

Grade 5 Parent's Guide to Marking Period 2

During Marking Period 2, students in Grade 5 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

Numbers and Operations in Base Ten

- Fluently multiply multi-digit whole numbers using the standard algorithm.
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Numbers and Operations Fractions

- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$.
(In general, $\frac{a}{b} + \frac{c}{d} = \frac{(ad+bc)}{bd}$.)
- Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result, $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ by observing that $\frac{3}{7} < \frac{1}{2}$.
- Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.
 - Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. For example, use a visual fraction model to show $(\frac{2}{5}) \times 4 = (8/5)$, and create a story context for this equation. Do the same with $\frac{2}{5} \times \frac{3}{4} = 8/15$. In general, $(a/b) \times (c/d) = (ac/bd)$.
 - Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.
- Interpret multiplication as scaling (resizing), by:
 - Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.
 - Explaining why multiplying a given number by a

fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.

- Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

READING

Reading Comprehension: Literature

- Quote accurately from 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, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.
- Compare and contrast two or more characters, settings, or events in a story or drama, drawing on specific details in the text.
- Explain how a series of chapters, scenes, or stanzas fits together to provide the overall structure of a particular text.
- Describe how a narrator's or speaker's point of view influences how events are described.
- Analyze how visual and multimedia elements contribute to the meaning, tone, or beauty of a text.
- Compare and contrast stories in the same genre on their approaches to similar themes and topics.
- Read and comprehend literature appropriately complex for Grade 5.

Reading Comprehension: Informational

- Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.
- Determine two or more main ideas of a text and explain how they are supported by key details; summarize the text.
- Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.
- Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a Grade 5 topic.
- Compare and contrast the overall structure of events,

ideas, concepts, or information in two or more texts.

- Analyze multiple accounts of the same event or topic, noting important similarities and differences in the point of view they represent.
- Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently.
- Explain how an author uses reasons and evidence to support particular points in a text, identifying which reasons and evidence support which point(s).
- Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.
- Read and comprehend informational texts appropriately complex for Grade 5.

Language: Vocabulary Acquisition and Use

- Engage effectively in a range of collaborative discussion on Grade 5 topics and texts, building on others' ideas and expressing their own clearly.
- Summarize a written text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on Grade 5 reading.
- Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.
- Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal contrast, addition, and other logical relationships (e.g., however, although, nevertheless, similarly, moreover).

WRITING

Informative/Explanatory

- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- Introduce a topic clearly, provide a general observation and focus; develop the topic with facts, definitions, concrete details, quotations, and group related information logically; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.
- Use precise language and domain-specific vocabulary to inform about or explain 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 narrative techniques, such as dialogue, description, and pacing, to develop experiences and events or show the responses of characters to situations.
- Use a variety of transitional words, phrases, and clauses to manage the sequence of events.
- Provide a conclusion that follows from the narrated

experiences or 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 ideas are supported by facts and details, and logically grouped to support the writer's purpose.
- Link opinion and reasons using words, phrases, and clauses (e.g., consequently, specifically).
- 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, editing, rewriting, or trying a new approach.
- Summarize or paraphrase information in notes and finished work, and provide a list of sources.
- Draw evidence from literary or informational texts to support analysis, reflection, and research.
- Write routinely over extended time frames and shorter time frames for a range of discipline-specific tasks, purposes, and audiences.

Use of Language

- Report on a topic or text or present an opinion, sequencing ideas logically and using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.
- Include multimedia components and visual displays in presentations when appropriate to enhance the development of main ideas or themes.
- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking English and capitalization, punctuation, and spelling when writing.
- Expand, combine, and reduce sentences for meaning, reader/listener interest, and style.

SCIENCE

Earth and Space Science

- Generate and Compare multiple solutions that use patterns to transfer information.
- Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move.
- Develop a model to describe that light reflecting from objects and entering the eye allows objects not to be seen.
- Support an argument that the gravitational force exerted by the Earth on objects is directed down.
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Engineering Design and Process

- Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

- Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

SOCIAL STUDIES

Civics

- Analyze how individuals and groups contributed to the political system of Maryland.
- Explain how Maryland government protects the rights of individuals and groups.
- Examine the early foundations, functions, and purposes of government.
- Analyze the historic events, documents, and practices that are the foundations of our political systems.
- Analyze the roles of colonial government regarding public policy and issues.
- Analyze how individuals' roles and perspectives shape the American political system.
- Analyze the importance of civic participation as a citizen of the United States.
- Describe individual rights and responsibilities in the United States.
- Examine the principle of due process.

Culture

- *Evaluate how various perspectives of Marylanders can cause compromise and/or conflict.*
- *Analyze factors that affected relationships in the colonial period.*

History

- Analyze the effects of the American Revolution.

INFORMATIONAL LITERACY

- *Formulate and refine questions to meet an information need.*
- *Identify resources to meet the information need.*
- *Evaluate and analyze the quality of recorded data/information to meet the information need.*
- *Locate, evaluate, and select sources to meet the information need.*
- *Record data/information in a variety of formats.*
- *Use a variety of formats to prepare the findings/conclusions of the information need for sharing.*
- *Use an appropriate and accepted citation style to create a source list.*

ART

Creating and Connecting to Art

- Synthesize ideas to generate innovative solutions for artwork.
- Use art elements and design principles to transform an idea, process, or product.
- Select appropriate art-making techniques and procedures when using art tools, media, and workspace.
- Apply feedback to enhance meaning in artwork and refine craftsmanship.
- Create artwork in response to change.
- Explain how art is used to change beliefs, values, or behaviors.

Presenting and Responding to Art

- Select an artwork for display and justify how it meets the criteria of an exhibition in an artist's statement.
- Apply appropriate display methods for artwork to be presented in a specific exhibition space.
- Share a personal collection that demonstrates how artwork has changed over time.
- Explain how observations change your analysis of the artwork.
- Explain how analyzing art transforms an initial interpretation.
- Select and use criteria to determine if a personal art-making goal was achieved.

MUSIC

Responding to Music

- Describe musical form in music from diverse cultures.
- Identify the mode of a piece of music as major or minor when presented aurally.
- Describe how the elements of music are used in aural examples from various world cultures.
- Develop criteria and apply them to the evaluation of their own and others' performances.

Performing Music

- Sing with increased vocal expression and clear diction and sing partner songs and songs with descants accurately.
- Perform simple chordal accompaniments, while other students sing or play contrasting parts.
- Sing or play in groups, blending timbres and matching dynamic levels.
- Perform folk songs 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 in different keys using solfeggio or a comparable system.*
- *Notate a short melodic phrase from dictation using standard notation.*

Creating Music

- *Arrange a given melody for classroom instruments.*

PHYSICAL EDUCATION

Personal and Social Responsibility

- Establish and modify personal activity goals while monitoring progress toward achievement.
- Apply time management strategies wisely.

Movement Skills and Concepts

- Recognize the importance of self-evaluation and feedback in the improvement of motor skills.
- Demonstrate catching an overhand-thrown object.
- Refine skills needed in catching, tossing, and throwing.
- Refine skills needed in striking with body parts and implements.

HEALTH EDUCATION

Personal and Consumer Health (PCH)

- *Identify and practice health-enhancing behaviors to reduce health risks for safer, healthier lives.*
- *Locate resources from home and school that provide valid health information concerning consumer health issues and services.*

Safety and Injury

- *Identify household products that can be abused by inhaling.*
- *Recognize sexual harassment as a form of violence.*