

Grade 4 Parent's Guide to Marking Period 3

During Marking Period 3, students in Grade 4 receive instruction on the concepts and skills described below.

PLEASE NOTE: Skills and Concepts in *Italics* Are Taught but Not Graded on the Report Card.

MATHEMATICS

Measurement and Data

- Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number-line diagrams that feature a measurement scale.
- Make a line plot to display a data set of measurements in fractions of a unit. Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Numbers and Operations - Fractions

- Explain why a fraction is equivalent to another fraction by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
- Compare two fractions with different numerators and different denominators, by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, by using a visual fraction model.
- Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.
 - Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.
 - Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, by using a visual fraction model.
 - Add and subtract mixed numbers with like denominators, by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.
- Solve word problems involving addition and subtraction of fractions referring to the same whole

and having like denominators, by using visual fraction models and equations to represent the problem.

- Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.
 - Understand a fraction $\frac{a}{b}$ as a multiple of $\frac{1}{b}$. For example, use a visual fraction model to represent $\frac{5}{4}$ as the product $5 \times (\frac{1}{4})$, recording the conclusion by the equation $\frac{5}{4} = 5 \times (\frac{1}{4})$.
 - Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number.
 - Solve word problems involving multiplication of a fraction by a whole number, by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $\frac{3}{8}$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed?
- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100. For example, express $\frac{3}{10}$ as $\frac{30}{100}$ and add $\frac{3}{10} + \frac{4}{100} = \frac{34}{100}$
- Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as $\frac{62}{100}$; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

Operations and Algebraic Thinking

- Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

READING

Reading Comprehension: Literature

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine a theme of a story, drama, or poem from details in the text; summarize the text.
- Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).
- Determine the meaning of words and phrases as they are used in a text, including those that allude to

significant characters found in mythology (e.g., Herculean).

- Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
- Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.
- Read and comprehend literature appropriately complex for Grade 4.

Reading Comprehension: Informational

- Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.
- Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a Grade 4 topic or subject area.
- Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.
- Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.
- Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.
- Read and comprehend informational texts appropriately complex for Grade 4.

Language: Vocabulary Acquisition and Use

- Identify the reasons and evidence a speaker provides to support particular points.
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on Grade 4 reading and content, choosing flexibly from a range of strategies.
- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

WRITING

Informative/Explanatory

- Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
- Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

- Provide a concluding statement or section related to the information or explanation presented.

Narrative

- Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.
- Use a variety of transitional words and phrases to sequence events.

Opinion

- Write opinion pieces on topics or texts, supporting a point of view with reasons and information.
- Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's opinion.
- Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).
- Provide a concluding statement or section related to the opinion presented.

Process, Production, and Research

- Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience.
- With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.
- With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.
- Conduct short research projects that build knowledge through investigation of different aspects of a topic.
- Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.

Use of Language

- Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
- Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.
- Use knowledge of language and its conventions when writing, speaking, reading, or listening.

SCIENCE

Earth and Space Science

- Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- Describe and graph the amounts and percentages of water and fresh water in various reservoirs to provide evidence about the distribution of water on Earth.
- Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.

SOCIAL STUDIES

Culture

- Describe the various cultures of early societies of Maryland.
- Analyze how Maryland society was influenced by the contributions of people and groups.
- Describe cultural characteristics of various groups of people in Maryland.
- Describe the various cultures of colonial societies and how the environment influenced them.
- Analyze how native societies were influenced by the diverse cultures of the explorers and settlers.
- Analyze how increased diversity in the colonies resulted from immigration, settlement patterns, and economic development.
- Analyze factors that affected relationships in the colonial period.

History

- Analyze the chronology and significance of key historical events leading to early settlement in Maryland.
- Compare Native American societies in Maryland before and after European colonization.
- Analyze the chronology and the significance of key historical events leading to early settlements in colonial America.

INFORMATIONAL LITERACY

- Follow an inquiry process and connect the process to real life.
- Formulate and refine questions to meet an information need.
- Evaluate sources to meet the information need.
- Use specific sources to find information.
- Record data/information in a variety of formats.
- Evaluate and analyze the quality of recorded data/information to meet the information need.
- Use an appropriate and accepted citation style to create a source list.
- Use a variety of formats to prepare the findings/conclusions of the information need for sharing.
- Use safe practices when online.

ART

Creating and Connecting to Art

- Investigate diverse approaches to artmaking as inspiration to generate original ideas.
- Select and organize art elements and design principles to depict ideas about tradition.
- Select from traditional and innovative techniques and practices when using art tools, media, and workspace.
- Apply feedback to revise artwork in progress and refine craftsmanship.
- Create artwork in response to a cultural tradition.
- Infer information about the time, place, and culture in which an artwork is made.

Presenting and Responding to Art

- Select an artwork for display and justify the choice with an artist's statement.
- Choose an appropriate display method and prepare selected artwork for presentation.
- Curate a group exhibition of artworks that communicates a selected theme.
- Compare images to determine stylistic and expressive qualities.
- Support personal interpretation with visual evidence from the artwork.
- Apply criteria and justify the evaluation of personal artwork and art made by others.

MUSIC

Analyzing and Responding to Music

- Listen to and perform music with changes in expressive qualities.
- Create appropriate movement to demonstrate perception of musical characteristics.
- Describe how musical elements are used in aural examples from various North American cultures.
- Identify and describe roles of musicians in North America.
- Listen to and describe how selected works from standard music literature correspond to specific historical events.
- Listen to and describe examples of music that represent musical styles and traditions from various historical periods and world cultures.
- Compare in two or more arts how the characteristic materials of the art form (sound in music, movement in dance) can be used to transform similar events, emotions, or ideas into works of art.

Performing Music

- *Perform singing games and traditional dances from a variety of world cultures.*
- *Perform songs and dances from a variety of historical periods and world cultures, including some connected to general classroom studies.*

Reading and Notating Music

- Read and perform a simple melody on the treble staff using solfeggio or a comparable system.
- Notate a short rhythmic phrase from dictation using standard notation.

Creating Music

- *Use the voice to improvise simple rhythmic variations and melodic embellishments on familiar melodies.*

PHYSICAL EDUCATION

Personal and Social Responsibilities

- Work effectively with others in physical activity settings.
- Build and maintain relationships that develop a sense of community.

Movement Skills and Concepts

- Demonstrate static and dynamic movement patterns.
- Demonstrate proficiency in tumbling sequence (educational gymnastics).
- Perform locomotor and non-locomotor skills while varying movement conditions.

HEALTH EDUCATION

Nutrition and Fitness (NF)

- *Identify and define functions of nutrients.*
- *Demonstrate the relationship among food intake, physical activity, and weight management.*
- *Explain the relationship between nutrition and physical activity.*
- *Summarize the Dietary Guidelines for Americans.*
- *Analyze the Nutrition Facts Label.*
- *Analyze influences on body image.*

Family Life and Human Sexuality (FLHS):

- *Identify how your family helps you and you help your family.*