

7

School Readiness What Students Should Know and Be Able to Do at the End of 7th Grade



Reading/English Language Arts *Based on the Maryland College and Career-Ready Standards*

Analyze how elements of a story or drama interact

Determine the meaning of words and phrases as they are used in a reading and analyze the impact of rhymes and other repetitions of sounds in poems, stories, and dramas

Analyze the structure an author uses to organize a work, including how the major sections contribute to the whole and to the development of the ideas

Compare and contrast a reading to an audio, video, or multimedia version of it, analyzing each medium's portrayal of the subject

Engage effectively in a range of collaborative discussions with diverse partners on Grade 7 topics, texts, and issues

Explain a speaker's argument and specific claims, evaluating the soundness of the reasoning and the evidence

Write arguments to support claims with reasons and evidence

Write informative/explanatory texts to examine a topic and convey ideas, concepts, and information

Write narratives to develop real or imagined experiences or events using effective technique, relevant descriptive details, and well-structured event sequences

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking

7

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Mathematics

Analyze proportional relationships and distinguish them from other kinds of mathematical relationships

Solve percent problems

Add, subtract, multiply, and divide positive and negative numbers, and solve related word problems

Solve word problems that have a combination of whole numbers, fractions, and decimals

Solve equations such as $\frac{1}{2}(x - 3) = \frac{3}{4}$ quickly and accurately, and write equations of this kind to solve word problems

Solve problems involving scale drawings

Use statistics to draw inferences and make comparisons

Science

Next Generation Science Standards (NGSS)

Conduct an investigation to provide evidence that living things are made up of cells-either one cell or many different numbers and types of cells

Develop and use a model to describe the function of a cell as a whole and the ways that parts of cells contribute to the function

Write a scientific explanation to describe the role of photosynthesis in the cycling of matter and the flow of energy in organisms

Develop a model to describe how food is rearranged through chemical reactions to form new molecules that support growth and/or the release energy in organisms

Support an argument for how the body is a system of interacting subsystems composed of groups of cells

7

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Develop and use a model to describe why asexual reproduction results in offspring with identical genetic information and sexual reproduction results in offspring with different but similar genetic information

Develop and use a model to describe why structural changes to genes (mutations) may result in harmful, beneficial, or neutral effects to the structure and function of the organism

Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms, including human-influenced factors

Develop a model to describe the cycling of matter and flow of energy among living and non-living parts of an ecosystem

Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's 4.6 billion-year-old history

Social Studies

Examine primary and secondary sources to write about ancient civilizations and contemporary world cultural geography of the Eastern Hemisphere

Identify, locate, and compare places in the Eastern Hemisphere using geographic characteristics to write about how these factors affect how people live and work

Analyze the growth and the development of nations in the contemporary world by looking at the expansion and changes in nations and empires within the Eastern Hemisphere

Study the world outside of the United States and use a variety of sources and perspectives to analyze the characteristics and structure of political and economic systems within the Eastern Hemisphere

Raise questions, solve problems, reason, and reflect in their understanding of their own learning styles

Demonstrate learning through portfolios, exhibitions, simulations, debate, service-learning projects, that correlate to social studies content standards for evaluation