

Grade 8 Learning Outcomes January 2020

English Language Arts

- In literary texts, analyze how particular lines of dialogue or events propel the action, reveal aspects of a character, or provoke a decision.
- In informational texts, analyze how individuals, events, and ideas are introduced, relate to each other, and are developed.
- Gather relevant information from multiple sources; assess the credibility and accuracy of each source; quote or paraphrase the data and conclusions of others; avoid plagiarism and follow a standard format for citation.

Academic Vocabulary

- Formulate
- Appropriate

Social Studies

- Immigration Changes the American Dynamic
- Immigrants were forced to, and still, make difficult decisions for future benefit
- Immigration led to the growth of cities and new problems were faced by the nation because of it

Mathematics

- Understand that a function is a rule that assigns to each input exactly one output. The graph of a function is the set of ordered pairs consisting of an input and the corresponding output.¹
- Compare properties of two functions each represented in a different way (algebraically, graphically, numerically in tables, or by verbal descriptions).
- Interpret the equation $y = mx + b$ as defining a linear function, whose graph is a straight line; give examples of functions that are not linear.
- Model a linear relationship between two quantities. Determine the rate of change and initial value of the function from a description of a relationship or from two (x, y) values, including reading these from a table or from a graph. Interpret the rate of change and initial value of a linear function in terms of the situation it models, and in terms of its graph or a table of values.
- Describe qualitatively the functional relationship between two quantities by analyzing a graph. Sketch a graph that exhibits the qualitative features of a function that has been described verbally.
- Graph proportional relationships; unit rate as the slope. Compare two different proportional relationships represented in different ways.
- Use similar triangles to show the slope is same between any two points on a line; derive the equation $y = mx + b$ for a line intercepting the vertical axis at b .

Science

- Understand the relationship between cell division and growth.
- Know what is cellular differentiation.
- Understand the process of how one cell can become a multicellular organism.
- Know the steps and process of mitosis.
- Understand the basic principles of sexual and asexual reproduction.
- Know the steps and process of meiosis.
- Distinguish between Eukaryotic and Prokaryotic cells.

Science Lab

- Students will use mathematical analysis , scientific inquiry , and engineering design, as appropriate, to pose questions, seek answers, and develop solutions.
- Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment.
- To understand that organisms maintain a dynamic equilibrium that sustains life.

Arts with Mrs. Rossicone

- View slide show of Pop Art exhibit from PS/IS 229.
- Work in a team of 2-3 students to collaborate and create an art piece together.
- Find and gather materials to realize your project.
- Create a larger than life size sculpture of the chosen product paying attention to details in the packaging.

Class Art with Mrs. Rossicone

- Create an abstract still-life collage based on an actual still life.
- Explain how value, texture, pattern and color can be used to create unity and balance.
- Understand that unity is created by repetition of one or more of the visual elements; balance is a feeling of equal weight on both sides of the composition.

Technology with Miss Rappo

CCSS.ELA-Literacy. W.8.6

Use technology, including the Internet, to produce and publish writing and present relationships between information and ideas efficiently as well as to interact and collaborate with others.