

## Grade 4/5 Parent's Guide to Marking Period 2

During Marking Period 2 students in Grade 4/5 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

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#### 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.
- 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.
- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement.
- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems.

#### Numbers and Operations--Fractions

- 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  $\frac{1}{2}$ .
- 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 and justify the decompositions. Examples:  $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$  ;  $2\frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$  .
- Multiply a fraction by a whole number and solve word problems involving multiplication of a fraction by a whole number, by using visual fraction models and equations to represent the problem.
- 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  $\frac{3}{10} + \frac{4}{100} = \frac{30}{100} + \frac{4}{100} = \frac{34}{100}$  .
- 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.
- Determine whether a given whole number in the range 1–100 is prime or composite.

#### Geometry

- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
- Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles.

### READING

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#### Reading Comprehension: Literature

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences.
- 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).
- Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.
- 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

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences.
- 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.
- 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.

- Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.
- Explain how an author uses reasons and evidence to support particular points in a text.
- 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**

- Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on Grade 4 topics and texts, building on others' ideas and expressing their own clearly.
- Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- 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.
- Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.
- 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 (e.g., quizzed, whined, stammered) and that are basic to a particular topic.

## **WRITING**

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### **Informative/Explanatory**

- Write informative/explanatory texts to examine a topic and convey ideas and information clearly.
- 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.
- 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.

### **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.
- Write routinely over extended time frames and shorter time frames for a range of tasks, purposes, and audiences.

### **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.
- Add audio recordings and visual displays to presentations, when appropriate to enhance the development of main ideas or themes.
- Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion); use formal English when appropriate to task and situation.
- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking (capitalization, punctuation, and spelling when writing).
- Use knowledge of language and its conventions when writing, speaking, reading, or listening.

### **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 purpose.
- Provide reasons that are supported by facts and details.
- Link opinions 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.

## **SCIENCE**

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### **Life Sciences**

- Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
- Support an argument that plants get the materials they need for growth chiefly from air and water.
- Use models to describe that energy in animals' food (used for body repair, growth, motion, and to maintain body warmth) was once energy from the sun.

## Engineering and Technology

- Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

## SOCIAL STUDIES

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### Economics

- Explain that people must make choices because resources are limited relative to economic wants for goods and services in Maryland, past and present.
- Explain how limited economic resources are used to produce goods and services to satisfy economic wants in Maryland.
- Describe regional economic specialization in Maryland and the ways people live and work.

### History

- Analyze the chronology and significance of key historical events during the age of European exploration and leading to early settlements in colonial America.

## INFORMATIONAL LITERACY

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- *Follow an inquiry process and connect the process to real life.*
- *Determine the scope of the information need and formulate and refine questions to meet the information need.*
- *Locate, select, and evaluate sources to meet the information need and 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 to share.*

## ART

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### 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 expressive quality.

- Support personal interpretation with visual evidence from the artwork.
- Apply criteria and justify the evaluation of personal artwork and art made by others.

## MUSIC

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### Responding to Music

- *Listen to and perform music with changes in expressive qualities.*
- *Distinguish between major and minor versions of the same melody presented aurally.*
- *Create appropriate movement to demonstrate perception of musical characteristics.*
- *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

- Sing, demonstrating variations of dynamics and tempi with proper breath management.
- Sing a varied repertoire of songs, including three-part rounds.
- 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

- *Create an arrangement by choosing instruments for a given ostinato (repeated musical phrase or rhythm).*

## PHYSICAL EDUCATION

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### Health-enhancing Physical Fitness and Activity

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

### Movement Skills and Concepts

- Demonstrate proficiency in throwing, catching, and striking with body parts.

## HEALTH EDUCATION

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### Personal and Consumer Health (PCH)

- *Locate resources that provide valid health information concerning consumer health issues and services.*

### Safety and Injury Prevention (SI)

- *Demonstrate the ability to respond appropriately to emergency situations.*
- *Identify safety rules that will prevent injury or accidents in specific situations.*
- *Identify harassment, abuse, and assault as a form of violence.*
- *Assesses and respond to situations that threaten personal*

*safety and may result in abuse.*