



8th Grade Essential Standards

Quarter 1

ELA:

- 8.RL.1.A Draw conclusions, infer and analyze by citing the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- 8.RL.1.D - Using appropriate text, determine the theme(s) of a text and analyze its development over the course of a text; provide an objective summary of the text.
- 8.RI.1.D Explain the central/main idea(s) of a text and analyze its development over the course of a text; provide an objective summary of a text.
- 8.W.2.A.a Narrative: Develop narratives including poems about real or imagined experiences, which establish and maintain a consistent point of view, and include clearly identified characters, well-structured event sequences, narrative techniques and relevant, descriptive details.

Math:

- 8.GM.A.3 – Describe the effect of dilations, translations, rotations and reflections on two-dimensional figures using coordinates.
- 8.EE1.B.6
 - a. Explain why the slope (m) is the same between any two distinct points on a non-vertical line in the Cartesian coordinate plane.
 - b. Derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .

Science:

- 6-8.ESS1.A.2 Develop and use a model of the Earth-Sun system to explain the cyclical pattern of seasons, which includes Earth's tilt and directional angle of sunlight on different areas of Earth throughout the year.

Quarter 2

ELA:

- 8.RL.1.D - Using appropriate text, determine the theme(s) of a text and analyze its development over the course of a text; provide an objective summary of the text.
- 8.RI.1.D Explain the central/main idea(s) of a text and analyze its development over the course of a text; provide an objective summary of a text.
- 8.RL.2.D Analyze how literary devices are used to develop setting, reveal character, advance the plot, and contribute to meaning.
- 8.W.2.A.c Argumentative: Develop argumentative writing by introducing and supporting a claim with clear reasons and relevant evidence, acknowledging counterclaims and establishing relationships among claims, counterclaims, and supporting evidence.



8th Grade Essential Standards

Quarter 2 cont.

Math:

- 8.EE1.B.6
 - a. Explain why the slope (m) is the same between any two distinct points on a non-vertical line in the Cartesian coordinate plane.
 - b. Derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b .
- 8.EE1.C.7
 - a. Create and identify linear equations with one solution, infinitely many solutions or no solutions.
 - b. Solve linear equations and inequalities with rational number coefficients, including equations and inequalities whose solutions require expanding expressions using the distributive property and combining like terms.

Science:

- 6-8.ESS1.B.1 Analyze and interpret data to determine scale properties of objects in the solar system.
- 6-8.ESS2.C.1 - Design and develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.
- 6-8.ESS2.C.2 - Research, collect, and analyze data to provide evidence for how the motions and complex interactions of air masses results in changes in weather conditions.

Quarter 3

ELA:

- 8.RI.1.D Explain the central/main idea(s) of a text and analyze its development over the course of a text; provide an objective summary of a text.
- 8.RI.2.B- Point of view: analyze how the author acknowledges and responds to conflicting evidence or points of view in an informational text.
- 8.RI.2.D- Evaluate an author's argument, assessing whether reasoning is sound and the evidence is relevant and sufficient; recognize when irrelevant evidence is introduced.
- 8.W.2.A.b Expository: Develop informative/explanatory writing to examine a topic with relevant facts, examples, and details; establish relationships between ideas and supporting evidence.

Math:

- 8.EE1.A.1 – Know and apply the properties of integer exponents to generate equivalent expressions.
- 8.F.B.4a – Explain the parameters of a linear function based on the context of a problem.
- 8.DSP.A.3 – Interpret the parameters of a linear model of bivariate measurement data to solve problems.



8th Grade Essential Standards

Quarter 3 cont.

Science:

- 6-8.ESS2.A.1 Develop and use a model to illustrate that energy from Earth's interior drives convection which cycles Earth's crust leading to melting, crystallization, weathering, and deformation of large rock formations, including generation of ocean seafloor at ridges, submergence of ocean seafloor at trenches, mountain building and active volcanic chains.
- 6-8.ESS1.C.1 Construct a scientific explanation based on evidence from rock strata for how the geologic time scale is used to organize Earth's history.

Quarter 4

ELA:

- 8.RL.1.A Draw conclusions, infer and analyze by citing the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text.
- 8.RL.1.D - Using appropriate text, determine the theme(s) of a text and analyze its development over the course of a text; provide an objective summary of the text.
- 8.RL.2.D Analyze how literary devices are used to develop setting, reveal character, advance the plot, and contribute to meaning.

Math:

- 8.EE1.A.1 – Know and apply the properties of integer exponents to generate equivalent expressions.
- 8.GM.B.6 – Use models to demonstrate a proof of the Pythagorean Theorem and its converse.
- 8.GM.C.9
 - a. Understand the concept of surface area and find surface area of pyramids.
 - b. Understand the concepts of volume and find the volume of pyramids, cones, and spheres.

Science:

- 6-8.ESS3.B.1 Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
- 6-8.ESS3.A.1 Construct a scientific explanation based on evidence for how the uneven distributions of Earth's mineral, energy, and groundwater resources are the result of past and current geoscience processes and human activity.
- 6-8.ESS3.C.1 Analyze data to define the relationship for how increases in human population and per-capita consumption of natural resources impact Earth's Systems.
- 6-8.ESS3.D.1 Analyze evidence of the factors that have caused the change in global temperatures over the past century.