

Mathematics

at a glance

Grade Level

Skills Learned

8

Students engage in problem-based instruction and hands-on lessons and activities by exploring topics like transformations, similarity, and slope. They will investigate linear relationships and functions, including piecewise functions, and apply these concepts to geometric solids and real-life data. They will also use exponents, scientific notation, the Pythagorean Theorem, and work with irrational numbers.

7

Students engage in problem-based instruction and hands-on lessons and activities. They explore geometric transformations (translations, rotations, reflections), scale drawings, and slopes. They will learn to write and solve equations, discuss linear relationships, and understand functions. Students will solve problems involving surface area, volume, and the Pythagorean Theorem, and work with exponents, scientific notation, and irrational numbers.

6

Students engage in problem-based instruction and hands-on lessons and activities. They will practice calculating area with different methods, work with ratios and percentages, and solve problems involving fractions and equations. They will also explore proportions, percent changes, and statistics through various representations.

Science

at a glance

Grade Level

Skills Learned

8

Students learn scientific concepts through hands-on activities. They explore matter's properties, forces, motion, and energy. Students study the universe, weather patterns, and climate influences, including the carbon cycle. They also investigate ecosystems, food webs, and the survival of cells and organisms.

7

Students explore how matter changes, forces, motion, and Earth's systems. They will study plate tectonics, human impacts on water, and how energy moves in ecosystems. They will also learn about cells, organs, human body systems, inheritance, and how organisms are classified.

6

Students will explore science through hands-on activities and engaging labs. They will learn about matter and its properties, such as solids, liquids, and gases, and investigate mixtures and solutions. They will study forces, energy types, and energy transfer, model the Earth-Sun-Moon system, and understand Earth's systems and rock cycle. They will also research resource management and investigate ecosystems, focusing on organism structures and variations.

History

at a glance

Grade Level

Skills Learned

8

Students will begin to explore U.S. history from colonization to Reconstruction. They will learn about early migration to the Americas, European exploration, and the reasons behind the establishment of European colonies in North America. The program integrates civics, economics, geography, and history to help students understand and engage with historical and current world events.

7

Students will explore Texas history, including the impact of explorers, migration, and major events like the Texas and American Revolutions. They study the Republic of Texas, immigration, and how industries and events shaped the state. The course also compares the Texas and U.S. Constitutions and discusses active citizenship.

6

Students will explore social studies through civics, economics, geography, and history. They learn about past and present global issues, core democratic values, and their impact on individuals and societies. Activities include analyzing information, understanding the influence of historical events, and identifying major geographic features and societal characteristics.

Language Arts

at a glance

Grade Level

Skills Learned

8

Students develop and expand comprehension and fluency through reading, interpreting, and evaluating both classic and contemporary works of fiction, nonfiction, drama, and poetry. They engage in interactive read alouds, shared reading experiences, and novel studies. Students expand literary analysis skills through analyzing how a modern work of fiction draws on themes, patterns, or character types from traditional stories. They will analyze character motivation and tone in a variety of literary genres while identifying author's purpose and style. They also learn to demonstrate knowledge of skills by responding to text in meaningful ways. Develop and expand digital literacy skills by using a variety of digital tools to produce and publish writing with the citation of sources and creating original works individually and in collaboration with others.

7

Students develop and expand comprehension and fluency through reading, interpreting, and evaluating both classic and contemporary works of fiction, nonfiction, drama, and poetry. They engage in interactive read alouds, shared reading experiences, and novel studies. Students develop academic vocabulary, reading, communication, and writing skills through whole- and small-group instruction. Students build knowledge and understanding of vocabulary, genre characteristics, comprehension skills, metacognitive skills, literary elements, and author's purpose/craft. They also learn to demonstrate knowledge of skills by responding to text in meaningful ways. Students develop and expand digital literacy skills by using a variety of digital tools to produce and publish writing with the citation of sources and creating original works as a means of personal expression.

6

Students develop comprehension and fluency through reading, interpreting, and evaluating both classic and contemporary works of fiction, nonfiction, drama, and poetry. They engage in interactive read alouds, shared reading experiences, and novel studies. Students develop academic vocabulary, reading, communication, and writing skills through whole- and small-group instruction. Students build knowledge and understanding of vocabulary, genre characteristics, comprehension skills, metacognitive skills, literary elements, and author's purpose/craft. They also learn to demonstrate knowledge of skills by responding to text in meaningful ways.