the presentation or analysis. | Recognize practices that bias the presentation or analysis of data. | <p>*Given three scenarios, recognize the one that represents bias</p> <ul style="list-style-type: none"> • Given two graphs and their data points, identify which one is incorrect | <p>*Given two data displays, select the one which demonstrates bias (e.g. a graph obviously skewed.)</p> <ul style="list-style-type: none"> • 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.) | <p>*From a list of data collecting practices, select the ones that would bias the analysis</p> <ul style="list-style-type: none"> • From a list of data collecting practices, select the ones that would bias the presentation analysis (scale, dimension, omitted info.) | Statistics and Probability | <p>6.SP.5. Summarize numerical data sets in relation to their context, such as by:</p> <ol style="list-style-type: none"> Reporting the number of observations. Describing the nature of the attribute under investigation, including how it was measured and its units of measurement. Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data were gathered. |
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CONTENT: Mathematics

STRAND: Number Sense & Operations

| Grade 8 | | |
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| 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><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><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><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 |
| <u>The student will:</u> ♦ Identify a proportion ♦ Fill in the missing number in a given proportion | <u>The student will:</u> ♦ Match a proportion to its graphical representation ♦ Given a ratio, select an equivalent ratio | <u>The student will:</u> ♦ 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 | | |
|--|--|---|
| Learning Standards as written Patterns, Relations, & Algebra | 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., $(-2)(-x + 2) = 2x - 4$]. | 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. |
| 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

Learning Standards as written

Patterns,
Relations, &
Algebra

8PRA8

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).

Essential and Prioritized Skill

Explain and analyze functional relationships both quantitatively and qualitatively using pictures, graphs, charts, and equations.

Less Complex

The student will:

- ◆ 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.

Possible Entry Points

The student will:

- ◆ 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.

More Complex

The student will:

- ◆ 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, Patterns, & Relations

Grade 8

Learning Standards as written

Data Analysis, 8DASP-2 Select, create, interpret, and use various tabular and graphical representations of data (e.g., scatter plots, box-and-whisker plots).
Patterns, &
Relations

Essential and Prioritized Skill

- ◆ Create and interpret graphical or tabular representations of data.

Less Complex Possible Entry Points More Complex

The student will:

- ◆ Given several graphs, select the one that matches a set of data points
- ◆ From four different types of graphs, select two that represent the same set of data points

The student will:

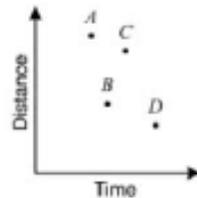
- ◆ Interpret data in a graph
- ◆ Match a graph with appropriate data

The student will:

- ◆ Create a tabular representation of data and answer questions about the data
- ◆ Create a graph and describe the data within it

General Education Example

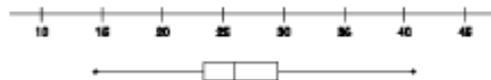
Example: The scatter plot below gives information about four different car trips.



Which point represents the trip with the fastest average speed?

(See also AI.P.4, AI.D.1)

Example: The box-and-whisker graph shown below represents the results of a survey of the estimated gas mileage of 100 car models.



Which statistics – mean, median, mode, range – can be determined from this graph?

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:

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

The student will:

- ◆ 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.)

The student will:

- ◆ 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.)

Entry Points – Grade 8

Science

CONTENT Science

STRAND Structure of Matter

| Grade 8 | | | |
|-------------------------------|--|---|---|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Matter and Reactions | 8.3.2 | 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 |
| Matter and Reactions | The student will: | | The student will: |
| | #####◆ Define atom #####◆ Name simple elements (hydrogen, oxygen, carbon) | #####◆ 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 | #####◆ Construct a model of an atom ◆ Combine shapes to make the “Modern Model of an Atom” |

CONTENT Science

STRAND Matter and Reactions

| Grade 8 | | | |
|---------------------------------|--|--|---|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Matter and Reactions | 8.4.1 | 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 |
| <u>The student will:</u> | | <u>The student will:</u> | <u>The student will:</u> |
| Matter and Reactions | <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 Matter and Reactions

| Grade 8 | | | |
|---------------------------------|--|---|---|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Matter and Reactions | 8.5.5 | 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 |
| <u>The student will:</u> | | <u>The student will:</u> | <u>The student will:</u> |
| Matter and Reactions | <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 Matter and Reactions

| Grade 8 | | | |
|---------------------------------|---|--|---|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Matter and Reactions | 8.7.2 | Explain how the idea of atoms explains the conservation of matter: <i>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.</i> | <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> |
| Matter and 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 Matter and Reactions

| Grade 8 | | | |
|---------------------------------|--|--|--|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Matter and Reactions | 8.8.3 | 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 | More Complex |
| <u>The student will:</u> | | <u>The student will:</u> | <u>The student will:</u> |
| Matter and 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} | <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 Matter and Reactions

| Grade 8 | | | |
|---------------------------------|---|--|--|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Matter and Reactions | 8.8.4 | Recognize that solutions can be acidic, neutral, or basic, 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> |
| Matter and 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 |
| Energy and Waves | 8.12.2 | 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). | ♦ 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> |
| Energy and Waves | <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 |
| Energy and Waves | 8.12.6 | 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> |
| Energy and Waves | <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 |
| Energy and Waves | 8.15.2 | 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. | ♦ 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> |
| Energy and Waves | <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 |
| Energy and Waves | 8.16.1 | Explain that in processes at the scale of atomic size or greater, energy cannot be created or destroyed but only changed from one form into 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> |
| Energy and Waves | <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 <div style="border: 1px solid black; padding: 2px; margin: 5px 0;"> <p style="text-align: center;">Example:</p> <p style="text-align: center;">potential energy → kinetic energy → thermal energy</p> </div> <ul style="list-style-type: none"> ◆ Define the law of conservation of energy |

CONTENT Science

STRAND Energy and Waves

| Grade 8 | | | |
|---------------------------------|--|---|--|
| Learning Standards as written | | | Essential and Prioritized Skill |
| Energy and Waves | 8.15.4 | 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 |
| <u>The student will:</u> | | <u>The student will:</u> | <u>The student will:</u> |
| Energy and Waves | <ul style="list-style-type: none"> ◆ 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 | <ul style="list-style-type: none"> ◆ Show the differences of the forms of heat energy using a graphic organizer ◆ List three ways that heat is transferred ◆ Using a graphic organizer, describe similarities of heat energy | <ul style="list-style-type: none"> ◆ Using a graphic organizer, describe similarities and differences of heat energy ◆ Show the similarities and differences of the forms of heat energy using a graphic organizer |

CONTENT Science**STRAND** Forces

| Grade 8 | | | |
|---------------------------------|--|---|--|
| Learning Standards as Written | | | Essential and Prioritized Skill |
| Forces | 8.10.1 | Explain that every object exerts an attractive gravitational force on every other object. | <ul style="list-style-type: none"> Understand gravitational force as it relates to objects. |
| 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 gravitational force. Identify an object that exerts a gravitational force. | <ul style="list-style-type: none"> Demonstrate gravitational force. Use different objects to demonstrate gravitational force. | <ul style="list-style-type: none"> Using a diagram, compare the amount of gravitational force acting between objects. Explain how an object's weight is a measure of the gravitational force of a planet/moon acting on that object. |

| Grade 8 | | | |
|---------------------------------|---|---|---|
| Learning Standards as Written | | | Essential and Prioritized Skill |
| Forces | 8.11.1 | Recognize that a force has both magnitude and direction. | <ul style="list-style-type: none"> Understand vector quantity. |
| 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 magnitude and direction. Distinguish between magnitude and direction. | <ul style="list-style-type: none"> Illustrate the magnitude of two objects. Using objects, demonstrate a force. | <ul style="list-style-type: none"> Using a diagram, demonstrate a force. Classify vectors using quantities. |

CONTENT Science

STRAND Forces

| Grade 8 | | | |
|-------------------------------|---|---|---|
| Learning Standards as Written | | | Essential and Prioritized Skill |
| Forces | 8.11.2 | Observe and explain that when the forces on an object are balanced (equal and opposite forces that add up to zero), the motion of the object does not change. | <ul style="list-style-type: none"> Demonstrate and understanding that when the forces on an object are balanced, the motion of the object does not change. |
| Less Complex | | Possible Entry Points | More Complex |
| The student will: | | The student will: | The student will: |
| | <ul style="list-style-type: none"> Define motion Identify a balanced force. | <ul style="list-style-type: none"> Define equal and opposite forces. List three examples of a balanced force. Using words, objects, or pictures, match balanced forces to a definition of balanced forces. | <ul style="list-style-type: none"> Draw a diagram to show a balanced force. Describe how forces affect the motion of an object. |