

Page-Turners & Big Ideas

9th Grade Quarter One

English

Narrative

Multiple Narratives: the Power of Story

Texts: All American Boys, The Magic Fish, A Separate Peace

 Key Terms: characterization, point of view (first-person, third-person limited, third-person omniscient), figurative language (metaphor, simile, personification, symbolism), imagery, connotation, denotation

Mathematics

Algebra 1

Linear Equations, Inequalities, and Systems

• **Key Terms:** solution to a system of equations, equivalent systems, systems of inequalities, solutions to a system of inequalities

Functions

• **Key Terms:** function notation, linear function, decreasing function, increasing function, vertical intercept, piecewise function, absolute value, inverse function

Geometry/Honors Geometry

Congruences & Rigid Transformation

• **Key Terms:** conjecture, perpendicular bisector, inscribed, angle bisector, tesselation, assertion, rigid transformation, theorem, vector, translation, reflectional symmetry, rotational symmetry

Algebra 2 and Honors Algebra 2

Functions and Their Inverses

• **Key Terms**: asymptote, end behavior, zero, factor, multiplicity, polynomial, inverse, minimum, maximum, turning points, rational function, logarithmic function

^{**}The Board of Education adopted the mathematics curriculum, "Illustrative Math" by Imagine Learning.

^{**}The content for the student workbooks is sourced from the Illustrative Math curriculum.

^{**}No core instructional textbook



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Science

Astronomy with Physics

Interplanetary Motion

In this unit, students explore and investigate the motion, orbits, and forces of our planet and of objects within our solar system.

• **Key terms:** velocity, acceleration, conservation of energy, kinetic energy, potential energy, energy transfer, revolution

Earth Systems and Sustainability

Space Systems

In this unit, students explore patterns caused by Earth's movement in the solar system.

• **Key terms:** spectra, fusion, fission, protostar, light-year, gravity, constellation, revolution, redshift

Biology

Independent Relationships in Ecosystems

In this unit, students explore how living things and their environments stay in balance, and what happens when that balance is disrupted.

• **Key terms:** ecosystem, population, community, carry capacity, limiting factor, predator-prey relationship, habitat destruction, invasive species, biodiversity, restoration Ecology, endangered species

Chemistry

Diversity of Elements

In this unit, students investigate the building blocks of matter and the forces that hold atoms together.

• **Key terms:** nuclear force, radioactive decay, nuclear fission, nuclear fusion, electromagnetic (EM) radiation, solar flares, oceanic/continental crust, mid-ocean ridges, meteorites, impact craters

Physics A

Forces, Motion, and Interactions

In this unit, students explore how objects interact and how energy moves within and between systems.

• **Key terms:** force, motion, velocity, conservation of Energy, kinetic energy, potential energy

**No core instructional textbook

Social Studies

United States History: 1870 - Present

Economic Change Impacts Society, 1870-1900 Students analyze the growth of immigration and the impact of industrialization.

 Key Terms: nativism, Ellis and Angel Islands, agricultural mechanization, Bessemer steel process, mining/oil drilling, Populists, Knights of Labor, American Federation of Labor, strikes.

American Progress, American Empire? 1890 - 1920

Students learn about the progressive movement, imperialism in Latin America and Asia, and the causes and consequences of the United States' entry into World War I.

• **Key Terms:** annexation, Roosevelt Corollary, Panama Canal, Open Door Policy, Philippine American War, imperialism, Zimmerman telegram, homefront, Great Migration, Treaty of Versailles, League of Nations

Note: Social Studies standards are integrated throughout the unit. The standards are History, Civics, Peoples of the Nations and World, Economics, Geography, and Social Studies Skills.



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These supplemental instructional materials might also be included in ninth grade. Supplemental materials are additional approved books for teachers to use to teach a topic. Ask your child's teacher for more information about supplemental materials used in your child's classroom. If any listed instructional material conflicts with your family's sincerely held religious beliefs, you may request your child's excusal by submitting this request form. For additional information, visit our website.

Families: Put this on your refrigerator and review at home!