

Grade 7

Roadmap for Success

Key standards and skills in
Math, Science, English & Spanish



Math 7

For additional practice opportunities, check out Khan Academy's
[Get Ready for 8th grade Math challenges](#)

Foundational Concept	Resources	CC Standard
<p>The Number System</p> <p>Students return to the number line to model the addition and subtraction of integers. Then they develop the rules for multiplying and dividing signed numbers. They use the properties of operations and their previous understanding of multiplication as repeated addition to represent the multiplication of a negative number as repeated subtraction.</p>	<p>Negative Numbers - Addition and Subtraction</p> <p>Negative Numbers - Addition and Subtraction</p>	<p>7.NS.A.1</p> <p>7.NS.A.2</p>
<p>Complementary, Supplementary, and Vertical Angles</p> <p>Students solve for unknown angles. They review key terms in this topic, including the following: adjacent, vertical, complementary, and supplementary angles; angles on a line; and angles at a point. Then students use a synthesis of angle relationships and algebra to solve multi-step problems, requiring students to identify several layers of angle relationships and to fit them with an appropriate equation to solve.</p>	<p>Vertical, complementary, and supplementary angles</p> <p>Missing angle problems</p>	<p>7.G.B.5</p>
<p>Ratios and Proportional Relationships</p> <p>Students examine situations carefully to determine if they are describing a proportional relationship. Their analysis is applied to relationships given in tables, graphs, and verbal descriptions. Students also learn that the unit rate of a collection of equivalent ratios is called the constant of proportionality and can be used to represent proportional relationships with equations of the form $y = kx$, where k is the constant of proportionality. Students extend their reasoning about ratios and proportional relationships to compute unit rates for ratios and rates specified by rational numbers, such as a speed of half a mile per one quarter of an hour. Finally, students solve percent increase and decrease problems with and without equations.</p>	<p>Rates and proportional relationships</p> <p>Percent word problems</p>	<p>7.RP.A.1</p> <p>7.RP.A.2</p> <p>7.RP.A.3</p>
<p>Expressions and Equations</p> <p>Students use linear equations to solve unknown angle problems and other problems presented within a context, including multi-step equations and inequalities containing rational numbers. Students use the number line to understand the properties of inequalities and recognize when to preserve the inequality and when to reverse the inequality when solving problems leading to inequalities. Students also discover the most famous ratio of all, π. They interpret solutions within the context of problems and they apply their work with expressions and equations to solve problems involving area of a circle and composite area in the plane, as well as volume and surface area of right prisms.</p>	<p>Expressions, equations, and inequalities</p> <p>Area and circumference of circles</p> <p>Volume and surface area word problems</p>	<p>7.EE.A.1</p> <p>7.EE.A.2</p> <p>7.EE.B.3</p> <p>7.EE.B.4</p> <p>7.G.B.4</p> <p>7.G.B.6</p>

7th Grade Life Science

Life Science

Unit	Concepts	NGSS Standards
Introduction to Life Sciences	<ul style="list-style-type: none"> -Science influence in the progressed of our world -Scientific method 	Science is a way of knowing used by many people, not just scientists.
Cells and Microlife	<ul style="list-style-type: none"> -Living things are made up of cells -Cells and their organelles have specific functions. 	MS-LS1-2. Develop and use a model to describe the function of a cell as a whole and ways parts of cells contribute to the function
Human Body Systems	<ul style="list-style-type: none"> -The relationship between our body systems determines their interaction and in consequence their balance -Students learn about the different body systems and how they interact with each other for a balanced and healthy human body 	MS-LS1-3. Use argument supported by evidence for how the body is a system of interacting subsystems composed of groups of cells
Ecology	<ul style="list-style-type: none"> -Living things interact between each other and their environment -Energy flows around the planet through different natural cycles. 	MS-LS2-3. Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem
Genetics	<ul style="list-style-type: none"> -Heredity -Genes and environmental factors that determine traits in living things -Importance of technology and modern science in the manipulation of genes to benefit humans 	<p>MS-LS1-5. Construct a scientific explanation based on evidence for how environmental and genetic factors influence the growth of organisms.</p> <p>MS-LS4-5. Gather and synthesize information about the technologies that have changed the way humans influence the inheritance of desired traits in organisms</p>
Evolution	Students investigate how evidence of changes in life that are due to unique interactions throughout time and space create changes in living organisms.	MS-LS4-1. Analyze and interpret data for patterns in the fossil record that document the existence, diversity, extinction, and change of life forms throughout the history of life on Earth under the assumption that natural laws operate today as in the past

****Practice and resources can be found in google classroom*****

English 7

To view the Summer Assignment for English 7, go to
<https://www.asf.edu.mx/learning/middle-school/summer>

7th Grade English

Power Standards	Performance Expectations	Links to Resources
Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.	Close reading: Students will be able to read and annotate a text carefully, looking for main ideas, supporting details as well as making inferences.	Common Lit Ereadingworksheets
By the end of the year, read and comprehend literature, including stories, dramas, and poems, in the grades 6-8 text complexity band proficiently, with scaffolding as needed at the high end of the range.	Independent reading: Students will be able to read a wide variety of fiction and non-fiction texts at or above grade level.	Summer book list
Write arguments to support claims with clear reasons and relevant evidence.	CEA Paragraph: Students will be able to write a well-structured CEA paragraph with claim, evidence and analysis.	No Red Ink Learn Your Smart
Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	Parts of speech: Student will be able use conjunctions and other transition words correctly.	No Red Ink
Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.	Capitalization: Students will be able to use the basic rules of capitalization such as days, months, names and titles.	No Red Ink

Spanish 7

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7th Grade Spanish

Estándar	Objetivos	Recursos
<p>Demuestran dominio de las normas y convenciones de la gramática y del uso del español al escribirlo</p>	<p>Aplicar en enunciados cortos las diversas reglas del acento.</p> <p>Identifican en oraciones cortas el sustantivo, pronombre, adjetivo y adverbio.</p>	<p>Deolarte Alcázar y Gutiérrez Gómez, <i>Punto y aparte 3, Cuaderno de ortografía para secundaria</i>. Editorial Castillo.</p>
<p>Citan evidencias textuales para sustentar el análisis de lo que dice explícitamente el texto, así como lo que se infiere del mismo.</p>	<p>Por medio de la lectura de textos literarios los alumnos logran argumentar problema central, descripción de personajes, solución del problema, escenario, etc.</p>	<p>Beltrán Brozon, Mónica, <i>Alguien en la ventana</i></p> <p>Sandoval, Jaime <i>El Club de la Salamandra</i></p> <p>Se recomienda revisar Sora, para pedir prestado algún libro electrónico que sea de su interés.</p>
<p>Escriben textos informativos para examinar y exponer ideas e información a través del análisis de contenidos relevantes.</p>	<p>Por medio de la investigación logran comprender y explicar temas que son de interés personal.</p> <p>Comprender y explicar el contexto que se vive en la actualidad dentro de México y el mundo.</p>	<p>CNN Español</p> <p>Milenio</p> <p>La Jornada</p>