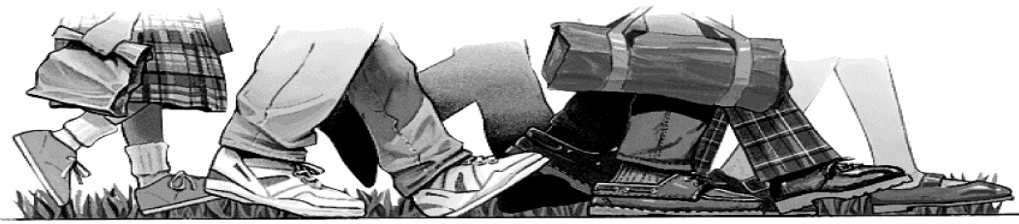




# Learning Goals

## Grade

# 4



**We prepare learners for the future**

### **Our Mission**

The mission of Plainfield Community Consolidated School District No. 202 — the primary source of comprehensive, high quality education in a trusting, supportive environment — is to develop, at all levels, responsible, successful citizens by providing an education, in cooperation with home and community, which: fosters each individual's value, uniqueness, and importance and promotes lifelong learning in an ever-changing society.

### **Our Goals**

District 202 recognizes the need for a vision that embraces and embodies the desires and aspirations of our learning community. We will encourage and support our students, parents, community, staff, and Board of Education as they dedicate their time, talent, and resources in support and pursuit of these goals.

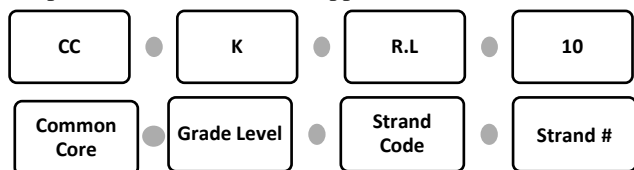
1. Our Learning Community will be a place where each person can achieve his or her maximum individual potential.
2. Optimal learning cultures, climates, and facilities will be developed and maintained.
3. Communication strategies will create a climate of inclusion, trust, and shared responsibility.
4. Resources will be developed and optimized to fulfill the vision, mission, and goals of the District.

This brochure created by K-5 curriculum committees in all learning areas is intended to provide parents and community members with a listing of important learning goals. The lists does contain all of the content or skills that students will experience during the school year for English Language Arts and Math. The lists does not contain all of the content or skills that students will experience during the school year for Science, Social Studies and Physical Education/Health. A more complete listing is used by teachers to prepare lessons and activities on a daily basis; however, this list should help parents and teachers as they discuss academic progress.

### **Key**

Outcomes are the unit of study

Components are the skills to support the unit



### **Strand Codes**

RL = Reading Standards for Literature

RI = Reading Standards for Informational Text

RF = Reading Standards: Foundational Skills

W = Writing

SL = Speaking and Listening

L = Language

### **English Language Arts**

**OUTCOME A:** Apply grade level phonics and word analysis when decoding and read with fluency to support comprehension.

#### ***Components***

ELA.004.A.1 Orally read with sufficient accuracy and fluency to support comprehension. CC.4.R.F.4

ELA.004.A.2 Orally read on-level text with purpose and answer questions to demonstrate understanding. CC.4.R.F.4a

ELA.004.A.3 Demonstrate self-correction strategies (e.g. use context, rereading) when orally reading a passage to confirm or self-correct word recognition and understanding. CC.4.R.F.4c

ELA.004.A.4 Orally read on-level prose and poetry with accuracy, appropriate rate, and expression. CC.4.R.F.4b

ELA.004.A.5 Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. CC.4.R.F.3a

**OUTCOME B:** Identify, read, analyze and comprehend literature, including stories, dramas, and poetry, for implicit and explicit meanings in grade appropriate text proficiently, with scaffolding as needed at the high end of the range. CC.4.R.L.10

#### ***Components***

ELA.004.B.1 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text. CC.4.R.L.7

ELA.004.B.2 Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures. CC.4.R.L.9

ELA.004.B.3 Utilize details and examples in a text to explain what the text says explicitly and when drawing inferences from the text (e.g. probable outcomes or actions before, during, and after reading, generalizations about the text). CC.4.R.L.1

ELA.004.B.4 Justify a theme of a story, drama, or poem from the details in the text; summarize the main ideas and supporting details of a passage. CC.4.R.L.2

ELA.004.B.5 Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions) and explain how it affects the plot within a text. CC.4.R.L.3

ELA.004.B.6 Apply various strategies (e.g. context clues, root words, affixes) to determine the meanings of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean). CC.4.R.L.4

ELA.004.B.7 Explain major differences between poems, drama, and prose, and give examples of the structural elements of poems (e.g., verse, rhythm, meter, rhyme, and rhyme scheme) and drama (e.g., casts of characters, setting descriptions, dialogue, stage directions) when writing or speaking about a text. CC.4.R.L.5

ELA.004.B.8 Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations. CC.4.R.L.6

**OUTCOME C:** Locate, read, analyze and comprehend informational texts, including history/social studies, science, and technical texts, for key ideas and details and integrate implicit and explicit knowledge in the grades appropriate text proficiently, with scaffolding as necessary at the high end of the range. CC.4.R.I.10

***Components***

ELA.004.C.1 Identify the main idea of a text and explain how it is supported by key details; summarize the text. CC.4.R.I.2

ELA.004.C.2 Identify information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears. CC.4.R.I.7

ELA.004.C.3 Explain how an author uses reasons and evidence to support particular points in a text. CC.4.R.I.8

ELA.004.C.4 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. CC.4.R.I.3

ELA.004.C.5 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area. CC.4.R.I.4

ELA.004.C.6 Compare and contrast different texts/writings of the same event or topic; describe the differences in focus and the information provided. CC.4.R.I.6

ELA.004.C.7 Locate details and examples in a text explaining what the text says explicitly and when drawing inferences from the text. CC.4.R.I.1

ELA.004.C.8 Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text. CC.4.R.I.5

**OUTCOME D:** Use the writing process to write clear, coherent, and focused multi-paragraph opinion pieces on topics or texts that support a point of view with reasons and information in which the development and organization are appropriate to task, purpose, and audience. CC.4.W.1, CC.4.W.4

***Components***

ELA.004.D.1 State a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose. CC.4.W.1.a

ELA.004.D.2 Write reasons that are supported by facts and details (CC.4.W.1.b),

ELA.004.D.3 Write words and phrases (e.g., for instance, in order to, in addition) that link opinion and reasons (CC.4.W.1.c).

ELA.004.D.4 Write a concluding statement or section related to the opinion presented. CC.4.W.1.d

ELA.004.D.5 Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. CC.4.L.1.f

ELA.004.D.6 Make correct capitalization. CC.4.L.2.a

ELA.004.D.7 Use commas and quotation marks to mark direct speech and quotations from a text. CC.4.L.2.b

ELA.004.D.8 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. CC.4.W.4

ELA.004.D.9 Spell grade-appropriate words correctly, consulting references as needed. CC.4.L.2.d

ELA.004.D.10 Plan, revise, and edit writing with peers and adults. CC.4.W.5

ELA.004.D.11 Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag). CC.4.L.1.d

**OUTCOME E:** Use the writing process to write clear, coherent, and focused multi-paragraph informative/explanatory pieces that examine a topic and convey ideas and information clearly, in which the development and organization are appropriate to task, purpose, and audience. CC.4.W.2, CC.4.W.4

***Components***

ELA.004.E.1 State a topic clearly and group related information in paragraphs and sections; utilize formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. CC.4.W.2.a

ELA.004.E.2 Produce support for the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic. CC.4.W.2.b

ELA.004.E.3 Write words and phrases (e.g., another, for example, also, because) that link ideas within categories of information. (CC.4.W.2.c)

ELA.004.E.4 Write a concluding statement or section related to the information or explanation presented CC.4.W.2.e

ELA.004.E.5 Use precise language and domain-specific vocabulary to inform about or explain the topic. CC.4.W.2.d

ELA.004.E.6 Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. CC.4.L.1.f

ELA.004.E.7 Make correct capitalization. CC.4.L.2.a

ELA.004.E.8 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. CC.4.W.4

ELA.004.E.9 Plan, revise, and edit writing with peers and adults. CC.4.W.5

ELA.004.E.10 Spell grade-appropriate words correctly, consulting references as needed. CC.4.L.2.d

**OUTCOME F:** Use the writing process to write clear, coherent, and focused multi-paragraph narrative pieces that develop real or imagined experiences or events using effective technique, descriptive details, and clear even sequences, in which the development and organization are appropriate to task, purpose, and audience. CC.4.W.3, CC.4.W.4

***Components***

ELA.004.F.1 Create an opening that describes a situation and introduces a narrator and/or characters; organize a series of events in a natural and logical order. CC.4.W.3.a

ELA.004.F.2 Use dialogue and description to develop experiences and events or show the responses of characters to situations. CC.4.W.3.b

ELA.004.F.3 Use a variety of transitional words and phrases to manage the sequence of events. CC.4.W.3.c

ELA.004.F.4 Use concrete words and phrases and sensory details to convey experiences and events precisely. CC.4.W.3.d

ELA.004.F.5 Compose a conclusion that follows from the narrated experiences or events. CC.4.W.3.e

ELA.004.F.6 Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons. CC.4.L.1.f

ELA.004.F.7 Make correct capitalization. CC.4.L.2.a

ELA.004.F.8 Choose or label punctuation for effect. CC.4.L.3.b

ELA.004.F.9 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. CC.4.W.4

ELA.004.F.10 Spell grade-appropriate words correctly, consulting references as needed. CC.4.L.2.d

ELA.004.F.11 Plan, revise, and edit writing with peers and adults. CC.4.W.5

**OUTCOME G:** Research to build and present knowledge to inform and to support analysis of texts.

***Components***

ELA.004.G.1 Develop short research projects that build knowledge through investigation of different aspects of a topic. CC.4.W.7

ELA.004.G.2 State relevant information from experiences or locate relevant information from print and digital sources; record notes and categorize information, and list sources. CC.4.W.8

ELA.004.G.3 Write evidence from literary or informational texts to support analysis, reflection, and research. CC.4.W.9

ELA.004.G.4 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. CC.4.R.I.9

ELA.004.G.5 Explain how an author uses reasons and evidence to support particular points in a text” in order to support ideas about an author's particular point. CC.4.W.9.b

ELA.004.G.6 Use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; Demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting. CC.4.W.6

ELA.004.G.7 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. CC.4.SL.4

ELA.004.G.8 Write over extended time (time for research reflection, and revision) and a shorter time (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. CC.4.W.10

ELA.004.G.9 Spell grade-appropriate words correctly, consulting references as needed. CC.4.L.2.d

**OUTCOME H:** Collaborate (one-on-one, in groups, and teacher-led) with diverse partners to support speaking and listening comprehension.

***Components***

ELA.004.H.1 Explain thoughts and ideas clearly that integrate own and ideas of others in a collaborative discussion with diverse partners on grade 4 topics and texts in a variety of formats (e.g. one-on-one, in groups, and teacher-led). CC.4.SL.1

ELA.004.H.2 State examples that explicitly draw on required preparation (after having read or studied required material) and other information known about the topic. CC.4.SL.1.b

ELA.004.H.3 Demonstrate successful collaboration by following agreed-upon rules for discussions and carry out assigned roles. CC.4.SL.1.c

ELA.004.H.4 Pose and respond to specific questions to evaluate or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. CC.4.SL.1.c

ELA.004.H.5 Review the key ideas expressed and explain their own ideas and understanding in light of the discussion. CC.4.SL.1.d

ELA.004.H.6 Diagnose portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. CC.4.SL.2

ELA.004.H.7 Identify the reasons and evidence a speaker provides to support particular points. Teachers can read text where students can identify main idea and details/persuasive main ideas. CC.4.SL.3

ELA.004.H.8 Demonstrate differentiation between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. CC.4.SL.6,CC.4.L.3c

**OUTCOME I:** Create a presentation of integrated knowledge and ideas.

***Components***

ELA.004.I.1 Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace. CC.4.SL.4

ELA.004.I.2 Integrate audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. CC.4.SL.5

ELA.004.I.3 Demonstrate differentiation between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation. CC.4.SL.6, CC.4.L.3.c

**OUTCOME J:** Conventions of Standard English: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking (CC.4.L.1) and command of the conventions of standard English capitalization, punctuation, and spelling when writing (CC.4.L.2).

***Components***

ELA.004.J.1 Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why) correctly in a sentence. CC.4.L.1.a

ELA.004.J.2 Demonstrate the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses correctly in a sentence. CC.4.L.1.b

ELA.004.J.3 Utilize modal auxiliaries (e.g., can, may, must) to convey various conditions correctly in a sentence. CC.4.L.1.c

ELA.004.J.4 Form and use prepositional phrases correctly in sentences. CC.4.L.1.e

ELA.004.J.5 Demonstrate and correctly use frequently confused words (e.g., to, too, two; there, their) in sentences. CC.4.L.1.g

ELA.004.J.6 Use a comma before a coordinating conjunction in a compound sentence. CC.4.L.2.c

**OUTCOME K:** Vocabulary Acquisition and Use: Decide or justify the meaning of unknown and multiple-meaning words and phrases (including figurative language) based on grade 4 reading and content, choosing flexibly from a range of strategies. (CC.4.L.4)

***Components***

ELA.004.K.1 Utilize context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase. CC.4.L.4.a

ELA.004.K.2 Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph). CC.4.L.4.b

ELA.004.K.3 Select reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases. CC.4.L.4.c

ELA.004.K.4 Demonstrate understanding of figurative language, word relationships, and nuances in word meanings. CC.4.L.5

ELA.004.K.5 Make use of the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context. CC.4.L.5.a

ELA.004.K.6 Identify and explain the meaning of common idioms, adages, and proverbs. CC.4.L.4.a

ELA.004.K.7 Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms). CC.4.L.5.b

ELA.004.K.8 Use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation). CC.4.L.6

ELA.004.K.9 Use words and phrases to convey ideas precisely. CC.4.L.3.a

**OUTCOME L:** Students will read and write in cursive format.

***Components***

ELA.004.L.1 Read passages produced in cursive format.

ELA.004.L.2 Write formal papers in cursive.

## **English Language Arts Honors**

**OUTCOME A:** Students apply word analysis skills and decoding strategies to acquire meaning and read with sufficient accuracy and fluency to support comprehension.

### ***Components***

ELA.04H.A.1 Use context (e.g., cause/effect relationships and comparisons in text) as a clue to the meaning of a word or phrase. CC.5.L.4.a

ELA.04H.A.2 Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., photograph, photosynthesis). CC.5.L.4.b

ELA.04H.A.3 Use the relationship between particular words (e.g., synonyms, antonyms, homographs) to better understand each of the words. CC.5.L.5.c

ELA.04H.A.4 Reference dictionaries, glossaries, thesauruses (both print and digital), to find the pronunciation and determine or clarify the precise meaning of key words and phrases. CC.5.L.4.c

ELA.04H.A.5 Accurately read all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context. CC.5.R.F.3.a

ELA.04H.A.6 Use context to confirm or self-correct word recognition and understanding, rereading as necessary. CC.5.R.F.4.c

ELA.04H.A.7 Read on-level text with fluency and understanding. C.5.R.F.4.a

ELA.04H.A.8 Use legible cursive handwriting.

**OUTCOME B:** Students use the writing process to write and communicate clear, coherent, and focused narrative pieces to accomplish a variety of purposes. Students write using standard English conventions.

### ***Components***

ELA.04H.B.1 Introduce a narrator and/or characters to orient the reader; organize an event sequence that unfolds naturally. CC.5.W.3.a

ELA.04H.B.2 Use narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations. CC.5.W.3.b

ELA.04H.B.3 Use a variety of transitional words, phrases, and clauses to manage the sequence of events. CC.5.W.3.c

ELA.04H.B.4 Use concrete words and phrases and sensory details to convey experiences and events precisely. CC.5.W.3.d

ELA.04H.B.5 Write a conclusion that follows the narrated experiences or events. CC.5.W.3.e

ELA.04H.B.6 Form and use the perfect verb tenses (e.g., I had walked; I have walked; I will have walked). CC.5.L.1.b

ELA.04H.B.7 Use verb tense to convey various times, sequences, states, and conditions. CC.5.L.1.c

ELA.04H.B.8 Identify and correct inappropriate shifts in verb tense. CC.5.L.1.d

ELA.04H.B.9 Develop and strengthen writing as needed by planning, revising (expand, combine, and reduce sentences for meaning, reader/listener interest, and style), editing, rewriting or trying a new approach with guidance and support from peers and adults. CC.5.W.5, CC.5.L.3.a

ELA.04H.B.10 Write over extended time (time for research reflection, and revision) and a shorter time (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. CC.5.W.10

**OUTCOME C:** Students use their writing process to write and communicate clear, coherent, and focused informative and explanatory pieces. Students write using standard English conventions.

### ***Components***

ELA.04H.C.1 Develop and strengthen writing as needed by planning, revising (expand, combine, and reduce sentences for meaning, reader/listener interest, and style), editing, rewriting or trying a new approach with guidance and support from peers and adults. CC.5.W.5, CC.5.L.3.a

ELA.04H.C.2 Write over extended time (time for research reflection, and revision) and a shorter time (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. CC.5.W.10

ELA.04H.C.3 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. CC.5.W.2

ELA.04H.C.4 Introduce a topic clearly, provide a general observation and focus, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. CC.5.W.2.a

ELA.04H.C.5 Develop the topic with supporting evidence, including facts, definitions, concrete details, quotations, or other information and examples related to the topic. CC.5.W.2.b

ELA.04H.C.6 Link ideas within and across categories of information using words, phrases, and clauses (e.g., in contrast, especially). CC.5.W.2.c

ELA.04H.C.7 Write with precise language and domain-specific vocabulary to inform about or explain the topic. CC.5.W.2.d

ELA.04H.C.8 Write a concluding statement or section related to the information or explanation presented. CC.5.W.2.e

ELA.04H.C.9 Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. CC.5.W.8

ELA.04H.C.10 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. CC.5.W.7

ELA.04H.C.11 Explain the function of conjunctions, prepositions, and interjections in general and their function in particular sentences. CC.5.L.1.a

ELA.04H.C.12 Use correlative conjunctions (e.g., either/or, neither/nor). CC.5.L.1.e

ELA.04H.C.13 Spell grade-appropriate words correctly, consulting references as needed. CC.5.L.2.e

**OUTCOME D:** Students read and comprehend a variety of grade level informational text, including history/social studies, science, technical texts, biographies, and autobiographies at a grade appropriate level, independently and proficiently, to analyze for key ideas and details, and to integrate implicit and explicit knowledge.

### *Components*

ELA.04H.D.1 Quote accurately from an informational text when explaining what the text says explicitly and when drawing inferences from the text. CC.5.R.I.1

ELA.04H.D.2 Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text. CC.5.R.I.2

ELA.04H.D.3 Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information. CC.5.R.I.3

ELA.04H.D.4 Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade level topic or subject area. CC.5.R.I.4

ELA.04H.D.5 Compare and contrast the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in two or more texts. CC.5.R.I.5

ELA.04H.D.6 Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent. CC.5.R.I.6

ELA.04H.D.7 Explain how an author uses reasons and evidence to support points in a text, identifying which reasons and evidence support which point(s). CC.5.R.I.8

ELA.04H.D.8 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. CC.5.R.I.9

ELA.04H.D.9 Summarize informational text. CC.5.R.L.2

**OUTCOME E:** Students read and analyze a variety of literature including stories, dramas, and poetry, for implicit and explicit meanings.



### ***Components***

ELA.04H.E.1 Quote accurately from literature when explaining what the text says explicitly and when drawing inferences from the text. CC.5.R.L.1

ELA.04H.E.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text. CC.5.R.L.2

ELA.04H.E.3 Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text (e.g., how characters interact). CC.5.R.L.3

ELA.04H.E.4 Compare and contrast stories in the same genre (e.g., mysteries and adventure stories, historical fiction, and fantasy) on their approaches to similar themes and topics, and varieties of English (e.g., dialects, registers) used in stories, dramas, or poems. CC.5.R.L.9, CC.5.L.3.b

ELA.04H.E.5 Describe how a narrator's or speaker's point of view influences how events are described. CC.5.R.L.6

ELA.04H.E.6 Read on-level prose and poetry orally with accuracy, appropriate rate, and expression. CC.5.RF.4.b

ELA.04H.E.7 Interpret figurative language, including similes, metaphors, personification, imagery, and hyperbole in context. CC.5.L.5.a

ELA.04H.E.8 Identify the meaning of common idioms and proverbs. CC.5.L.5.b

ELA.04H.E.9 Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular story, drama, or poem. CC.5.R.L.5

ELA.04H.E.10 Use underlining, quotation marks, or italics to indicate titles of works. CC.5.L.2.d

ELA.04H.E.11 Summarize literary text. CC.5.R.L.2

### **OUTCOME F: Students use the writing process to write and communicate clear, coherent, and focused opinion pieces.**

#### ***Components***

ELA.04H.F.1 Develop and strengthen writing as needed by planning, revising (expand, combine, and reduce sentences for meaning, reader/listener interest, and style), editing, rewriting, or trying a new approach with guidance and support from peers. CC.5.W.5, CC.5.L.3.a

ELA.04H.F.2 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. CC.5.W.1

ELA.04H.F.3 Introduce a topic or text clearly, state an opinion, and create an organizational structure in which ideas are logically grouped to support the writer's purpose. CC.5.W.1.a

ELA.04H.F.4 Write logically ordered reasons that are supported by facts and details. CC.5.W.1.b

ELA.04H.F.5 Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically). CC.5.W.1.c

ELA.04H.F.6 Write a concluding statement or section related to the opinion presented. CC.5.W.1.d

ELA.04H.F.7 Use punctuation to separate items in a series. CC.5.L.2.a

ELA.04H.F.8 Use a comma to separate an introductory element from the rest of the sentence. CC.5.L.2.b

ELA.04H.F.9 Use a comma to set off the words yes and no (e.g., Yes, thank you), to set off a tag question from the rest of the sentence (e.g., It's true, isn't it?), and to indicate direct address (e.g., Is that you, Steve?). CC.5.L.2.c

ELA.04H.F.10 Write over extended time (time for research reflection, and revision) and a shorter time (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences. CC.5.W.10

### **OUTCOME G: Students create a presentation of integrated knowledge and ideas. Students summarize key ideas and themes from a variety of presentations given, including text read aloud and information presented in diverse media formats.**

### ***Components***

ELA.04H.G.1 Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes. CC.5.SL.4

ELA.04H.G.2 Include multimedia components (e.g., graphics, sound) and visual displays in presentations when appropriate to enhance the development of main ideas or themes. CC.5.SL.5

ELA.04H.G.3 Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. CC.5.R.I.7

ELA.04H.G.4 Adapt speech to a variety of contexts and tasks, using formal English when appropriate to task and situation; speak clearly at an understandable pace. CC.5.SL.6

ELA.04H.G.5 Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text (e.g., graphic novel; multimedia presentation of fiction, folktale, myth, poem). CC.5.R.L.7

ELA.04H.G.6 Summarize, in written format, a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally. CC.5.SL.2

ELA.04H.G.7 Summarize the points a speaker makes and explain how each claim is supported by reasons and evidence. CC.5.SL.3

ELA.04H.G.8 Publish writing using technology, including the Internet, to produce and publish writing with some guidance and support from adults; demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting. CC.5.W.6

ELA.04H.G.9 Demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting. CC.5.W.6

**OUTCOME H:** Students collaborate (one-on-one, in groups, and teacher-led) with diverse partners to support comprehension.

### ***Components***

ELA.04H.H.1 Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 5 topics and texts, building on others' ideas and expressing their own clearly. CC.5.SL.1

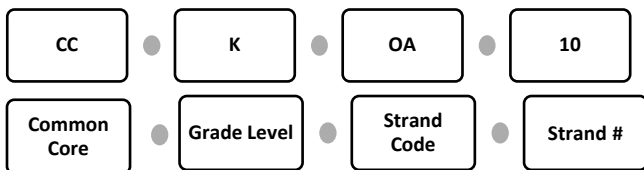
ELA.04H.H.2 Teacher Assessed Come to discussions prepared having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion. CC.5.SL.1.a

ELA.04H.H.3 Follow agreed-upon rules for discussions and carry out assigned roles. CC.5.SL.1.b

ELA.04H.H.4 Pose and respond to specific questions by making comments that contribute to the discussion and elaborate on the remarks of others. CC.5.SL.1.c

ELA.04H.H.5 Review the key ideas expressed and draw conclusions in light of information and knowledge gained from the discussions. CC.5.SL.1.d

## Key



## Strand Codes

CC = Counting and Cardinality

OA = Operations and Algebraic Thinking

NBT = Number and Operations in Base Ten

MD = Measurement and Data

NF = Number and Operations Fractions

RP = Ratios and Proportional Relationships

NS = Number System

G = Geometry

## Math

**OUTCOME A:** Number Sense Outcome: Students will represent, compare, order, and solve problems involving whole numbers to 1,000,000.

### *Components*

MA.004.A.1 Identify that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right up to the millions place. (For example,  $1,000/10=100$ , 1000 is ten times 100) CC.4.NBT.1

MA.004.A.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. CC.4.NBT.2

MA.004.A.3 Compare two multi-digit numbers based on meanings of the digits in each place, using  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons. CC.4.NBT.2

MA.004.A.4 Round multi-digit whole numbers to any place up to the millions place while applying place value understanding. CC.4.NBT.3

MA.004.A.5 fluently add and subtract multi-digit whole numbers using the standard algorithm. CC.4.NBT.4

MA.004.A.6 Represent verbal statements of multiplicative comparisons as multiplication equations. Interpret a multiplication equation as a comparison, e.g., interpret  $35 = 5 \times 7$  as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. CC.4.OA.1

MA.004.A.7 Multiply or divide to solve word problems involving multiplicative comparison. (This is related to repeated addition,  $4 \times 3 = 12$ , as does  $3 + 3 + 3 + 3 = 12$ .) CC.4.OA.2

MA.004.A.8 Solve word problems using equations with a letter standing for the unknown quantity. CC.4.OA.3

**OUTCOME B:** Multiplication: Students will apply strategies to solve problems involving operations of whole numbers.

### *Components*

MA.004.B.1 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. CC.4.NBT.5

MA.004.B.2 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. CC.4.OA.3

MA.004.B.3 Analyze answers to whole number problems using mental computation and estimation strategies including rounding. CC.4.OA.3

MA.004.B.4 Create and identify apparent features of a number or shape pattern that follow a given rule. (For example, given the rule “Add 3” and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way. CC.4.OA.5

**OUTCOME C:** Division: Students will apply strategies to solve problems involving operations of whole numbers.

***Components***

MA.004.C.1 Illustrate and explain multi-digit (up to four digits) multiplication and division problems using equations, rectangular arrays, and/or area models. CC.4.NBT.5

MA.004.C.2 Solve for whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. CC.4.NBT.6

MA.004.C.3 Demonstrate that a whole number is a multiple of each of its factors, determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. CC.4.OA.4

MA.004.C.4 Identify whether a given whole number in the range 1–100 is prime or composite. CC.4.OA.4

MA.004.C.5 Identify all factor pairs for a whole number in the range 1–100. CC.4.OA.4

**OUTCOME D:** Fractions: Students will build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.

***Components***

MA.004.D.1 Solve addition and subtraction problems with the knowledge that fractions are joined and separated based on parts of the same whole. (For example,  $\frac{2}{3} + \frac{1}{3} = \frac{3}{3}$  or 1 whole) CC.4.NF.3

MA.004.D.2 Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition with an equation. Justify decompositions, e.g., by using a visual fraction model. Examples:  $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ ;  $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$ ;  $2 \frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$ . CC.4.NF.3

MA.004.D.3 Solve addition and subtraction problems involving mixed numbers with like denominators. CC.4.NF.3

MA.004.D.4 Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators. CC.4.NF.3

MA.004.D.5 Read, write, identify, and model equivalent representations of improper fractions. CC.4.NF.4

MA.004.D.6 Apply the distributive property to multiply whole numbers by a fraction. CC.4.NF.4

MA.004.D.7 Solve word problems involving multiplication of a fraction by a whole number. (For example,  $\frac{2}{3} * 4$ ) CC.4.NF.4

MA.004.D.8 Create a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ). CC.4.MD.4

MA.004.D.9 Solve problems involving addition and subtraction of fractions by using information presented in line plots. (For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.) CC.4.NF.5

**OUTCOME E:** Fractions: Students will model, explain, and compare equivalent fractions. Students will recognize and solve problems involving decimal notation for fractions, and compare decimal fractions.

***Components***

MA.004.E.1 Model and explain equivalent fractions within the same size whole. (For example, half of a pizza is equivalent to  $\frac{2}{4}$  or  $\frac{4}{8}$ .) CC.4.NF.1

MA.004.E.2 Compare two fractions with different numerators and different denominators. (For example, by creating common denominators or numerators, or by comparing to a benchmark fraction such as  $\frac{1}{2}$ . Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols  $>$ ,  $=$ , or  $<$ , and justify the conclusions, e.g., by using a visual fraction model.) CC.4.NF.2

MA.004.E.3 Identify that a fraction with a denominator of 10 is equivalent to a fraction with a denominator of 100, and apply this technique to add two fractions with the respective denominators 10 and 100. (For example,  $\frac{3}{10}$  as  $\frac{30}{100}$ , and add  $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$ ). CC.4.NF.5

MA.004.E.4 Write and identify fractions with denominators of 10 or 100 in decimal notation. (For example, rewrite 0.62 as  $\frac{62}{100}$ ; describe a length as 0.62 meters (say “62 hundredths of a meter”); locate 0.62 on a number line diagram.) CC.4.NF.6

MA.004.E.5 Order and compare decimals up to hundredths. CC.4.NF.7

**OUTCOME F:** Measurement: Students will solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.

**Components**

MA.004.F.1 Compare relative sizes of measurement units within one system of units including length (km., m., cm.); weight (lb., oz.); mass (kg., g.); volume (l., ml.); and time (hr., min., sec.). CC.4.MD.1

MA.004.F.2 Compare larger units in terms of their related smaller units and vice versa. (For example, 1 ft. is 12 times as long as 1 in.) CC.4.MD.1

MA.004.F.3 Record measurement equivalents in a two-column table. (For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36). CC.4.MD.1

MA.004.F.4 Apply addition, subtraction, multiplication, and division algorithms to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money. CC.4.MD.2

MA.004.F.5 Apply the four operations to solve word problems including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. (For example, add a 12 inch section of rope to a 2  $\frac{1}{2}$  foot section of rope.) CC.4.MD.2

MA.004.F.6 Represent and illustrate measurement quantities using diagrams such as a number line that features a measurement scale. (For example, create a number line from 1 inch-24inches, and at the number 12 it would also be marked 1 foot.) CC.4.MD.2

MA.004.F.7 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. (For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.) CC.4.MD.3

**OUTCOME G:** Geometry: Students will draw and identify lines and angles, and classify shapes by properties of their lines and angles.

**Components**

MA.004.G.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. CC.4.G.1

MA.004.G.2 Classify two-dimensional figures based on the presence or absence of parallel lines, perpendicular lines, or the absence of angles of a specified size. Characterize and identify right triangles. CC.4.G.2

MA.004.G.3 Identify a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. CC.4.G.3

**OUTCOME H:** Geometry: Students will measure, calculate, and construct angles and angle measurements.

**Components**

MA.004.H.1 Identify that angles are formed when two rays share a common endpoint. CC.4.MD

MA.004.H.2 Model the part of a circle where an angle is representing one part of a whole circle. CC.4.MD.5

MA.004.H.3 Measure and draw angles in whole-number degrees using a protractor. CC.4.MD.6

MA.004.H.4 Demonstrate angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure (For example, if one angle within a 90 degree angle equals 25 degrees, what is the unknown angle.).  
CC.4.MD.7

### **Math Honors**

**OUTCOME A:** Equivalencies and Place Value: Using various representations, students will read, write, compare and model equivalencies and place value with whole numbers and decimals.

#### ***Components***

MA.04H.A.1 Use whole number exponents to denote powers of 10. CC.5.NBT.2

MA.04H.A.2 Explain and apply the concept of patterns between the number of zeroes in a product and the number of zeroes in the problem when multiplying a number by powers of 10. CC.5.NBT.2

MA.04H.A.3 Use manipulatives to model digits and their place value. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. CC.5.NBT.1

MA.04H.A.4 Compare decimals to thousandths based on digit placement, or by using tools such as base-ten blocks and number lines. Use  $>$ ,  $=$ , and  $<$  symbols to record the results of comparisons CC.5.NBT.3b

MA.04H.A.5 Read and write decimals to thousandths using base-ten numerals, number names, and expanded form. (Ex:  $347.392 = 3 \times 100 + 4 \times 10 + 7 \times 1 + 3 \times (1/10) + 9 \times (1/100) + 2 \times (1/1000)$ ). CC.5.NBT.3a

MA.04H.A.6 Use place value understanding to round decimals to any place. CC.5.NBT.4

**OUTCOME B:** Math Computation: Students will solve problems and number sentences including addition, subtraction, multiplication, and division, using multi-digit numbers and decimals, and understand the inverse relationship between operations.

#### ***Components***

MA.04H.B.1 Explain and apply the concept of patterns between the placement of the decimal point and the multiplication or division of the number by a power of 10. CC.5.NBT.2

MA.04H.B.2 Fluently multiply multi-digit whole numbers using the standard algorithm. (Ex:  $342 \times 27$ ). CC.5.NBT.5

MA.04H.B.3 Compare the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. (Ex:  $324 \times 42$  must equal a product in the 10,000's due to the number of digits in each of the two factors). CC.5.NF.5a

MA.04H.B.4 Solve problems using division involving whole numbers with up to four-digit dividends and two-digit divisors. CC.5.NBT.6

MA.04H.B.5 Use strategies based on place value, the properties of operations, and/or the relationship between multiplication and division to solve multi-digit whole number multiplication and division problems. Illustrate the strategies/calculations using equations, arrays and/or area models. CC.5.NBT.6

MA.04H.B.6 Use concrete models and drawings, based on place value, properties of operations, the relationship between addition and subtraction and/or the relationship between multiplication and division to add, subtract, multiply, and divide decimals to hundredths. CC.5.NBT.7

MA.04H.B.7 Relate addition, subtraction, multiplication, and division of whole numbers and decimals within problem solving strategies to a written method and explain the reasoning used. (Ex: "When dividing, you first need to divide, then multiply, subtract your product from the current sum, and then bring down the next digit. You need to do this in order to multiply each of the numbers according to its place value"). CC.5.NBT.7

**OUTCOME C:** Fractions: Students will generate equivalent fractions and use them to add and subtract fractions and mixed numbers with unlike denominators.

#### ***Components***

MA.04H.C.1 Apply knowledge of factors and multiples to determine common denominators in order to determine equivalent fractions. CC.5.NF.1

MA.04H.C.2 Demonstrate that any number over itself is equal to one (Ex:  $\frac{2}{2} = 1$  whole) and that equivalent fractions can be determined by multiplying both the numerator and the denominator by the same number. CC.5.NF.1, CC.5.NF.5b

MA.04H.C.3 Interpret a fraction as division of a numerator by the denominator (Ex:  $\frac{a}{b} = a \div b$ ). CC.5.NF.3

MA.04H.C.4 Represent fractions in lowest terms. CC.5.NF.1

MA.04H.C.5 Solve problems and use visual models or equations to represent the addition and subtraction of fractions with unlike denominators, including mixed numbers. CC.5.NF.1, CC.5.NF.2

MA.04H.C.6 Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. (Ex:  $\frac{2}{5} + \frac{1}{2}$  does not equal  $\frac{3}{7}$  because  $\frac{3}{7}$  is  $< \frac{1}{2}$ ) CC.5.NF.2

**OUTCOME D:** Fractions: Students will apply and extend previous knowledge of multiplication and division to solve problems and multiply fractions and mixed numbers with like and unlike denominators, divide unit fractions by whole numbers, and use fraction models to represent and solve real world problems.

### *Components*

MA.04H.D.1 Formulate or create visual models to interpret, represent and solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers and be able to explain the process. (Ex: interpret  $\frac{3}{4}$  as the result of dividing 3 by 4, noting that  $\frac{3}{4}$  multiplied by 4 equals 3 and that when 3 wholes are shared equally among 4 people each person has a share of size  $\frac{3}{4}$ . If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?) CC.5.NF.3

MA.04H.D.2 Multiply a fraction or a whole number by a fraction. (Ex:  $4 \times \frac{2}{3}$  or  $\frac{3}{5} \times \frac{1}{3}$ ) CC.5.NF.4

MA.04H.D.3 Demonstrate and explain how multiplying a given number by a fraction greater than 1 results in a product greater than the given number, and multiplying a given number by a fraction less than 1 results in a product less than the given number. (Ex:  $4 \times 1\frac{1}{2} = 6$  or  $4 \times \frac{1}{2} = 2$ ) CC.5.NF.5b

MA.04H.D.4 Formulate or create visual fraction models or equations to interpret, represent and solve word problems involving multiplication of fractions and mixed numbers. (Ex: If a party lasted  $1\frac{1}{4}$  hours, and  $\frac{2}{3}$  of the time was spent dancing, what fraction of the total party hours were spent dancing?) CC.5.NF.6

MA.04H.D.5 Compute quotients of a unit fraction by a non-zero number and use the relationship between multiplication and division to prove your answer. (Ex:  $\frac{1}{3} \div 4 = \frac{1}{12}$  because  $\frac{1}{12} \times 4 = \frac{1}{3}$ ). Create a story context or visual model to demonstrate your strategy. (Ex: Students may draw an array of 12 divided into 3 parts with one of the 3 parts divided into 4). CC.5.NF.7a

MA.04H.D.6 Use previous knowledge of division to divide whole numbers by fractions (Ex:  $8 \div \frac{1}{2} = 16$ ), and fractions by whole numbers (Ex:  $\frac{1}{2} \div 8 = \frac{1}{16}$ ). CC.5.NF.7

MA.04H.D.7 Create a story context and use a visual fraction model to explain and show the inverse relationship between multiplication and division within fractions. (Ex:  $4 \div \frac{1}{5} = 20$  because  $20 \times \frac{1}{5} = 4$ ) CC.5.NF.7b

MA.04H.D.8 Solve real world problems involving division of fractions by non-zero whole numbers and division of whole numbers by fractions (Components 1 and 3 above) by using visual fraction models and equations to represent the problem. (Ex: How much chocolate will each person get if 3 people share  $\frac{1}{2}$  pound of chocolate equally? How many  $\frac{1}{3}$  cup servings are in  $\frac{2}{3}$  cup of raisins?) CC.5.NF.7c

**OUTCOME E:** Geometry: Students will model the volume of three dimensional figures and apply the formula for volume to solve real world problems.

### *Components*

MA.04H.E.1 Recognize volume as an attribute of solid figures and identify a model that demonstrates understanding of the concepts of volume measurement. CC.5.MD.3

MA.04H.E.2 Solve problems involving volume by counting unit cubes, using cubic cm, cubic in., cubic ft. and improvised units. CC.5.MD.4

MA.04H.E.3 Identify the dimensions of “a cube” and apply the dimensions to solve problems to compute volume. CC.5.MD.3a

MA.04H.E.4 Solve real world mathematical problems which relate volume to the operations of multiplication and addition, apply the formula of  $V = (l) \times (w) \times (h)$ , and demonstrate the relationship between the formula and visual representation of right rectangular prisms. (e.g. If a cereal box measures 3 in. by 10 in. by 12 in., how many cubic inches of cereal will the box hold?) (CC.5.MD.5 and 5a) or (e.g. If an aquarium has a length of 50 cm, a width of 20 cm and height of 30 cm, how many  $\text{cm}^3$  will be needed to fill the aquarium?  $((50\text{cm})(20\text{cm})(30\text{cm}) = 30,000\text{cm}^3)$ . CC.5.MD.5b

MA.04H.E.5 Using the associative property, write 2 different equations representing the volume of a right rectangular prism. CC.5.MD.5a

MA.04H.E.6 Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.

**OUTCOME F:** Conversions: Students will convert using a given measurement system and use conversions to solve multi-step real-world problems.

**Components**

MA.04H.F.1 Convert among different-sized standard measurement units within a given measurement system. Use these conversions to solve real-world problems. (Ex: Convert 5 cm to 0.05 m, 2 cups to 16oz.). CC.5.MD.1

MA.04H.F.2 Demonstrate the use of measurement conversions to solve multi-step real-world problems such as map interpretations. (Using a ruler and a map scale, measure the distance from point A to point B on a map and convert to real-world distance). CC.5.MD.1

MA.04H.F.3 Solve problems by comparing two measurement quantities as a ratio and extend the numerical pattern. (e.g. If 1 mile=5,280 feet, then 3 miles=\_\_\_\_\_, If 360 minutes = 3 hours, \_\_\_\_\_ =4 hours.). CC.5.MD.1

**OUTCOME G:** Numerical Expressions and Patterns and Relationships: Students will write, interpret, and evaluate numerical expressions and analyze patterns to determine the relationship and extend the pattern based on given rules.

**Components**

MA.04H.G.1 Write and interpret numerical expressions using parentheses, brackets, or braces and apply order of operations when solving expressions. CC.5.OA.1

MA.04H.G.2 Write and interpret simple numerical expressions that record calculations with numbers and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as  $2 \times (8 + 7)$ ; recognize that  $3 \times (18,932 + 921)$  is three times as large as  $18,932 + 921$ , without having to calculate the indicated sum or product. CC.5.OA.2

MA.04H.G.3 Analyze patterns and relationships to determine a missing term in a sequence, extending a sequence, and identifying errors in a sequence. CC.5.OA.3

MA.04H.G.4 Generate two numerical patterns using two given rules and identify the relationship between the corresponding terms. (Ex: In and Out boxes). CC.5.OA.3

**OUTCOME H:** Represent and interpret data: Students will form ordered pairs, graph points in the first coordinate of the coordinate plane and explain the sequence and create a line plot to display a data set.

**Components**

MA.04H.H.1 Draw the coordinate plane by using a pair of perpendicular number lines, define and label the origin as 0, label the x axis and x coordinate, and y axis and y coordinate points in the first quadrant given two sets of ordered pairs. CC.5.G.1

MA.04H.H.2 Identify points and describe the paths using ordered pairs by demonstrating an understanding that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and coordinates correspond. CC.5.G.1)

MA.04H.H.3 Form ordered pairs consisting of corresponding terms from two patterns, and graph the ordered pairs on a coordinate plane, and explain the relationship of the pattern on the coordinate plane. (Ex: given the rule “add 3” and the starting number of 0 and given the rule “add 6” and the starting number 0, generate terms in the resulting sequences, and explain the terms in one sequence as twice corresponding terms in the other sequence) CC.5.OA.3

MA.04H.H.4 Represent, solve, and interpret coordinate value points in the context of a situational real-world and/or mathematical problem. (Ex: use maps to indicate directions i.e., travel 3 blocks north, then 5 blocks east). CC.5.G.1



MA.04H.H.5 Create a line plot to display a data set of measurements in fractions of a unit ( $\frac{1}{2}$ ,  $\frac{1}{4}$ ,  $\frac{1}{8}$ ). CC.5.MD.2

MA.04H.H.6 Use operations on fractions to solve problems involving information presented in line plots. (Ex: given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally (add unlike fractions and then divide by 3). CC.5.MD.2

## **Science**

### Physical Science

- Use evidence to construct an explanation relating the speed of an object to the energy of that object. 4-PS3-1
- Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents. 4-PS3-2
- Ask questions and predict outcomes about the changes about the changes in energy that occur when objects collide. 4-PS3-3
- Apply scientific ideas to design, test, and refine a device that converts energy from one form to another. 4-PS3-4
- Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move. 4-PS4-1
- Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. 4-PS4-2

### Life Science

- Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. 4-LS1-1
- Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. 4-LS1-2

### Earth Science

- Obtain and combine information to describe that energy and fuels are derived from natural resources and that their uses affect the environment. 4-ESS3-1
- Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for changes in a landscape over time. 4-ESS1-1
- Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. 4-ESS2-1
- Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans. 4-ESS3-2

## **Social Science**

**OUTCOME A:** Students will research and analyze the Northeast region to determine the geography, government, history, economic, culture, diversity, roles of individuals, and current events.

**OUTCOME B:** Students will research and analyze the Midwest region and Illinois to determine the geography, government, history, economic, culture, diversity, roles of individuals, and current events.

**OUTCOME C:** Students will research and analyze the Southeast region to determine the geography, government, history, economic, culture, diversity, roles of individuals, and current events.

**OUTCOME D:** Students will research and analyze the Southwest region to determine the geography, government, history, economic, culture, diversity, roles of individuals, and current events.

**OUTCOME E:** Students will research and analyze the West region to determine the geography, government, history, economic, culture, diversity, roles of individuals, and current events.

## **Fine Arts**

### **Art**

**OUTCOME A:** Students will identify and create contour and gesture line drawings.

**OUTCOME B:** Students will identify intermediate colors.

**OUTCOME C:** Students will identify and apply emphasis through the elements of art.

**OUTCOME D:** Students will identify 3D form focusing on patterns and repetition.

**Music**

**OUTCOME A:** Students will demonstrate rhythm patterns in various time signatures.

**OUTCOME B:** Students will demonstrate various melodic patterns independently and/or in groups (small or large).

**OUTCOME C:** Students will read, perform and compose notes on the treble clef staff.

**OUTCOME D:** Students will demonstrate proper playing technique on a recorder.

**OUTCOME E:** Student will classify musical instruments according to their families.

**Physical Education/Health**

**OUTCOME HA:** Students will be able to relate parts of the digestive system to their function.

**OUTCOME HB:** Students will develop abilities that promote a healthy lifestyle

**OUTCOME HC:** Students will predict the effects of decision making.

**OUTCOME PA:** Students will demonstrate movement and manipulative skills in team sports and rhythmic activities.

**OUTCOME PB:** Students will demonstrate and apply principles of health related fitness components to activities that contribute to their life long wellness.

**OUTCOME PC:** Students will apply an understanding of teamwork, sportsmanship and cooperation in physical activities.