Manchester Academic Charter School
Fifth Grade
Priority Standards and Content for Mastery
English-Language Arts

5th grade

Foundational Skills

1. Read with accuracy and fluency to support comprehension.
   a. Read on-level text with purpose and understanding
   b. Read grade-level text orally with accuracy, appropriate rate, and expression on successive readings
   c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary

Analyzing Literature

2. Cite evidence by quoting accurately from the text to explain what the text says explicitly and make inferences and generalizations.
3. Determine the theme of a text 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 a text.
4. Compare and contrast two or more characters, settings or events in a story or drama, drawing on specific details in the text.
5. Describe how a narrator or speaker’s point of view influences how events are described; describe an author’s purpose and explain how it is conveyed in the text.
6. Compare and contrast texts in the same genre on their approaches to similar themes and topics as well as additional literary elements. (See Appendix A)

Analyzing Informational text

7. Determine two or more main ideas in a text and explain how they are supported by key details; summarize the text.
8. Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
9. Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence supports which points.
10. Integrate information from several texts on the same topic to demonstrate understanding of that topic.
11. Interpret text features (e.g., headings, graphics, charts) and/or make connections between text and the content of text features.

Writing

13. Write opinion pieces on topics or texts.
   a. Introduce the topic and state an opinion on the topic
   b. Provide reasons that are supported by facts and details; draw from credible sources
   c. Create an organizational structure that includes
      i. related ideas grouped to support the writer’s purpose
ii. link opinion and reasons using words, phrases and clauses
iii. provide a concluding statement or section related to the opinion
d. Write with an awareness of style; use sentences of varying length; explain, combine, and reduce sentences for meaning, reader/listener interest and style

14. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
   a. Identify and introduce the topic clearly
   b. Develop the topic with facts, definitions, concrete details, quotations or other information and examples related to the topic; include illustrations and multimedia when useful to aiding comprehension
   c. Group related information in paragraphs and sections
      i. linking ideas within categories of information using words and phrases
      ii. provide a concluding statement or section
      iii. include formatting when useful to aiding comprehension
   d. Write with an awareness of style; use precise language and domain-specific vocabulary to inform about or explain the topic; use sentences of varying length

15. Write narratives to develop real or imagined experiences or events.
   a. Orient the reader by establishing a situation and introducing a narrator and/or characters
   b. Use narrative techniques such as
      i. dialogue, description and pacing, to develop experiences and events or show the responses of characters to situations
      ii. use concrete words and phrases and sensory details to convey experiences and events precisely
   c. Organize an event sequence that unfolds naturally
      i. using a variety of transitional words and phrases to manage the sequences of events
      ii. provide a conclusion that follows from the narrated experiences and events

***Students should be able to write at least strong five paragraphs.***
(Introductions, three body paragraphs and a conclusion)

Language

16. Demonstrate command of the conventions of standard English grammar, usage, capitalization, punctuation and spelling.
   a. Explain the function of conjunctions, prepositions and interjections in general and their function in particular sentences
   b. Form and use perfect verb tenses (e.g., I had walked; I have walked; I will have walked)
   c. Use verb tense to convey various times, sequences, states and conditions
   d. Recognize and correct inappropriate shifts in verb tense
   e. Use correlative conjunctions (e.g., either/or, neither/nor)
   f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-on sentences
   g. Correct frequently confused words (e.g., to, too, two; there, their, they’re)
h. Ensure subject-verb and pronoun-antecedent agreement
i. Use punctuation to separate items in a series
j. Use a comma to separate an introductory element from the rest of the sentence
k. 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?)
l. Use underline, quotation marks or italics to indicate titles of works
m. Use colons before a list
n. Spell grade-appropriate words correctly

Production of Writing

16. With guidance and support from peers and adults
   a. develop and strengthen writing as needed by planning, revising, editing, rewriting or trying a new approach
   b. use technology, including the Internet, to produce and publish writing
   c. to interact and collaborate with others

***Demonstrate sufficient command of keyboarding skills to type a minimum of two pages in a single sitting (30 minutes).***

Vocabulary

17. Demonstrate understanding of figurative language, word relationship and nuances in word meanings. (See Appendix B)
   a. Interpret figurative language (simile, metaphor, personification, symbol), in context
   b. Recognize and explain the meaning of common idioms, adages and proverbs
   c. Use the relationship between particular words (e.g., antonyms, synonyms, homographs) to better understand each of the words

18. Determine or clarify the meaning of unknown and multiple-meaning word and phrases based on grade 5 level reading and content, choosing flexibly from a range of strategies.
   a. Use context as a clue to the meaning of a word
   b. Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word

Anti, Co, Fore, Il, ir, Inter, Mid

   Post, Semi, -ist, -ish, -ness, -tion, -sion

Research

19. Conduct short research projects that use several sources to build knowledge through investigation of a different aspect of a topic.
   a. Document sources in a works cited page
Speaking

20. Report on a topic or present an opinion
   a. sequencing ideas logically and using appropriate facts and relevant descriptive details to support main ideas or theme
   b. speak clearly with adequate volume, appropriate pacing, and clear pronunciation
Mathematics

5th grade

Numbers and Operations in Base Ten
Place-Value and Decimals

1. Explain patterns in the number of zeros of the product when multiplying a number by powers of 10 and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.
2. Read and write decimals to thousandths using base-ten numerals, word form and expanded form.
3. Compare two decimals to thousandths based on meanings of the digits in each place using >, =, < symbols.
   a. Round decimals to any place (limiting rounding to the ones, tenths, hundredths, or thousandths place).
4. Multiply multi-digit whole numbers (not to exceed three-digit dividends and two-digit divisors).
   a. Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors
5. Add, subtract, multiply and divide decimals to hundredths (no divisors with decimals).

Numbers and Operations
Fractions

6. Add and subtract fractions (including mixed numbers) with unlike denominator. (May include multiple methods and representations).
7. Solve word-problems involving division of whole numbers leading to answers in the form of fractions (including mixed numbers).
8. Multiply a fraction (including mixed numbers) by a fraction.
9. Demonstrate an understanding of multiplication as scaling (resizing).
10. Divide unit fractions by whole numbers and whole numbers by unit fractions.

Operations and Algebraic Thinking
Numerical Expressions

11. Use multiple grouping symbols (parentheses, brackets or braces) in numerical expressions and evaluate expressions containing these symbols.
12. Generate two numerical patterns using two given rules.
13. Identify apparent relationships between corresponding terms of two patterns with the same starting numbers that follow different rules.
Geometry
Graphing Points

14. Identify parts of the coordinate plane (x axis, y-axis and the origin) and the ordered pair (x-coordinate and y-coordinate). Limit the coordinate plane to quadrant 1.

15. Classify two-dimensional figures in a hierarchy based on properties.

Measurement and Data
Conversions

16. Convert between different-sized measurement units within a given measurement system. A table of equivalencies will be provided.

17. Solve problems involving computation of fractions by using information presented in line plots.

18. Display and interpret data shown in tallies, tables, charts, pictographs, bar graphs, and line graphs and use a title, appropriate scale, and labels. A grid will be provided to display data on bar graphs or line graphs.

19. Apply the formulas \( V = l \times w \times h \) and \( V = B \times h \) for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real-world and mathematical problems. Formula will be provided.
Science

5th grade

The Nature of Science

1. Describe how explanations, predictions and models are developed using evidence.
2. Design a simple, controlled experiment (fair test) identifying the independent and dependent variables, how the dependent variable will be measured and which variables [mass, release height, length of string] to number of swings of a pendulum, investigate the relationships between variables in paper airplane designs).
3. Describe relationships between variables through interpretation of data and observations (i.e., make predictions for the outcome of a controlled experiment using data tables and graphs).
4. Describe the appropriate use of instruments and scales to accurately measure time, mass, distance, volume, and temperature safely under a variety of conditions (e.g., use a thermometer to observe and compare the interaction of food coloring in water at different temperatures).
5. Describe how models are used to better understand the relationships in natural systems (e.g., water cycle, Sun-Earth-Moon system. Ecosystems, observe and draw a diagram to show the effects of flowing water in a watershed).
   a. Explain the human body systems: glands and reproductive system, human adolescent, endocrine and reproductive systems
6. Recognize that all organisms are composed of cells and explain the concept of the cell as the basic structural unit of all living things.
   a. Explain the concept of a cell as the basic unit of life. Compare and contrast plant and animal cells structure and processes.
      i. Identify and classify items into one of five kingdoms (plant, animal, fungus, protist, moneran).
      ii. Explain and classify items into smaller groups: Kingdom, Phylum, Class, Order, Family, Genus, Species and Variety.
7. Compare the structure and function of basic cell parts in organisms (i.e., plants and animals).
8. Differentiate between inherited and acquired traits (e.g., scars, injuries).
9. Describe the roles of producers, consumers and decomposers within a local ecosystem.
10. Explain how different items are recycled and reused.
11. Explain how certain questions can be answered through scientific inquiry and/or technological design (e.g., consumer product testing, common usage of simple machines, modern inventions).
12. Describe how life on Earth depends on energy from the sun.
13. Describe how organisms meet some of their needs in an environment by using behaviors (patterns of activities) in response to information (stimuli) received from the environment.
14. Give examples of how inherited characteristics (e.g., shape of beak, length of neck, location of eyes, shape of teeth) may change over time as adaptations to changes in the environment that enable organisms to survive.
15. Describe the life cycles and reproduction: the life cycles of humans, asexual reproduction, sexual reproduction.

Physical Sciences: Chemistry and Physics

16. Describe how water can be changed from one state to another by adding or taking away heat. Describe chemical and physical changes.
17. Explain the basic atomic structure, activity, and common compounds.
18. Identify and describe common elements from the periodic element table.
   - Hydrogen
   - Helium
   - Carbon
   - Nitrogen
   - Oxygen
   - Sodium
   - Aluminum
   - Silicon
   - Chlorine
   - Copper
   - Silver
   - Gold
   - Iron
19. Demonstrate how electrical circuit provides a means of transferring electrical energy when heat, light, sound and chemical changes are produced.
   a. Demonstrate how electromagnets can be made and used.

Earth and Space Sciences

20. Describe how landforms are the result of a combination of destructive forces such as erosion and constructive erosion, deposition of sediment, etc.
21. Differentiate between weather and climate. Explain how the cycling of water, both in and out of the atmosphere, has an effect on climate.
22. Provide evidence that the earth revolves around (orbits) the sun in a year’s time and that the earth rotates on its axis once approximately every 24 hours.
Famous Scientist

23. Galileo
24. Percy Lavon Julian
25. Ernest Just
26. Carl Linnaeus
Social Studies

5th grade

Civics

1. Understand the rule of law in protecting property rights, individual rights, and the common good.
2. Describe the basic purposes of government in the classroom, school, community, state and nation.
3. Identify key ideas about government found in significant documents:
   a. Declaration of Independence
   b. United States Constitution
   c. Bill of Rights
   d. Pennsylvania Constitution
4. Explain why individuals become involved in leadership and public service and identify specific ways individuals participate in school and community activities.
5. Describe the responsibilities and powers of the three branches of government
   a. Describe how the elected official representative bodies function in making local, state and national laws
   b. Describe the role of the local and state government officials.

Geography

6. Describe the difference between nation, country, state and city.
   a. Locate the Western Hemisphere, North America, Caribbean Sea, Gulf of Mexico, Regions and their characteristics (New England, Mid-Atlantic, Great Plains, Southwest, West, Pacific Northwest)
   b. Locate and name the fifty states and capitals.
7. Identify and locate South and Central American on maps and globes; Brazil and Argentina, Amazon River, Andes Mountains.
8. Identify the Great Lakes of the world.
   a. Eurasia: Caspian Sea
   b. Asia: Aral Sea
   c. Africa: Victoria, Tanganyika, Chad
   e. South America: Maracaibo, Titicaca

United States History

10. Differentiate how continuity and change in United States history are formed and operate through the Western Expansion.
    a. Belief systems and religions
    b. Commerce and industry
    c. Technology
    d. Politics and government
e. Physical and human geography
f. Social organizations

11. Examine the causes and leaders of the Civil War.
12. Examine the Reconstruction Era.

World History

13. Distinguish between conflict and cooperation among groups and organizations that impacted development of the history of the world with a focus on Russia and Japan.
Appendix A

Books and Stories Suggestions

Stories

*The Adventures of Tom Sawyer*, Twain
*Little Women* (Part First), Alcott
*Narrative of the Life of Frederick Douglass*, Douglass
*The Secret Garden*, Burnett
*Tales of Sherlock Holmes*, including “The Red-Headed League”, Doyle

Drama

*A Midsummer Night’s Dream* (William Shakespeare)

Novels:

*Rats of NIHM*
*Bud, Not Buddy*
*Tuck Everlasting*

Poems

Barbara Friethchie, Whittier
Battle Hymn of the Republic, Howe
A bird came down the walk, Dickinson
I Hear America Singing, Whitman
I like to see it lap the miles, Dickinson
I, too, sing America, Hughes
Jabberwocky, Carroll
O Captian! My Captain!, Whitman
The Road Not Taken, Frost

Myths and Legends

*A Tale of the Oki Islands* (a legend from Japan, also known as “The Samurai’s Daughter”)
*Morning Star and Scarface: the Sun Dance* (a Plains Native American legend, also known as “The Legend of Scarface”)
Native American trickster stories (for example, tales of Coyote, Raven, or Grandmother Spider)

Speeches

Abraham Lincoln: The Gettysburg Address
Chief Joseph “I will fight no more forever”
Appendix B

Phrases and Sayings

Birthday suit
Bite the hand that feeds you.
Chip on your shoulder
Count your blessings.
Eat crow
Eleventh hour
Eureka!
Every cloud has a silver lining.
Few and far between
Forty winks
The grass is always greener on the other side (of the hill).
To kill two birds with one stone
Lock, stock and barrel
Make a mountain out of a molehill
A miss is as good as a mile.
It’s never too late to mend.
Out of the frying pan and into the fire.
A penny saved is a penny earned.
Read between the lines.
Sit on the fence
Steal his/her thunder
Take the bull by the horns.
Till the cows come home
Time heals all wounds.
Tom, Dick and Harry
Vice versa
A watched pot never boils.
Well begun is half done.
What will be will be.