CPS Learning Targets

Specific Skills and Knowledge Listed for

- ✓ Math
- ✓ Science
- ✓ Reading
- ✓ Writing

These lists are provided to demonstrate the comprehensiveness of the specifications.

Teachers should use the complete Learning Targets documents, which include concepts and resources as well as these specifications.

For the complete Learning Targets, go to

http://www.chicagoteachingandlearning.org/

CPS Mathematics Learning Targets—KINDERGARTEN

By the end of Kindergarten, students will:

Number Sense

- □ Read and write numbers up to 20
- □ Count by 1s up to 100
- □ Connect numbers to quantities
- Explore addition and subtraction situations using manipulatives, pictures, and symbols
- □ Explore quantity and number
- □ Begin to compare and order sets of objects

Measurement

- □ Explore *Measurement* using non-standard units
- □ Construct a sense of time and order of events through daily activities
- Develop an initial understanding of comparing objects
- □ Incorporate estimation and *Measurement* in play activities

Algebra

- □ Explore simple patterns such as sounds, shapes, colors, and sequences
- Describe and compare growth patterns (e.g., growing taller)

Geometry

- □ Recognize shapes and structures in the environment
- □ Sort simple 2-dimensional and 3-dimensional shapes
- □ Find and name locations (e.g., "in front of," "next to," "behind")

- □ Pose questions to gather and display data about themselves and their surroundings
- □ Predict what would happen next

CPS Science Learning Targets—KINDERGARTEN

By the end of Kindergarten, students will:

Scientific Inquiry Processes and Technological Design

- □ Investigate the world around them over time with the help of an adult
- □ Describe the world around them
- □ Collect, write, and/or draw observations of the world around them
- □ Explain their observations of the world around them
- □ In small groups, list ideas for solving problems

Function, Adaptation, and Change of Living Things

- □ Tell about the characteristics of living things
- **Compare** young organisms to the parent organism

Interaction of Living Things with Each Other and the Environment

- Describe how living things live in their environment
- □ Observe how living things interact with each other
- Compare similarities and differences between organisms

Matter and Energy

- □ Explore properties of materials
- □ Use senses to sort materials by their properties
- □ Observe how water and other liquids affect materials

Force and Motion

- □ Push and pull objects to see how they move
- □ Talk about how objects move when pushed

Earth and Its Resources

- □ Make and use scientific tools to observe weather
- □ Observe weather over a period of time
- Recycle and reuse items in the classroom and at home

Composition and Structure of the Universe

□ Pick out and name the objects in the sky they see all of the time (e.g., sun, moon, stars)

Practices of Science

- □ Follow science safety rules
- □ Use scientific habits of mind

Science, Technology, and Society

- □ Talk about the work of meteorologists
- □ Use science tools and technology in the classroom and tell about it
- □ Talk about healthy choices

CPS Reading Learning Targets—KINDERGARTEN

By the end of Kindergarten, students will:

Concepts about Print

- □ Recognize the front and back covers and title page of a book
- □ Recognize and name upper-case and lower-case letters
- □ Understand that reading progresses from left to right, top to bottom, and page by page
- □ Understand that print carries a message
- □ Understand that words are separated by spaces in print

Comprehension

- Predict what will happen next in a story using pictures and/or text recall important facts from a text that is heard or read retell a simple text and familiar stories in sequence identify characters, settings, and important events in a story
- □ Respond to questions about a text read-aloud
- □ Understand the meaning of stories by making comments (e.g., I like this story because...; I think the character was...because...)

Fluency

- □ Read emergent texts accurately with purpose and understanding phonemic/phonological awareness
- Recognize how many individual words are spoken in a phrase or simple sentence
- □ Count and pronounce segments and blend sounds in spoken words
- □ Recognize and create rhyming words (e.g., bear, care, fair)
- □ Identify and isolate beginning, middle, and ending sounds of three phoneme words (e.g., beginning sound /b/ middle sound /a/ ending sound /t/ in the word bat)

Vocabulary

- □ Use a variety of resources (e.g., pictures, illustrations, asking others, context, and previous experiences) to learn the meaning of unfamiliar words
- Develop vocabulary through listening, discussing, and direct teaching of words in literary, informational, and subject-specific texts (e.g. math, science, social science, art, music, health)

Speaking and listening

- Actively participate in group conversations on kindergarten topics and texts by: following agreed-upon discussion rules
- □ Continuing a conversation with others
- Describe familiar people, places, things, and events and provide additional detail with prompting and support
- □ Tell stories, share information and ideas in a logical order while speaking in complete sentences
- □ Speak audibly and express thoughts, feeling, and ideas in complete sentences

CPS Writing Learning Targets—KINDERGARTEN

By the end of Kindergarten, students will:

Process

- □ Enjoy writing daily on topics they choose themselves
- □ Make changes to pictures and/or words in response to questions or suggestions made by others
- □ Talk about their work as writers
- □ Look to published authors for ideas to include in their writing

Beginning Inquiry, Research & Communication

- □ Seek answers to questions through active exploration
- Discuss ideas to include in a story

Beginning Writing Skills

- Use scribbles, approximation of letters, or known letters to represent written language (Stages of Writing)
- □ Dictate stories and experiences
- □ Use drawing and writing skills to convey meaning and information
- □ Write labels, signs, or captions for drawings or illustrations

Conventions

- □ Write most letters and some sight words when dictated and in their own writing (e.g., "the", "a", "I")
- □ Write some consonant-vowel-consonant words (e.g., "cat", "dog", "bat")
- Write first and last names, and first names of friends, by using upper-case an lowercase letters
- □ Leave a space between words
- □ Write left to right, top to bottom
- □ Begin to use classroom resources such as alphabet charts and word lists to help with writing
- □ Produce and expand complete sentences in shared language activities

CPS Mathematics Learning Targets—FIRST GRADE

By the end of Grade 1, students will:

Number Sense

- □ Count by 1s from zero past 100
- □ Skip count by 2s, 5s, and 10s past 100
- □ Estimate and count collection of objects using strategies and a calculator
- □ Use number words and numerals to represent quantities
- □ Understand ordinal, cardinal, odd, and even numbers
- Develop an understanding of base-ten up to 100 and use appropriate vocabulary
- □ Understand composing and decomposing single-digit whole numbers
- □ Understand and apply operations of addition and subtraction
- \Box Understand $\frac{1}{2}$ and $\frac{1}{4}$ parts of a whole
- □ Understand and apply operations of addition and subtraction

Measurement

- □ Order and compare objects by attributes
- □ Explore *Measurement* using non-standard tools for length, weight/mass, and capacity/volume
- Develop an understanding of duration of time
- Develop an initial understanding of concepts of money

Algebra

- □ Understand common and uncommon attributes
- □ Describe relationships and solve problems involving simple patterns
- □ Describe and compare growth patterns
- □ Construct and solve simple number sentences with variables

Geometry

- □ Identify, model, compare, and sort simple 2-dimensional and 3-dimensional shapes in the environment
- $\hfill\square$ Identify shapes that are the same
- □ Recognize shapes with a line of symmetry
- Develop an understanding of position of objects in space

- □ Use simple methods to gather, organize, and display data
- □ Compare information from tables and graphs
- $\hfill\square$ Identify possible and impossible events

CPS Science Learning Targets—FIRST GRADE

By the end of Grade 1, students will:

Scientific Inquiry Processes and Technological Design

- □ Conduct inquiry investigations over time with the help of an adult
- □ Make observations of the world around them
- □ Collect and record their observations of the world around them
- □ Organize, display, and explain their observations of the world around them
- □ Share ideas for how to solve problems
- Choose a solution to a problem and test it
- Talk about what happened during the test of the solution

Function, Adaptation, and Change of Living Things

- Describe the growth of different plants over time
- □ Name parts of living things
- □ Find different ways living things can develop and change due to environmental influences

Interaction of Living Things with Each Other and the Environment

- Describe how living things depend on their environment
- Explore how living things depend on each other to survive
- **Compare** similarities and differences between organisms and humans

Matter and Energy

- □ Read about energy sources in the world
- □ Observe properties of materials around them
- □ Identify and describe solids and liquids
- □ **Classify** materials based on their properties

Force and Motion

- Compare how objects move when pushed or pulled
- □ Talk about simple machines that make work easy

Earth and Its Resources

- □ Sort soil, sand, and rocks based on their properties
- Read about how soil, sand, rocks, water, and air are parts of the Earth's systems
- □ Tell about ways to use rocks, soil, sand, and water
- **Compare** different types of soil from different places
- □ Record observations of daily weather changes
- □ List things that can and cannot be recycled in the classroom and at home
- □ Recycle and reuse in the classroom and at home

Composition and Structure of the Universe

- **Compare** the shape of the moon over time
- □ Talk about the path of the sun over time
- □ Talk about the sun and moon and how their places in the sky change

Practices of Science

- □ Follow science safety rules
- Use scientific habits of mind

Science, Technology, and Society

- □ Collect and write information accurately
- □ Talk about inventions of scientists that they use every day
- Tell how they use science and technology in the classroom and at home
- □ Explain how pollution can happen
- Discuss characteristics of healthy living

CPS Learning Targets

CPS Reading Learning Targets—FIRST GRADE

By the end of Grade 1, students will:

Concepts about Print

- □ Identify the author, title, and front and back covers of a book
- □ Understand that reading goes from left to right, top to bottom, and page by page
- □ Recognize and distinguish between letters, words, and sentences
- □ Understand that pictures and print have meaning
- □ Match oral word to printed word while recognizing sentence structure
- □ Identify that different punctuation marks have meaning (e.g., . = stop; ? = question; ! = excitement)

Comprehension

- Use prior knowledge, predictions, personal connections, and ask questions to understand text
- □ Check for understanding during reading by rereading, reading ahead, using illustrations, asking clarifying questions, and using context clues
- □ Retell and sequence main events with a beginning, middle, and end
- □ Use specific parts of the text to support answers to simple questions or to support a point
- □ Identify and compare elements of character, setting, and plot within and across stories
- □ Identify and compare similarities and differences between two texts on the same topic
- □ Make simple evaluative expressions about text (e.g., "I like the story because", and "I didn't like the character because")
- □ Distinguish between fiction and non-fiction
- □ Use information and respond to illustrations, pictures, and details in stories to describe characters, events, or settings
- □ Use information and respond to illustrations, text features, and functional text (e.g., recipes, charts, maps, directions)

Fluency

- □ Read grade-level text that sounds like everyday speech with accuracy, appropriate rate, and expression
- □ Recognize errors during oral reading that interfere with the meaning, and use self-correcting strategies

Vocabulary

- □ Use a variety of resources (e.g., age-appropriate dictionaries, pictures, illustrations, asking others, context, previous experiences) to learn the meaning of unfamiliar words
- Develop vocabulary through listening, discussing, and direct teaching of words in literary, informational, and subject-specific texts (e.g., math, science, social science, art, music, health)

Speaking and Listening

- Actively participate in group conversations on Grade 1 topics and texts by:
 - o Following agreed-upon rules for discussions
 - o Building on others' talk in conversation by linking their comments to the remarks of others
- □ Share information, highlight important points, and use appropriate eye contact, adequate volume, and clear pronunciation
- □ Describe familiar people, places, things, and events and provide additional detail with prompting and support
- □ Tell stories, and share information and ideas in a logical order while speaking in complete sentences
- □ Speak audibly and express thoughts, feelings, and ideas in complete sentence

CPS Writing Learning Targets—FIRST GRADE

By the end of Grade 1, students will:

Process

- □ Enjoy writing daily on topics they choose themselves
- □ With assistance, write for many purposes (e.g., narrative and expository) and use the basic steps of the writing process
- □ Revise picture and/or text for publication and sharing with others
- □ Talk about their work as writers with others
- □ Create a basic publication using available resources (e.g., pictures, computer)
- □ Look at published authors for ideas to include in their writing

Inquiry & Research

- □ Generate questions, ideas, and thoughts gained from experiences (e.g. field trips, visitors, stories, discussions) as sources of information
- Gather, organize, and share information about a topic
- □ Use books and stories to learn something new about a topic
- □ Maintain focus—stay on topic

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, letters)
- □ Tell a focused story with a beginning, middle, and end using various approaches (e.g., pictures, letter approximations, connected oral account)
- Add drawing or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings
- □ Use descriptive words when writing
- □ Experiment with different kinds of writing

Organization, Coherence, and Quality of Writing

- □ With assistance, use developmentally-appropriate prewriting strategies (e.g., drawing, brainstorming) to generate and organize ideas
- □ Communicate meaning of pictures or letter approximation represented in writing

Conventions and Structure in Writing

- □ Use phonemic awareness and letter knowledge to spell independently
- □ Write all upper- and lower-case letters
- □ Spell correctly high-frequency and age-appropriate words
- □ Identify and correctly write singular and plural nouns (e.g., cat/cats)
- □ Identify and correctly write simple possessive pronouns (e.g., my/mine, his/hers)
- □ Write simple sentences with beginning capitalization and end marks

CPS Mathematics Learning Targets—SECOND GRADE

By the end of Grade 2, students will:

Number Sense

- □ Skip count by 1s, 2s, 5s, 10s, and 100s up to 100
- □ Use multiple models to understand numerical relationships and the base-ten system
- Estimate, compute, and use a calculator to solve simple 1-digit and 2-digit addition and subtraction problems
- □ Solve equal grouping/sharing problems
- \Box Develop an understanding of $\frac{1}{2}$, $\frac{1}{3}$, and $\frac{1}{4}$ using circle and rectangle models

Measurement

- □ Use *Measurement* units and tools appropriately to measure lengths and temperature
- □ Develop an understanding of time and duration of time
- □ Compare objects using length, weight, and temperature
- □ Develop an understanding of money
- Develop an understanding of perimeter and area

Algebra

- □ Solve problems involving patterns
- □ Sort and classify objects
- □ Solve word problems for unknowns

Geometry

- Develop an understanding of 2-dimensional and 3-dimensional shapes
- Develop an understanding of direction and distance
- □ Understand lines of symmetry

- □ Use simple methods to collect, organize, compute, and interpret data
- □ Make predictions from simple data
- □ Use simple probability terms

CPS Science Learning Targets—SECOND GRADE

By the end of Grade 2, students will:

Scientific Inquiry and Technological Design

- □ Choose correct tools for measuring
- $\hfill\square$ Check measurements for accuracy
- □ Follow steps to correctly use science measuring tools
- □ Conduct inquiry investigations over time with the help of an adult
- □ Make observations as they investigate
- □ Collect and record their observations from investigations
- □ Organize, analyze, display, and explain their observations
- Build and test a solution to a problem
- Record what happened during the test of the solution
- □ Use correct science vocabulary in their explanations

Function, Adaptation, and Change of Living Things

- Compare parts of insects and their uses for survival
- **Compare** stages in the life cycles of living things
- □ Observe the behavior of living things over time
- □ Tell about what living things need to survive
- Discuss the importance of the human body's functions and survival

Interaction of Living Things with Each Other and the Environment

- □ Tell how the different parts of living things help them to survive
- □ Observe and describe habitats of living things

Matter and Energy

- Observe that air takes up space and can be squeezed into a smaller space
- □ **Compare** solids and liquids

Force and Motion

- □ Watch the **effects** of the pushes and pulls created by air
- □ Test the pushes and pulls of air on how an object moves
- □ Write about how gravity affects motion
- Test balancing different objects
 Make stable and unstable systems
- □ Tell about ways to make unstable systems stable

Earth and Its Resources

- **Compare** weather conditions in different areas
- □ Predict weather changes over time
- Describe tools used by meteorologists to collect information about the weather
- □ Read about the water cycle
- □ Identify renewable and non-renewable resources in the world around them
- □ Recycle and reuse in the classroom

Composition and Structure of the Universe

- Observe the changes in the way the moon looks as it moves through its phases
- □ Name familiar objects in the sky
- □ Talk about sizes, shapes and locations of objects in the sky **compare**d to each other (e.g., sun, moon, and stars)

Science, Technology, and Society

- □ Tell about science and technology in the world around them
- □ List **causes** of pollution and how to stop polluting
- □ Identify characteristics for healthy living

CPS Reading Learning Targets—SECOND GRADE

By the end of Grade 2, students will:

Concepts about Print

- Recognize print conventions (e.g., font, italics, bold, underline)
- □ Recognize internal punctuation (e.g., commas, quotation marks)

Comprehension

- Use prior knowledge, predictions, personal connections, and ask questions to understand text
- □ Respond to literal, inferential, and analytical questions
- □ Check for understanding during reading by rereading, reading ahead, using illustrations, asking clarifying questions, and using context clues
- □ Retell and sequence main events with a beginning, middle, and end
- □ Compare and discuss a broad range of books that have a similar theme or topic
- □ Use specific parts of the text to support answers to simple questions or to support a point
- □ Identify and compare elements of character, setting, and plot from stories and/or pictures
- □ Identify and compare the similarities and difference between two texts on the same topic
- □ Summarize and retell what was either read or heard during a read-aloud
- □ Identify and state facts and details during and after reading
- Distinguish between fiction and non-fiction
- Use information and respond to illustrations, pictures, and details in stories to describe characters, events, or settings
- Use information and respond to illustrations, text features, and functional text (e.g., recipes, charts, maps, directions)

Fluency

- □ Read grade-level material that sounds like everyday speech with accuracy, appropriate rate, phrasing, and expression
- □ Recognize errors during oral reading that interfere with the meaning, and use self-correcting strategies

Vocabulary

- Determine and clarify meanings of unfamiliar or multiple-meaning words through context (understanding how the word is used in a sentence), discussion, and using a variety of resources (e.g., age-appropriate print or digital dictionaries, pictures, illustrations, asking others, previous experiences)
- Develop vocabulary through listening, discussing, and direct teaching of words in literary, informational, and subject-specific texts (e.g., math, science, social science, art, music, health)
- Determine the meanings of new words using word patterns, word study (e.g., prefixes/ suffixes, synonyms/antonyms), and context clues

Speaking and Listening

- Actively participate in group discussions on Grade 2 topics and texts by:
 - Following agreed-upon rules for discussions
 - Explaining own ideas, thoughts, and understanding clearly and in a sequential order
 - Building on others' talk in conversation by linking their comments to the remarks of others
- □ Present information, emphasizing important points and using appropriate eye contact, adequate volume, and clear pronunciation
- Describe familiar people, places, things, and events and provide additional detail with prompting and support
- □ Tell stories, and share information and ideas in a logical order while speaking in complete sentences
- □ Speak audibly and express thoughts, feelings, and ideas in complete sentence

CPS Writing Learning Targets—SECOND GRADE

By the end of Grade 2, students will:

Process

- □ Enjoy writing daily on topics they choose themselves
- □ With some assistance, write for many purposes (e.g., narrative and expository) and uses the basic steps of the writing process
- □ Use available resources to plan, compose, revise, and edit written work
- □ Talk about their work as writers with others, to improve the quality of their writing
- □ Look at published authors for ideas to include in their writing
- □ Create a basic publication using available resources (e.g., pictures, computer)

Inquiry & Research

- Generate questions and ideas gained from experiences (e.g., field trips, visitors, stories, discussions, books), as sources of information
- □ Begin to include facts and details and distinguish between relevant and irrelevant information
- □ Gather, organize, summarize, and/or share information about a topic
- Develop ideas by using details from pictures, diagrams, maps, and other graphic organizers
- □ Use books and stories to learn something new about a topic
- □ Maintain focus—stay on writing topic

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, letters)
- □ Write a focused story with a beginning, middle, and end using various approaches (e.g., transition words, connected oral and written accounts)
- □ Write for a variety of purposes and audiences
- □ Use descriptive words when writing
- □ Experiment with different forms of writing
- □ Compose an original, focused writing piece using picture(s) and/or text

Organization, Coherence, and Quality of Writing

- □ With assistance, use developmentally-appropriate prewriting strategies (e.g., drawing, brainstorming) to generate and organize ideas
- □ Use a series of pictures and text to tell a focused story in proper order
- □ Elaborate and support written content with facts, details, and descriptions
- □ Begin to evaluate and reflect on their own writing and the writing of others

Conventions and Structure in Writing

- □ Represent all sounds in a word when spelling independently
- □ Use correct spelling of previously studied words (high-frequency words) and spelling patterns in own writing
- □ Write contractions correctly (e.g., I'll, don't)
- □ Proofread their own work
- $\hfill\square$ Extend simple sentences and use correct subject-verb agreement
- □ Use appropriate capitalization (e.g., beginning capitalization, proper nouns) and end marks (period, question mark, exclamation mark)

CPS Mathematics Learning Targets—THIRD GRADE

By the end of Grade 3, students will:

Number Sense

- □ Use place value understanding of the base-ten number system to create multiple representation of numbers up to 100,000
- □ Identify, locate, order, and compare whole numbers, fractions, and decimals using monetary units
- □ Represent and use equivalent forms of simple fractions
- □ Compute using whole numbers and decimals (e.g. money)
- Understand relationships between addition and subtraction; multiplication and division
- □ Estimate using whole numbers and decimals
- □ Solve application problems using whole numbers and decimals (e.g., money \$10.00 or less)
- □ Use arithmetic properties of identity

Measurement

- □ Use *Measurement* units and tools appropriately to measure length, mass/weight, capacity/volume, and elapsed time
- □ Solve problems involving length, time and elapsed time, money, perimeter, area, volume/capacity, and mass/weight

Algebra

- □ Solve problems involving patterns
- Solve problems using equations and number sentences
- □ Solve comparison problems

Geometry

- □ Identify characteristics and properties of 2-dimensional and 3-dimensional shapes
- □ Solve problems using 2-dimensional and 3-dimensional shapes and properties
- □ Solve problems using the coordinate system
- □ Identify and sketch lines of symmetry
- □ Solve problems with reflection/flips, translations/slides, and rotations/turns

- □ Represent and analyze data using charts, tables, graphs, and Venn diagrams
- $\hfill\square$ Find median and mode
- □ Use probability and counting principles in problem-solving situations

CPS Science Learning Targets—THIRD GRADE

By the end of Grade 3, students will:

Scientific Inquiry and Technological Design

- □ Conduct inquiry investigations over time with the support of an adult
- □ Make multiple observations over time during their investigations
- Collect and record their observations from investigations
- Discuss and **compare** their observations
- □ Organize, analyze, and display their observations in charts and graphs
- Generate multiple ideas for how to solve problems
- $\hfill\square$ Discuss the strengths and weaknesses of the proposed solutions
- Build and test a solution to a problem
- □ Record and explain what happened during the test of the solution
- □ Use correct science vocabulary in their explanations

Function, Adaptation, and Change of Living Things

- Compare and contrast individual members from the same group of plants and animals
- **Compare** the ways living things have adapted to live in various places
- □ Construct a model habitat for living things considering their adaptations

Interaction of Living Things with Each Other and the Environment

- □ Identify the parts of living things that help them survive
- □ Explain how living things depend on each other for survival
- □ Read about and **compare** animals of the past and present

Matter and Energy

- □ Identify sources of water
- □ Read about water as a source of energy
- □ Observe, identify, and describe the changes water undergoes as it moves from solid to liquid to gas
- □ Explore the energy of sound
- Demonstrate the movement of sound energy through various materials

Force and Motion

- □ Talk about what affects the speed at which things move
- □ Research simple machines they use in their lives

Earth and Its Resources

- □ Observe how temperature affects the rate of evaporation of water
- Test what materials absorb or do not absorb water
- □ Test rocks and minerals to find their properties
- □ Sort rocks and minerals by their properties
- □ Observe the patterns and shapes of crystals

Composition and Structure of the Universe

- □ Use models of the universe to show positions of known objects in the sky
- □ Explain how Earth rotates on its axis, causing day and night
- Demonstrate how Earth orbits the sun in the solar system
- □ Model the path the sun takes in the sky as the seasons change
- Draw the changes in the appearance of the moon as it moves through its phases

Science, Technology, and Society

- □ Collect and write information correctly
- □ Read and talk about the inventions of scientists of the past
- □ Talk about science and technology in the world around them
- □ Plan healthy living activities

CPS Learning Targets

CPS Reading Learning Targets—THIRD GRADE

By the end of Grade 3, students will:

Concepts about Print

- Recognize appropriate use of font (e.g., italics, bold, underline) and dialogue in a variety of texts and genres
- Recognize internal punctuation (e.g., commas, quotation marks, colons)

Comprehension

- □ Interpret text using prior knowledge, predictions, connections, and asking questions (e.g., what did the author really mean?)
- Generate and respond to literal, inferential, and analytical questions using higher-level thinking
- □ Check for understanding during reading by rereading, reading ahead, using illustrations, asking clarifying questions, and using context clues
- Use evidence from text to support answers, make interpretations to questions, or support a point
- Demonstrate comprehension of more complex text through discussion
- □ Identify, explain, compare, and discuss elements of character, setting, and plot from stories and/or pictures with a similar theme or topic
- □ Identify, explain, compare, and discuss elements of informational texts including text features (e.g., headings, captions, maps)
- □ Identify cause and effect relationships
- □ Summarize and retell a text that was either read or heard
- □ Identify main ideas that are in the text or need to be inferred from the text
- Distinguish and comprehend a variety of fiction and non-fiction
- Use information and respond to illustrations, pictures, and details in text to describe individuals/ characters, events, or settings
- □ Use knowledge to quickly locate important information (e.g., sequential order, problem/solution, text features) to deepen understanding of text
- □ Interpret figurative language (e.g., simile busy as a bee; onomatopoeia snap, crackle, pop; metaphor you are what you eat; personification giving human qualities to an animal, object, or idea: The tree fought the wind with its branches.)

Fluency

- □ Read grade-level material orally with accuracy, appropriate rate, logical phrasing, and expression to support comprehension
- □ Recognize errors during oral reading that interfere with the meaning and use self-correcting strategies

Vocabulary

- Determine the meanings of new words using word patterns, word study (e.g., affixes, synonyms/ antonyms, homophones their, there, they're), and context clues
- Determine and clarify meanings of unfamiliar or multiple-meaning words through context (understanding how the word is used in a sentence), discussion, and using a variety of resources (e.g., age-appropriate print or digital dictionaries, pictures, illustrations, asking others, previous experiences)
- Develop vocabulary through listening, discussing, and direct teaching of words in literary, informational, and subject-specific texts (e.g., math, science, social science, art, music, health)
- □ Use grade-appropriate academic vocabulary across all subject areas

Speaking and Listening

- □ Engage actively in group discussion on grade 3 topics and texts by:
 - Following agreed-upon rules for discussions
 - Explaining own ideas, thoughts, and understanding clearly and in a sequential order
 - Preparing for discussions, having read or studied material and referring to the material while sharing their thoughts and ideas on a topic, text, or an opinion
- □ Present information, emphasize important points, and use appropriate eye contact, adequate volume, and clear pronunciation complete sentences
- □ Speak audibly and express thoughts, feelings, and ideas in complete sentence

CPS Writing Learning Targets—THIRD GRADE

By the end of Grade 3, students will:

Process

- □ Use the writing process for a variety of purposes (e.g., narrative, expository, persuasive) and audiences
- □ Revise and edit for organization, coherence, and quality after reviewing their work through discussion and conferences, with classmates and teachers
- □ Use available resources to plan, compose, revise, edit, and publish written work
- □ Refer to published authors for ideas to include in their writing
- Begin to evaluate and reflect on their writing and the writing of others

Inquiry & Research

- □ Brainstorm and generate questions of interest and ideas gained from experiences (e.g., field trips, visitors, stories, discussions), text, and/or digital media as sources of information
- □ Identify and define the purpose and focus of the research
- □ With support, identify key words to locate relevant information through use of an organizational system (e.g., online search, library, and available technology)
- □ Collect and analyze (e.g., categorize, classify, sort, organize, combine) information for a project to understand and identify relevant and irrelevant information
- □ Organize related information under main topics (e.g., Lions: habitat, population, physical traits, diet)
- □ Organize, paraphrase, and synthesize information in their own words
- □ Understand that one must refer to the source of their research (e.g., title, author, and type of resources such as magazines, books, encyclopedias, web sites)
- Present information in oral, written, and available technological/multimedia forms

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, song, letters)
- □ Write for a variety of purposes, audiences
- □ Write independently under time constraints
- □ Use descriptive words when writing
- Experiment with different forms of creative writing (e.g., song lyrics, poetry, short fiction, plays, letters)
- □ Compose an original, focused writing piece

Organization, Coherence, and Quality of Writing

- □ With limited assistance, use the steps of the writing process (e.g., prewriting, drafting, revising, editing, publishing) to generate and organize ideas and develop writing
- □ Organize writing around a structure (e.g., paragraph, essay) appropriate to purpose, audience, and context
- Establish and maintain a focus in a writing piece
- Elaborate and support written content with facts, details and descriptions, and narration
- □ Use transition words (e.g., to connect ideas, show time, conclude)

Conventions

- Use knowledge of letter-sound relationships to spell unfamiliar words when spelling independently
- □ Use correct spelling of previously studied words (high-frequency words), and spelling patterns in their own writing
- □ Construct and extend sentences; use correct subject-verb agreement
- □ Use appropriate capitalization (e.g., beginning capitalization, proper nouns) and punctuation (period, question mark, exclamation mark, comma, quotation marks)
- □ Proofread their own work for grammar, punctuation, spelling, and revise accordingly

CPS Mathematics Learning Targets—FOURTH GRADE

By the end of Grade 4, students will:

Number Sense

- □ Read, write, recognize, and model the base-ten number system and equivalent representations of numbers up to 1,000,000
- □ Use equivalent representations of fractions and decimals
- □ Identify, locate, order, and compare whole numbers, decimals, and fractions
- □ Compute using whole numbers, fractions, and decimals
- □ Estimate using whole numbers, fractions, and decimals
- □ Solve problems using number relationships
- □ Use ratios to describe problem situations
- □ Use commutative and distributive properties and inverse number relationships

Measurement

- □ Use *Measurement* units and tools appropriately to measure weight/mass, length, volume/capacity, and angles
- □ Compare objects with respect to length, area, volume/capacity, temperature, and events with respect to time
- □ Solve problems using unit conversions within the same system for length, weight/mass, and time
- □ Estimate length, area, volume, and mass/weight

Algebra

- □ Solve problems involving patterns
- □ Solve problems using equations and number sentences
- □ Represent mathematical situations using words, tables, and graphs

Geometry

- □ Solve problems using 2-dimensional and 3-dimensional shapes and properties
- □ Solve problems using the coordinate system
- □ Use characteristics and properties of 2-dimensional and 3-dimensional shapes
- □ Identify and sketches lines of symmetry
- □ Solve problems with reflections/flips, translations/slides, and rotations/turns

- □ Collect, read, create, compare, interpret, and predict using data charts, tables, graphs, and Venn diagrams
- □ Solve problems using data
- □ Find range, median, and mode
- □ Use probability and counting principles in problem-solving situations

CPS Science Learning Targets—FOURTH GRADE

By the end of Grade 4, students will:

Scientific Inquiry and Technological Design

- □ Conduct guided-inquiry investigations
- □ Make multiple observations and observations over time during their investigations
- □ Collect and record their observations from investigations
- Discuss and **compare** their observations
- □ Organize and display their observations in charts and graphs
- Generate multiple ideas for how to solve problems
- □ Discuss the strengths and weaknesses of the proposed solutions
- □ Build and test a solution to a problem
- □ Record and explain what happened during the test of the solution
- Discuss changes that could be made to the test to improve the results
- □ Use correct science vocabulary in their explanations

Function, Adaptation, and Change of Living Things

- □ Explore the kinds of movement supported by the skeleton
- □ Examine microscopic organisms and their structures
- □ **Compare** offspring with their parents
- □ Read about body structures of current animals **compare**d to those of animals of long ago

Interaction of Living Things with Each Other and the Environment

- Design a test to record reaction time in living organisms
- Discuss the importance of adaptations to the survival of a species

Matter and Energy

- □ Construct a test to demonstrate the movement of sound through a material
- □ Read about different sources of energy in the world
- □ Sort common substances by their physical and chemical characteristics
- □ Identify common substances by their reactions with acids or bases

Explore the properties of magnets

- □ Identify materials that conduct electricity or do not conduct electricity
- □ Create open, closed, parallel, and series circuits
- □ Construct an electromagnet

Force and Motion

- Describe examples of motion in their everyday lives
- □ Read about the **effects** of friction

Earth and Its Resources

- □ Construct a model of the water cycle
- □ Observe and model the process of erosion
- □ Identify what helps limit and/or prevent erosion
- □ Read about the **effect** people have on Earth's resources

Composition and Structure of the Universe

- □ Research categories of stars
- □ Read about things we use that have been developed as a result of space research

CPS Learning Targets

CPS Reading Learning Targets—FOURTH GRADE

By the end of Grade 4, students will:

Comprehension

- Actively engage during reading to interpret text using prior knowledge, predictions, inferences, drawing conclusions, evaluations, connections, and asking questions
- Generate and respond to literal, inferential, and analytical questions using higher-level thinking and support their responses by using evidence from grade-appropriate text
- □ Check for understanding during reading by rereading, reading ahead, using visual cues, asking clarifying questions, and using context clues
- □ Infer cause and effect relationships
- □ Identify, explain, and/or compare elements of character, plot, setting, themes/messages, sequence of events, conflict/resolution, and points of view from a variety of text and/or pictures with similar themes, topics, or authors
- □ Summarize and paraphrase information from text that was either read or heard
- Demonstrate an accurate understanding of information by focusing on key ideas presented explicitly and implicitly
- Demonstrate understanding of author's perspective, and contrasting viewpoints
- Read, locate, and interpret information from a variety of informational text, using structural text features to strengthen comprehension (e.g., diagrams, maps, charts, titles, etc.)
- Demonstrate listening comprehension of more complex text through discussion
- □ Interpret figurative language (e.g., simile–busy as a bee; metaphors–you are what you eat; idioms–a slap on the wrist; onomatopoeia–snap, crackle, and pop; hyperbole–I tried a thousand times)

Fluency

- Read grade-level material with accuracy, appropriate rate, logical phrasing, and expression to support comprehension
- □ Recognize errors during reading that interfere with the meaning, and use self-correcting strategies, and adjust reading rate

Decoding Word Recognition

- Decode multi-syllabic words by distinguishing roots, affixes, complex word patterns, and structural analysis
- □ Recognize an increasing bank of grade-appropriate, high-frequency words

Vocabulary

- Develop vocabulary through word study: word patterns, word origins, structural analysis, context clues, homographs (e.g., the wind blew; wind the clock), homophones (e.g., their, there, they're), and synonyms/antonyms
- Develop vocabulary through listening, discussion, independent reading, and direct teaching of words in literary, informational, and content-specific texts
- □ Determine and clarify meanings of unfamiliar or multiple-meaning words through context-understanding, how the word is used in a sentence, and using additional resources (e.g., glossaries or dictionaries, both print and digital)
- □ Use grade-appropriate academic vocabulary across all subject areas

Speaking and Listening

- □ Engage actively in group discussion on grade 4 topics and texts by:
 - Building on others' ideas by asking relevant questions and contributing appropriate and essential information
 - Explaining own ideas, thoughts, and understanding clearly and in a sequential order
 - Preparing for discussions, having read, or studied material and explicitly drawing on the material to explore ideas for discussions
- □ Present information, emphasizing important points and using appropriate eye contact, adequate volume, and clear pronunciation
- □ Formulate questions and comments based upon the content to clarify or follow up on information

CPS Writing Learning Targets—FOURTH GRADE

By the end of Grade 4, students will:

Process

- □ With limited assistance, use prewriting strategies to choose a topic and generate ideas (e.g., brainstorming, listing, note-taking, outlining, drafting, graphic organizers)
- Use the writing process for a variety of purposes (e.g., narrative, expository, and persuasive) and audiences
- □ Refer to published authors for ideas to include in their writing
- □ Revise and edit for organization, coherence, and quality after reviewing their work through discussion and conferences, with classmates and teachers
- □ Use available resources to design, produce, and present writing and multimedia works
- Evaluate and reflect on their own writing and the writing of others

Inquiry & Research

- □ Brainstorm and generate questions of interest, and issues gained from experiences (e.g., field trips, news, discussions), text, and/or digital media as sources of information
- □ Identify and define the purpose and focus of research
- □ Use key words to identify relevant information through use of an organizational system (e.g., online search, library, and available technology)
- □ Collect and analyze (e.g., categorize, classify, sort, organize, combine) information for a project to understand and identify relevant and irrelevant information
- □ Organize, paraphrase, and synthesize information gathered, in their own words
- □ Organize related information under main topics (e.g., Water on Earth: water cycle, fresh water, sea water)
- Understand that one must refer to the source of their research (e.g., title, author, copyright date)
- □ Present information in an oral, written, and/or available multimedia format

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, song, parody, letters)
- □ Write for a variety of purposes, audiences
- □ Write independently during time constraints
- □ Use appropriate language, detail, and format for a specific audience
- □ Use the characteristics of a developed narrative, expository, and persuasive piece
- □ Compose an original, focused writing piece

Organization, Coherence, and Quality of Writing

- Elaborate ideas through first-level supporting details (e.g., facts, description, reasons, narration)
- □ Use strong verbs to enrich written language (e.g., "trampled" instead of "stepped")
- □ Compose a topic sentence; establish and maintain a focus throughout a paragraph
- Use a variety of sentence structures appropriately (e.g., simple, compound, complex)
- □ Use transitions words (e.g., to connect ideas, show time, conclude) to connect ideas and paragraphs

Conventions

- Demonstrate conventional spelling of words, appropriate punctuation, and capitalization
- Demonstrate subject-verb agreement and appropriate use of prepositional phrases
- □ Write fully developed paragraphs using a variety of sentences appropriate to purpose, audience, and context, and use proper form (e.g., topic sentence, details, summary/conclusion sentence)
- □ Proofread their work for grammar, punctuation, spelling, and revise accordingly

CPS Mathematics Learning Targets—FIFTH GRADE

By the end of Grade 5, students will:

Number Sense

- Read, write, recognize, and model base-ten number system and equivalent representation of numbers
- □ Read, write, model, convert, and use operations with fractions, decimals, and percents
- □ Compare and order numbers including fractions, decimals, and percents
- □ Compute fluently using whole numbers, decimals, and fractions
- □ Estimate using whole numbers, decimals, and fractions
- □ Solve problems using whole numbers, decimals, and fractions
- □ Use arithmetic properties such as identity, commutative, and distributive
- □ Use proportional reasoning
- □ Write, recognize, model, and interpret numerical expressions for a given situation

Measurement

- Use *Measurement* units and tools appropriately
- Estimate length, area, volume, mass/weight, and angles
- □ Solve problems, including real-world problems, involving length, perimeter, area, volume (right rectangular prisms only), mass/weight, and angles
- □ Solve problems with unit conversions for time, length, mass/weight
- □ Solve problems with elapsed time
- □ Solve problems with scales in maps

Algebra

- □ Solve problems using patterns, input-output tables, and inverse operations
- □ Solve problems using *Algebra*ic expressions and equations
- □ Use tables of written and pictorial representations of whole numbers
- □ Solve problems with unknown quantities

Geometry

- □ Identify, describe, sketch, and classify 2-dimensional shapes including circles
- □ Identify, describe, and sketch parallel, perpendicular, and intersecting lines
- □ Identify, describe, and sketch acute, obtuse, and right angles
- □ Use congruent and similar figures
- □ Copy line segments and angles using a straight edge and a compass
- □ Use characteristics and properties of 2-dimensional and 3-dimensional shapes
- □ Identify and sketch lines of symmetry
- □ Solve problems with reflections/flips, translations/slides, and rotations/turns
- □ Identify, locate, plot, and describe paths using the coordinate system

- □ Create, read, interpret, and make predictions from data tables, bar graphs, pictographs, line plots, Venn diagrams, and circle graphs
- □ Solve problems using data in graphs
- □ Find mean, median, mode, and range
- □ Use probability and counting principles in problem-solving situations

CPS Science Learning Targets—FIFTH GRADE

By the end of Grade 5, students will:

Scientific Inquiry and Technological Design

- □ Conduct guided-inquiry investigations
- □ Make multiple observations and observations over time during their investigations
- □ Collect and record their observations from investigations
- Discuss and **compare** their observations
- □ Organize, analyze, and display their observations in charts and graphs
- Generate multiple ideas for how to solve problems
- Discuss the strengths and weaknesses of the proposed solutions
- □ Build and test a solution to a problem
- □ Record and explain what happened during the test of the solution
- Discuss changes that could be made to the test to improve the results
- □ Redesign the test to include the changes
- □ Use correct science vocabulary in their explanations

Function, Adaptation, and Change of Living Things

- Group organisms by their features and explain the way they are grouped
- Compare and contrast plant and animal cells
- Look at basic cell parts and explain their jobs
- Explain the jobs of cells, tissues, and organs in living organisms
- □ Recognize that living things inherit half of their genes from each parent
- Discuss what features can be inherited from parents and which cannot
- **Compare** which characteristics are learned or inherited
- Use a microscope to **compare** and draw microscopic organisms

Interaction of Living Things with Each Other and the Environment

- □ Explain energy relationships in food webs
- □ Research carbon dioxide/oxygen cycle, water cycle, nitrogen cycle
- □ Read about different ways living things have adapted for survival over time

Matter and Energy

- □ Identify examples of kinetic and potential energy in simple machines
- **Compare** solar energy to other renewable and non-renewable energy forms
- Build a model to show how solar energy transfers into heat energy
- □ Talk about how energy is transferred
- Construct a model to show how temperature varies based on how a material absorbs sunlight
- □ Demonstrate actions and reactions
- Graph how temperature changes as something changes from a solid to a liquid to a gas
- □ Read about how light travels

Force and Motion

- □ Test how a force can do work
- □ Name the parts of a lever and pulley system
- □ Name the simple machines that make some real-world tools work
- Find things that can affect the swing of a pendulum
- □ Discover how gears can help do work

Earth and Its Resources

- □ Research past and present weather conditions in Chicago
- □ Read about what **causes** weather to change
- Discuss how choices in the past affect our resources today

Composition and Structure of the Universe

- Track time through the movement of the sun and moon
- □ Make models of the solar system
- □ Explain why the planets don't fall out of orbit around the sun
- □ Read about the force of gravity in their lives

CPS Learning Targets

CPS Reading Learning Targets—FIFTH GRADE

By the end of Grade 5, students will:

Comprehension

- Actively engage during reading to interpret text using prior knowledge, predictions, inferences, drawing conclusions, evaluations, connections, and asking questions
- Generate and respond to analytical and interpretive questions using higher-level thinking and support interpretations with evidence from a variety of text
- □ Apply self-monitoring and self-correcting strategies to clarify understanding by rereading, reading ahead, using visual cues and context clues, asking clarifying questions, retelling, clarifying terminology, and seeking additional information
- □ Make inferences and draw conclusions about contexts, themes, events, characters, setting
- □ Identify and comprehend text by identifying structures including description, cause/effect, sequence, problem/solution, and procedures
- □ Identify and describe author's point of view to help comprehend text
- Analyze new information using previously acquired information, evidence from text, inferring, interpreting, drawing conclusions, and synthesizing key ideas and supporting details
- Distinguish between minor and significant details
- □ Explain and discuss the similarities and differences between texts on the same topic
- Demonstrate listening comprehension of more complex text that has been read to them and express understanding through discussion
- □ Interpret figurative language (e.g., simile–busy as a bee; metaphors–you are what you eat; idioms–a slap on the wrist; onomatopoeia–snap, crackle, and pop; hyperbole–l tried a thousand times)

Literary Elements

- Compare ideas from literary texts representing a variety of eras and cultures
- Read a wide range of poetry such as narrative, lyrical, and humorous poems
- □ Identify, explain, and/or compare elements of character, plot, setting, themes/messages, sequence of events, conflict/resolution, and points of view from a variety of text and/or pictures with a similar theme, topic, or authors
- □ Identify elements of author's craft (e.g., tone, emotional appeals, logical arguments)

Informational Text

- □ 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
- □ Interpret information from a variety of informational text, using structural text features (e.g., tables, maps, captions, sidebars, timelines, titles) to strengthen comprehension
- □ Identify content features in persuasive text such as author's perspective, contrasting view points, and presentation of the argument

Fluency

- Read grade-level material orally with accuracy, appropriate rate, phrasing, and expression to support comprehension
- □ Recognize errors during reading that interfere with meaning, uses self-correcting strategies, and adjusts reading rate

Vocabulary

- Develop vocabulary through word study: word origins, roots and word parts, structural analysis, homographs, and synonyms/antonyms
- Develop vocabulary through listening, discussion, and direct teaching of words in literary, informational, and content specific texts
- Determine and clarify meanings of unfamiliar or multiple-meaning words through context and structural cues
- Use grade-appropriate academic vocabulary across all subject areas

Speaking and Listening

- Engage actively in group discussion on Grade 5 topics and texts by:
 - Building on others' ideas by asking relevant questions and contributing appropriate and essential information
 - Explaining own ideas, thoughts, and understanding clearly and in a sequential order
- Present information, emphasizing important points and using appropriate eye contact, adequate volume, and clear pronunciation
- Summarize and paraphrase the content of a spoken presentation or message

CPS Learning Targets

CPS Writing Learning Targets—FIFTH GRADE

By the end of Grade 5, students will:

Process

- □ Use prewriting strategies to choose a topic and generate ideas (e.g., webbing, brainstorming, listing, note-taking, outlining, drafting, and graphic organizers)
- Use the writing process for a variety of purposes (e.g., narrative, expository, and persuasive) and audiences
- □ Refer to published authors for ideas to include in their writing
- □ Revise and edit for organization, coherence, and quality after reviewing their work through discussion and conferences, with classmates and teachers
- Use available resources to design, produce, and present compositions and multimedia works

Inquiry & Research

- Brainstorm and generate questions of interest around issues gained from experiences (e.g., field trips, news, discussions, text, and/or digital media) as sources of information
- □ Identify and define the purpose and focus of the research
- Develop a hypothesis based on prior knowledge and gather information (e.g., note-taking) based on the hypothesis
- □ Use key words to identify relevant information through use of an organizational system (e.g., web search, library, and available technology)
- □ Collect and analyze (e.g., categorize, classify, sort, organize, combine) information for a project to understand and identify relevant and irrelevant information
- □ Reference the source of their research (e.g., title, author, copyright date)
- □ Use text, graphic materials, or visual aids to present information (e.g., charts, written reports, banners, maps, models, artifacts, student-created games, multimedia)
- □ Present information in appropriate format that was gathered by either inquiry or research (e.g., interviews, surveys, software, presentations)

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, song, parody, letters)
- □ Write for a variety of purposes, audiences, and time constraints
- Use appropriate language, detail, and format for a specified audience
- □ Use the characteristics of a well-developed narrative, expository, and persuasive piece
- Compose a multi-paragraph piece that presents one position of an issue with sufficient support

Organization, Coherence, and Quality of Writing

- Elaborate ideas using facts and evidence, details, description, reasons, narration
- Use strong verbs, adjectives, adverbs, and prepositional phrases to enrich written language
- □ Organize a coherent structure appropriate to audience and context using paragraphs while writing narrative, expository, and persuasive pieces
- □ Compose topic sentences while establishing and maintaining focus throughout a paragraph or writing piece
- □ Use transition words to connect ideas and paragraphs

Conventions

- Demonstrate and proofread their own work for grammar, punctuation, conventional spelling, and revise accordingly
- Use a variety of sentence structures (e.g., simple, compound)
- Demonstrate appropriate use of various parts of speech
- □ Write paragraphs that include a variety of sentence types (e.g., declarative, interrogative, exclamatory, imperative)
- Develop multi-paragraph compositions that include introduction, first- and second-level support, and a conclusion

CPS Mathematics Learning Targets—SIXTH GRADE

By the end of Grade 6, students will:

Number Sense

- □ Model, represent, interpret, and compare equivalent representations of numbers
- □ Solve problems involving characteristics and properties of number relationships and number systems and justify a mathematical concept or relationship
- □ Apply rules and properties of arithmetic and perform operations with numbers in problem-solving situations using estimation to approximate results
- □ Use proportional reasoning in solving problems

Measurement

- □ Use *Measurement* units and *Measurement* tools appropriately
- □ Solve problems involving measurable attributes

Algebra

- □ Represent and solve mathematical situations with expressions, equations, and inequalities
- Represent and solve mathematical situations with expressions, equations, and inequalities

Geometry

- □ Identify, describe, and solve problems involving the characteristics and properties of 2dimensional and 3-dimensional figures
- □ Identify, describe, and predict results of transformations of objects in the plane and on a coordinate system
- □ Recognize and determine attributes of, and relationships between, geometric figures

- □ Create, compare, and analyze data in a variety of representations
- □ Solve problems, make predictions, and use probability in problem solving situations

CPS Science Learning Targets—SIXTH GRADE

By the end of Grade 6, students will:

Scientific Inquiry and Technological Design

- □ Formulate a hypothesis that can be tested by collecting data
- Design and conduct scientific experiments that control all but one variable
- □ Construct and use conceptual models
- □ Draw conclusions based on evidence gathered
- □ Explain the existence of unexpected results in a data set
- □ Interpret and represent the results to produce findings
- □ Report the results of the investigation or design and defend the process used

Interaction of Living Things with Each Other and the Environment

□ Describe how fossils are used to determine patterns of evolution

Force and Motion

Explain the effect of gravitational forces on our weight and on the solar system

Earth and Its Resources

- □ Identify the components of the different earth systems (e.g., land, water, atmosphere, biosphere) and explain and **compare** the resources from these systems
- □ Identify and explain **factors** that affect soil structure and make-up
- □ Examine physical and chemical properties of minerals
- Explain meteorological phenomena, including weather, climate, and atmospheric properties
- □ Analyze large-scale dynamic forces, events, and processes that affect Earth's water/atmospheric systems and populations
- □ Identify and explain the factors that have **caused** changes in the Earth's structure

Composition and Structure of the Universe

- □ Explain the physical organization of the Earth, moon, and sun
- □ Analyze and describe the organization and physical characteristics of the solar systems
- Describe features of the universe

Practices of Science

- Demonstrate appropriate principles of safety within and beyond the classroom
- □ Incorporate scientific habits of mind to investigations
- □ Analyze and evaluate scientific studies

Science, Technology, and Society

- □ Incorporate scientific technologies when conducting research
- □ Describe the interactions of technology in science and society

CPS Reading Learning Targets—SIXTH GRADE

By the end of Grade 6, students will:

Comprehension

- □ Infer meaning to determine main idea and/or themes of a text by referring to the text
- □ Analyze and discuss how a central idea, events, and individuals develop and interact over the course of a text
- Demonstrate understanding of author's point of view to help comprehend text and determine author's purpose
- □ Compare and contrast one author's point of view on events with that of another (e.g., a biography and a memoir written by the subject of the biography: Biography *Anne Frank: The Book, The Life, The Afterlife* by Francine Prose / Memoir *The Diary of a Young Girl* by Anne Frank)
- Identify and describe internal and external conflict in text
- □ Identify the literal and figurative meanings of words and phrases in grade-appropriate text and analyze how an author's choice of specific words in a text contributes to understanding the ideas or concepts
- □ Synthesize and discuss the similarities and differences between two or more texts on the same topic

Literary Elements

- Describe how a story's plot unfolds (e.g., in a series of episodes or as a problem to be solved) as well as how characters adapt or change as they move toward a resolution
- □ Explain the effect of such devices as flashbacks and foreshadowing on the development of the plot and meaning of a text
- □ Identify and describe key literary elements (e.g., perspective, plot, characterization, dialogue, theme, figurative language)
- □ Recognize and interpret poetry that includes elements of poetic style (e.g., repetition, omission, dialogue, line organization/patterns)
- □ Identify elements of author's craft (e.g., tone, irony, sarcasm, emotional appeal, logical arguments)

Informational Text

- Distinguish among fact, opinion, and reasoned judgment presented in a text
- Recognize and use knowledge of text organization (e.g., sequence, including chronology and enumeration; description; cause and effect; comparison and contrast; problem and solution) to support comprehension
- □ Identify and use text features (e.g., italics, photographs, illustrations, captions, labels, legends, charts, tables, sidebars, graphs, maps, and timelines) to establish purpose for reading and support comprehension

Fluency

- □ Read and comprehend informational and narrative texts fluently and accurately
- □ Recognize errors during reading that interfere with the meaning, use self-correcting strategies, and adjust reading rate

Vocabulary

- Determine word meanings using structural analysis (e.g., roots, affixes, derivations) r context, whether stated directly or inferred, through use of definition, restatement, xample, and compare and contrast
- □ Use grade-appropriate academic vocabulary (e.g., science, math, social science, technology) and English language arts-specific words and phrases (e.g., poetry, literature) taught directly and gained through reading and responding to text

Speaking and Listening

- □ Initiate and engage actively in group discussion on grade 6 topics and texts by:
 - Building on others' ideas by asking relevant questions and contributing appropriate and essential information
 - o Cooperating with classmates to set clear goals, deadlines, and establish roles
 - Explaining own ideas, thoughts, and understanding clearly, and in a sequential order
- □ Prepare for discussions by having read or studied material, and explicitly draw on the material to explore ideas for discussions
- □ Present information using appropriate eye contact, adequate volume, and clear pronunciation
- Adapt speech for appropriate audience, context, and task

CPS Learning Targets

CPS Writing Learning Targets—SIXTH GRADE

By the end of Grade 6, students will:

Process

- □ Engage in the writing process to develop good writing habits
- □ Use the writing process for a variety of purposes (e.g., narrative, expository and persuasive) and audiences
- □ Read and discuss work of published authors; study what they do as writers, and imitate what they noticed, in an effort to strengthen writing
- □ Revise and edit for organization, coherence, and quality after reviewing their work through discussion and conferences, with classmates and teachers
- □ Use available resources to design, produce, and present compositions and multimedia works

Inquiry and Research

- □ Generate questions of interest around issues gained from experiences (e.g., field trips, news, discussions, text, and/or digital media) as sources of information
- Gather relevant information from multiple sources and assess the credibility and accuracy of sources
- □ Write explanatory texts on chosen topics utilizing relevant facts
- Quote, paraphrase, and cite the source of their research
- □ Use text, graphic materials, or visual aids to present information (e.g., charts, written reports, maps, artifacts, multimedia)
- □ Present information in appropriate format that was gathered by either inquiry or research (e.g., interviews, surveys, software, presentations)

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, song, parody, letters)
- □ Write for a variety of purposes, audiences, and time constraints
- □ Use appropriate language, detail, and format for a specified audience
- □ Use the characteristics of a well-developed narrative, expository, and persuasive piece
- Compose a multi-paragraph piece that presents one position of an issue with sufficient support

Organization, Coherence, and Quality

- Elaborate ideas through facts, evidence, details, descriptions, reasons, and narration
- □ Use strong verbs, adjectives, adverbs, and prepositional phrases to enrich written
- □ language
- □ Organize a coherent structure appropriate to audience and context using paragraphs, while writing narrative, expository, and persuasive pieces
- □ Compose topic sentences while establishing and maintaining focus throughout a paragraph or writing piece
- □ Use transition words to connect ideas within and across paragraphs

Conventions

- Edit own work for grammar, punctuation, conventional spelling, and revise accordingly
- Demonstrate appropriate use of various parts of speech
- □ Write paragraphs that include a variety of sentence types (e.g., declarative, interrogative, exclamatory, imperative)
- Develop multi-paragraph compositions that include introduction, first- and second-level support, and a conclusion

CPS Mathematics Learning Targets—SEVENTH GRADE

By the end of Grade 7, students will:

Number Sense

- Model, recognize, translate, and apply equivalent representations of numbers in meaningful contexts
- □ Solve problems involving characteristics and properties of numbers, relationships, and number systems and justify a mathematical concept or relationship
- □ Apply rules and properties of arithmetic and perform operations with rational numbers in problem-solving situations using estimation to approximate results
- □ Solve problems using proportional reasoning in problem situations

Measurement

- □ Use *Measurement* units and *Measurement* tools in problem-solving
- □ Solve problems involving measurable attributes

Algebra

- □ Identify a relationship and make generalizations from arithmetic or geometric sequences
- □ Represent, simplify, and solve mathematical relationships and situations with expressions, equations, and inequalities
- □ Represent, translate, and interpret relationships between equations and/or inequalities and graphs in the coordinate plane

Geometry

- □ Describe, solve problems, and make and test conjectures involving the characteristics, properties, and relationships between geometric figures
- □ Identify, describe, and predict results of transformations of objects in the plane and on a coordinate system

- □ Create, compare, critique, interpret, and compute with data in a variety of representations
- □ Apply the measures of central tendency and spread in problem-solving situations
- □ Solve problems, make predictions, and use probability in problem-solving situations
- □ Solve problems involving permutations and combinations

CPS Science Learning Targets—SEVENTH GRADE

By the end of Grade 7, students will:

Scientific Inquiry and Technological Design

- □ Formulate a hypothesis to explain observations and make testable predictions
- □ Design and conduct experiments that address proposed hypothesis, controlling all but one variable and conducting multiple trials
- □ Create and use conceptual models and identify flaws of models
- Determine data collection format and construct data tables
- □ Collect both qualitative and quantitative data using metric units of measurement
- □ Organize and analyze data, and explain possible sources of error
- □ Evaluate the proposed hypotheses based on **evidence** from experiments
- □ Report the investigation using appropriate graphical displays and defend the process used in the investigation

Function, Adaptation, and Change of Living Things

- **Compare** the interrelationships between cells and organisms
- □ Describe the relationship between cell structure and function
- Describe how systems in living things carry out vital functions
- Describe how living organisms are classified
- □ **Compare** characteristics of organisms produced from a single parent with those of organisms produced by two parents, and identify simple patterns of inheritance
- □ Identify that traits can be affected by genes, the environment, or an interaction of these two
- Explain macro/micro evolution in organisms (e.g., compare and assess features or forms of organisms over broad time periods to their adaptations, explain how natural selection accounts for diversity of species)

Interaction of Living Things with Each Other and the Environment

- □ Explain how energy is acquired and transferred between organisms (e.g., trace the roles and population ratios of producers, consumers, and decomposers in food chains and webs; trace the transfer of energy from the sun to final consumers)
- □ Explain how the introduction or extinction of species impacts an ecological community
- □ Explain the interactions that occur between an ecosystem's organisms (e.g., **compare** mutualism, predation, and parasitism; explain the interrelationship of adaptations and ecosystem survival)
- □ Describe the dynamics that occur in populations (e.g., determine population growth rates and their limiting factors, describe instances of population explosions over time)
- □ Create and evaluate models to understand levels of ecological organization, from population to ecosystem to biome

Practices of Science

- Demonstrate appropriate principles of safety within and beyond the classroom
- □ Apply scientific habits of mind to investigations
- □ Analyze and evaluate scientific studies

Science, Technology, and Society

- Describe how scientific discoveries and technologies have impacted our lives
- □ Explain how science and technology interact to affect multicultural, societal, and economic settings
- □ Explain how scientific discoveries and innovations have been influenced by history, cultures, and society
- □ Investigate how the knowledge of science and technology is used in everyday setting

CPS Learning Targets

CPS Reading Learning Targets—SEVENTH GRADE

By the end of Grade 7, students will:

Comprehension

- □ Infer meaning to determine main idea and/or themes of a text and analyze theme development by citing textual evidence
- □ Identify and interpret the themes, morals, and/or lessons of a variety of grade-appropriate text
- Analyze two or more themes or central ideas in a text and how they relate to one another, drawing on key details
- □ Analyze the impact of a specific word choice on meaning and tone, including figurative and connotative meanings
- Describe an author's point of view or purpose in a text and analyze how the author distinguishes his or her point of view from that of others
- Identify and describe the external and internal conflicts in grade-appropriate text
- Compare and contrast the impression conveyed by a printed text, to listening or viewing a video/multimedia presentation (e.g., analyzing how the delivery of a speech affects its impact)
- Compare and contrast a text to its film, stage, or multimedia version including examining some techniques unique to each medium (e.g., lighting, sound, color, camera focus, and angles)

Literary Text

- Analyze how particular lines of dialogue or specific incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision
- □ Identify a subtly described setting and explain how the setting is important to the plot in grade-appropriate text
- □ Identify rhyme scheme and sound devices (e.g., alliteration, onomatopoeia) in grade-appropriate poetry
- Analyze a specific case in which a modern work of fiction draws on patterns of events or character types found in traditional literature (e.g., the hero, the quest)

Informational Text

- Determine the effectiveness of text organization (e.g., sequence, including chronology and enumeration; description; cause and effect; comparison and contrast; problem and solution) in grade-appropriate text
- □ Use text features (e.g., italics, photographs, illustrations, captions, labels, legends, charts, tables, sidebars, graphs, maps, and timelines) to aid comprehension and make connections between the text features and grade-appropriate text
- □ Identify the stated and unstated premises of an argument and explain how they contribute to the conclusions reached
- □ Analyze where two or more texts provide conflicting information on the same subject to determine whether the texts disagree on matters of fact or on matters of interpretation

Fluency

- Read and comprehend informational and narrative grade-appropriate texts fluently and accurately
- Recognize errors during reading that interfere with the meaning, use self-correcting strategies, and adjust reading rate

Vocabulary

- Determine word meanings using structural analysis (e.g., roots, affixes, etc.) or context (whether stated directly or inferred) through use of definition, restatement, example, and compare/contrast
- □ Use grade-appropriate academic vocabulary (e.g., science, math, social science, technology) and English language arts-specific words and phrases (e.g., poetry, literature) taught directly and gained through reading and responding to text

Speaking and Listening

- □ Initiate and engage actively in group discussion on grade 6 topics and texts by:
 - Building on others' ideas by asking relevant questions and contributing appropriate and essential information
 - Cooperating with classmates to set clear goals, deadlines, and establish roles
 - o Explaining own ideas, thoughts, and understanding clearly, and in a sequential order
- □ Prepare for discussions by having read or studied material, and explicitly draw on the material to explore ideas for discussions
- Present information using appropriate eye contact, adequate volume, and clear pronunciation
- Adapt speech for appropriate audience, context, and task

CPS Writing Learning Targets—SEVENTH GRADE

By the end of Grade 7, students will:

Process

- □ Engage in the writing process to develop good writing habits
- □ Use the writing process for a variety of purposes (e.g., narrative, expository and persuasive) and audiences
- □ Read and discuss work of published authors; study what they do as writers, and imitate what they noticed, in an effort to strengthen writing
- □ Revise and edit for organization, coherence, and quality after reviewing their work through discussion and conferences, with classmates and teachers
- Use available resources to design, produce, and present compositions and multimedia works

Inquiry and Research

- Generate questions of interest around issues gained from experiences (e.g., field trips, news, discussions, text, and/or digital media) as sources of information
- Gather relevant information from multiple sources and assess the credibility and accuracy of sources
- □ Write explanatory texts on chosen topics utilizing relevant facts
- □ Quote, paraphrase, and cite the source of their research
- □ Use text, graphic materials, or visual aids to present information (e.g., charts, written reports, banners, maps, models, artifacts, student-created games, multimedia)
- □ Present information in appropriate format that was gathered by either inquiry or research (e.g., interviews, surveys, software, presentations)

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, song, parody, letters)
- □ Write for a variety of purposes, audiences, and time constraints
- □ Use appropriate language, detail, and format for a specified audience
- □ Use the characteristics of a well-developed narrative, expository, and persuasive piece
- Compose a multi-paragraph piece that presents one position of an issue with sufficient support

Organization, Coherence, and Quality

- Elaborate ideas through facts, evidence, details, descriptions, reasons, and narration
- □ Use strong verbs, adjectives, adverbs, and prepositional phrases to enrich written language
- □ Organize a coherent structure appropriate to audience and context using paragraphs while writing narrative, expository, and persuasive pieces
- □ Compose topic sentences while establishing and maintaining focus throughout a paragraph or writing piece
- □ Use transition words to connect ideas within and across paragraphs
- Develop multi-paragraph compositions that include introduction, first- and second-level support, and a conclusion

Conventions

- Edit own work for grammar, punctuation, conventional spelling, and revise accordingly
- Demonstrate appropriate use of various parts of speech
- □ Write paragraphs that include a variety of sentence lengths and types (e.g., declarative, interrogative, exclamatory, imperative)

CPS Mathematics Learning Targets—EIGHTH GRADE

By the end of Grade 8, students will:

Number Sense

- Model, recognize, and translate among equivalent representations of numbers in meaningful contexts
- □ Represent, order, and compare rational and irrational numbers in meaningful contexts
- □ Apply rules and properties of arithmetic and perform operations with real numbers in problem-solving situations using estimation to approximate results
- □ Solve problems using proportional reasoning and relationships in problem-solving situations

Measurement

- □ Use *Measurement* units and *Measurement* tools in problem-solving situations and determine accuracy of results
- □ Solve problems involving measurable attributes

Algebra

- □ Identify a relationship, and make generalizations from linear or non-linear sequences in meaningful contexts
- □ Represent, simplify, and solve mathematical relationships and situations using expressions, equations, and inequalities
- □ Identify, interpret, represent, and solve functions in a coordinate system

Geometry

- □ Visualize, describe, and solve problems involving the characteristics, properties, and relationships between geometric figures
- □ Identify, represent, describe, and predict results of transformations of objects in a plane and on a coordinate system

- □ Create, compare, and explain data displayed in a variety of representations
- □ Describe and use the measures of central tendency and spread in problem-solving situations
- □ Solve problems, make predictions, and use probability in problem-solving situations

CPS Science Learning Targets—EIGHTH GRADE

By the end of Grade 8, students will:

Scientific Inquiry and Technological Design

- Formulate hypotheses to explain observations, referencing prior knowledge and research
- □ Make testable predictions and re-evaluate hypotheses when data determine that previous ideas were incorrect
- □ Design and conduct experiments that address proposed hypotheses, controlling all but one variable and conducting multiple trials
- Collect both qualitative and quantitative data using metric units of measurement
- □ Represent results through the use of multiple charts and graphs
- □ Explain the existence of unexpected results in a data set and form hypotheses to explain these results
- □ Evaluate proposed hypotheses based on **evidence** from experiment
- Report the investigation using appropriate graphical displays, and defend the process used in the investigation

Matter and Energy

- □ Analyze the chemical and physical characteristics of matter, and **classify** materials based on these properties
- □ Explain the organization of the periodic table of elements
- □ Use quantitative data from investigations and simple chemical formulas and equations to understand the conservation of mass
- □ Understand interactions between energy and matter
- □ Identify and explain the changes of state of materials
- □ Explain energy transfer and transformations

Force and Motion

- □ Analyze how forces affect motion
- Explain the effect of speed and direction on motion along straight, circular, and inclined paths
- □ Explain the laws of force, mass, and inertia

Earth and Its Resources

□ Describe Earth's energy resources, and **compare** and **contrast** renewable and non-renewable resources

Practices of Science

- Demonstrate appropriate principles of safety within and beyond the classroom
- □ Evaluate sources and **evidence** for validity and reliability
- □ Make inferences based on data
- □ Apply scientific procedures to investigations
- □ Analyze and evaluate scientific studies and information
- □ Create a scientific investigation based upon a learned concept

Science, Technology, and Society

- □ Explain how advances in technology affect the sciences on multiple levels and explain the costs and benefits of such technological advances
- □ Describe ways to conserve and manage resources

CPS Reading Learning Targets—EIGHTH GRADE

By the end of Grade 8, students will:

Comprehension

- □ Infer meaning to determine main idea and/or themes of a text and analyze theme development by citing textual evidence
- Analyze how an author introduces, illustrates, and elaborates two or more significant ideas in a text, including how the relationship between the ideas is expressed
- □ Explain the comparisons an author makes through metaphors, allusions, and analogies in a text and analyze how those comparisons contribute to meaning
- Analyze how an author or narrator uses description, dialogue, and action to suggest relationships between characters in print, or non-print sources (e.g., films, advertisements)
- □ Recognize contradictions and inconsistencies in text
- Examine specific language in text and propose plausible interpretations based in part on the reader's own viewpoints and experiences
- □ Evaluate the advantages and disadvantages of using different mediums (e.g., text, video, multimedia) to present a particular topic or idea

Literary

- Analyze how elements of a story or drama interact (e.g., how plot and setting are important to one another; how the setting affects characters)
- Explain how the differences in the perspective or knowledge of characters and the audience produces suspense or humor (e.g., created through the literary devices of irony, symbolism, flashback, and foreshadowing)
- □ Compare a fictional portrayal of a time, place, or character to historical sources from the same period as a means of understanding how authors use or alter history
- Critique an author's use of elements of poetic style (e.g., repetition, omission, line organization/patterns and dialogue)
- Describe and discuss the effect of the author's use of exaggeration, flashback, foreshadowing, diction, word choice (e.g. the choice to omit words that leave the reader with much to infer), tone, mood, exposition, action, or dialogue on the reader's understanding of grade-appropriate text

Informational

- □ Analyze the effectiveness of text organization (e.g., sequence, including chronology and enumeration; description; cause and effect; compare and contrast; problem and solution) in grade-appropriate text
- Evaluate, explain, and discuss how the different components of a presentation of an argument (e.g., issue definition, issue choice, stance, and relevance) affect the quality of the position
- Analyze how two or more authors writing about the same topic shape their presentations of key information by emphasizing different evidence or advancing different interpretations of facts

Fluency

- Read and comprehend informational and narrative grade-appropriate texts fluently and accurately
- □ Recognize errors during reading that interfere with the meaning, use self-correcting strategies, and adjust reading rate

Vocabulary

- Determine word meanings using structural analysis (e.g., roots, affixes, etc.) or context, whether stated directly or inferred, through use of definition, restatement, example, and compare and contrast
- □ Use grade-appropriate academic vocabulary (e.g., science, math, social science, technology) and English language arts-specific words and phrases (e.g., poetry, literature) taught directly and gained through reading and responding to text

Speaking and Listening

- □ Initiate and engage actively in group discussion on Grade 8 topics and texts by:
 - Building on others' ideas by asking relevant questions and contributing appropriate and essential information
 - Cooperating with classmates to set clear goals, deadlines, and establish roles
 - o Explaining own ideas, thoughts, and understanding clearly and in a sequential order
- Prepare for discussions by reading and researching materials and explicitly drawing on that preparation in discussion
- D Present claims and findings, using visual materials when appropriate
- Present information using appropriate eye contact, adequate volume, and clear pronunciation for appropriate audience, context, and task

CPS Learning Targets

CPS Writing Learning Targets—EIGHTH GRADE

By the end of Grade 8, students will:

Process

- □ Engage in the writing process (e.g., prewriting, drafting, revision, editing, and publishing) to develop the habits of writers
- □ Use the writing process for a variety of purposes (e.g., narrative, expository and persuasive) and audiences
- □ Read and discuss the work of published authors to study what they do as writers and imitate what they noticed in an effort to strengthen their own writing
- □ Revise and edit for organization, coherence, and quality after reviewing their work through discussion and conferences, with classmates and teachers
- □ Use available resources to design, produce, and present compositions and multimedia works

Inquiry and Research

- Generate questions of interest around issues gained from experiences (e.g., field trips, news, discussions, text, and/or digital media) as sources of information
- Gather relevant information from multiple sources and assess the credibility and accuracy of sources
- □ Write explanatory texts on chosen topics utilizing relevant facts
- $\hfill\square$ Quote, paraphrase, and cite the source of their research
- Use text, graphic materials, or visual aids to present information (e.g., charts, written reports, maps, artifacts, student-created games, multimedia)
- □ Present information in appropriate format that was gathered by either inquiry or research (e.g., interviews, surveys, software, presentations)

Communication through Writing

- □ Value writing as a way of expressing themselves (e.g., short story, poetry, play, song, parody, letters)
- □ Write for a variety of purposes, audiences, and time constraints
- □ Use appropriate language, detail, and format for a specified audience
- Use the characteristics of a well-developed narrative, expository, and persuasive piece
- Compose a multi-paragraph piece that presents one position of an issue with sufficient support

Organization, Coherence, and Quality

- Elaborate ideas through: facts and evidence, details, description, reasons,
- $\hfill\square$ and narration
- □ Organize a coherent structure appropriate to audience and context using paragraphs while writing narrative, expository, and persuasive pieces
- □ Draft an effective introduction that provides a context for discussion
- Compose topic sentences while establishing and maintaining focus throughout a
- $\hfill\square$ paragraph or writing piece
- Draft a conclusion that emphasizes main theme and synthesizes key points
- □ Use transition words to connect ideas within and across paragraphs
- Develop multi-paragraph compositions that include introduction, first- and second-level support, and a conclusion

Conventions

- Edit own work for grammar, punctuation, conventional spelling, and revise accordingly
- Demonstrate appropriate use of various parts of speech
- □ Explore and use more sophisticated sentence constructions and improve awkward or confusing structures
- □ Write paragraphs that include a variety of sentence types (e.g., declarative, interrogative, exclamatory, imperative)