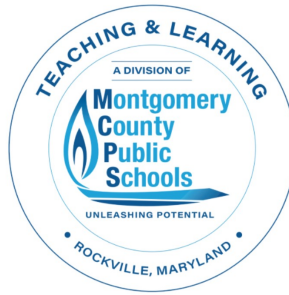


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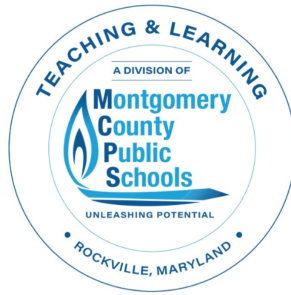
9th Grade Quarter Three

English Unit 3: Inquiry Anchor Texts: This unit from Odell Education focuses on non-fiction texts to support students in crafting effective arguments. Teachers may incorporate literary texts via literature circles as appropriate, focusing student attention on how writers use literature to present arguments. Suggested Literature Circle Texts: • <i>The Souls of Black Folk: Essays and Sketches</i> by W.E.B. Du Bois • <i>The House on Mango Street</i> by Sandra Cisneros • <i>Flowers for Algernon</i> by Daniel Keyes • <i>Ender's Game</i> by Orson Scott Card • <i>Speak</i> by Laurie Halse Anderson • <i>To Be Young, Gifted, and Black</i> by Lorraine Hansberry • <i>Jurassic Park</i> by Michael Crichton. • English 9 Text List • Key Terms: Argument, claim, counterclaim, rhetoric, multiple perspectives, philosophical argument, multimedia, film, revise, research, delineate, evidence, context, figurative language, academic English, nuances, oral presentation	Math Algebra 1 Unit 6: Introduction to Quadratic Functions • Key Terms: Function, function notation, linear growth, exponential growth, quadratic growth, quadratic function, pattern growth, rate of change, table of values, graph, equation, projectile motion, free fall, height versus time, initial height, initial velocity, gravity, coefficients, quadratic term, linear term, constant term, standard form, factored form, vertex form, x-intercepts, zeros, roots, y-intercept, vertex, axis of symmetry, opens upward, opens downward, maximum value, minimum value, symmetry, horizontal translation, vertical translation, vertical stretch, area models, revenue models, graphing technology. <i>**The Board of Education adopted the mathematics curriculum, "Illustrative Math" by Imagine Learning.</i> Geometry/Honors Geometry Unit 4: Right Triangle Trigonometry • Key Terms: Right triangle, acute angle, hypotenuse, opposite side, adjacent side, trigonometric ratio, sine, cosine, tangent, SOHCAHTOA, complementary angles, inverse trigonometric functions, arcsine, arccosine, arctangent, angle of elevation, angle of depression, 45-45-90 triangle, 30-60-90 triangle, ratios in right triangles, estimating angles, estimating side lengths, applying trigonometry, height problems, distance problems. Unit 5: Solid Geometry • Key Terms: Three-dimensional figures, solids of rotation, axis of rotation, prism, pyramid, cylinder, cone, sphere, cross section, dilation, scale factor, surface area, volume, composite solids, right solids, oblique solids, Cavalieri's Principle, density, cube root, scaling solids,
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	scaling area, scaling volume, prisms and cylinders, pyramids and cones, modeling with volume and surface area. <i>**The content for the student workbooks is sourced from the Illustrative Math curriculum.</i> Algebra 2 and Honors Algebra 2 Unit 2: Polynomial and Rational Functions Key Terms: complex zeros, completing the square, quadratic formula, radical equations, real numbers, complex numbers, imaginary numbers, rational equation, extraneous solution, even function, odd function, polynomial division, polynomial, Remainder Theorem, Pythagorean triples, polynomial identity, factorization, Fundamental Theorem of Algebra
Science** Biology B Unit 3: Structure and Function In this unit, students study how the human body maintains balance (homeostasis) while responding to internal and external changes, especially during athletic performance. Using athlete case studies, students explore how body systems work together, how injuries and illnesses disrupt balance, and how the body restores stability through feedback mechanisms or medical intervention. Students also examine how advances in athletic training and sports medicine help prevent injuries and protect long-term health. Key terms: homeostasis, equilibrium, feedback mechanism, stimulus, response, human body systems, structure and function, multicellular organism, internal environment, external environment Astronomy with Physics B Unit 3: Light and Stars. Students explore the relationship between distance and electric and magnetic fields, and the relationship between electricity and magnetism. Students observe the behaviors of light.	Social Studies United States History, 1900 - Present Day Prosperity, Depression & War, 1920-1945 Students investigate rising racism, xenophobia, and cultural conflicts that occurred amidst laissez-faire policies and the domination of big business in the 1920s. Students analyze the causes and impacts of the Great Depression and evaluate the legacy of the New Deal, as well as examine historical interpretations on the causes & consequences of WWII. Key Terms: racism, Red Summer, restrictive covenants, xenophobia, Harlem Renaissance, ethnic community organizations, Red Scare, religious fundamentalism, New Woman, LGBTQ subcultures, mass consumption, Great Depression, deportation, repatriation, New Deal, fascism, Nazism, antisemitism, Holocaust as a cause of Jewish refugees, Neutrality Acts, Pearl Harbor, Executive Order 8802, Bracero program, homefront, war theatres, nuclear weapon, peace conferences, Nuremberg Trials, United Nations



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Students analyze light from stars to identify their composition and distance from Earth.

- **Key terms:** electrostatic forces, Newton's Laws, gravity/gravitational fields, attraction, repulsion, solar storms, electromagnetic spectrum, reflection, refraction, diffraction, waves, photons, reflection, absorption, transmission, nuclear fusion, nuclear fission

Earth Systems and Sustainability B

Unit 3: Earth Systems and Water. Students investigate properties of water and compare sources of water on Earth. Students explore how water interacts with all of Earth's other systems. Students will model how the carbon cycle is connected to water including the role of the ocean. Students will compare Earth's current atmosphere to its ancient atmosphere. Students will design a rain harvesting system.

- **Key terms:** evaporation, condensation, transpiration, oceanic circulation, thermohaline, energy, convection, weathering, erosion, carbon cycle, greenhouse effect, climate change

Chemistry B

Unit 3: Characterizing and Explaining Chemical Reactions. Students will observe chemical reactions, balance chemical equations, and analyze data from lab investigations. Students will observe and model the relationship between composition, energy, and bonds of chemical reactants versus their products.

- **Key terms:** conservation of mass, energy, equilibrium, reactants, products, atoms, molecules, endothermic, exothermic, bonds, kinetic molecular theory, collision

Physics B

Unit 3: Thermal, Waves, Earth Science, and Communities Facing Environmental Challenges.

Students will develop and use models that demonstrate the laws of thermodynamics, including in Earth's systems and Earth's climate. Students will examine waves as means of transferring energy. Students will interpret data related to human impacts on the environment and the challenges communities face.

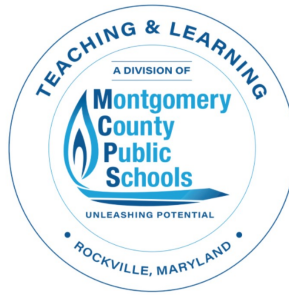
- **Key terms:** heat transfer, energy, temperature, thermodynamics, conservation of energy,

Early Cold War and the Black Freedom Struggle, 1945-1968

Students will learn about post-war economic growth and evaluate the extent to which the benefits were equally distributed. Students will analyze the causes of the Cold War and its impact on domestic politics and global events in Europe, Asia, and Latin America. Students will explore the growth, methods, and accomplishments of the Black freedom struggle.

- **Key Terms:** GI Bill, consumption, suburbanization, Executive Order 9981, urban renewal, Operation Wetback, tribal termination and relocation policies, Cold War, Marshall Plan, NATO, arms race, space race, McCarthyism, Red Scare, Lavender Scare, Civil Rights Movement, civil rights organizations, civil disobedience, terrorism, white supremacist organizations, COINTELPRO, Civil Rights Act of 1964, Voting Rights Act of 1965, Fair Housing Act,

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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radiation, electromagnetic, conduction, convection, seismic waves, wavelength, frequency, plate tectonics <i>**No core instructional textbook</i>	
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[These](#) supplemental instructional materials might also be included in 9th grade. Supplemental materials are additional approved books for teachers to use to teach a topic. 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!