

## What Your Child Is Learning This Quarter: Page-Turners & Big Ideas

### Eighth Grade Quarter Three

#### Humanities Magnet English

##### **Unit 3: The Power of Media and Narrative**

Focusing on how artists, writers, and creators use media to challenge societal norms and advocate for change, students explore speculative fiction and historical narratives.

**Genre Focus:** Science Fiction, Dystopia, and Culture

**Writing Task:** Speculative Fiction

##### Texts

- “Rime of the Ancient Mariner” by Samuel Taylor Coleridge
- *Frankenstein* (excerpts) by Mary Shelly
- “Nosedive” from BlackMirror
- “Story of Your Life” by Ted Chiang
- *Slaughterhouse-Five* by Kurt Vonnegut
- “Sunshine 99” by N.K Jemisin
- “The Lottery” by Shirley Jackson
- “The Eyes Have It” by Philip K. Dick
- “Frontier Thesis” by Frederick Jackson Turner
- The Treaty of New Echota
- *American Progress* by John Gast
- *Introduction to Mass Communication: Media Literacy and Culture (11th ed.)* by S.J. Baran

**Key Terms:** dystopia, mindset, influence, resistance

#### MatMath

##### **Math 8**

##### **Unit 5: Functions & Volume**

- **Key Terms:** function, input, output, rule, independent variable, dependent variable, function notation, equation, table, graph, coordinate plane, ordered pair, linear function, rate of change, initial value, volume, cubic unit, unit cube, prism, rectangular prism, cylinder, base, height, area of base, cross section, formula, measurement, units

##### **Unit 7: Exponents & Scientific Notation**

- **Key Terms:** exponent, power, base, exponentiation, repeated multiplication, power of ten, equivalent expressions, evaluate, standard form, scientific notation, coefficient, exponent of ten, positive exponent, negative exponent, zero exponent, magnitude, order of magnitude, estimate, reasonableness

#### Algebra 1

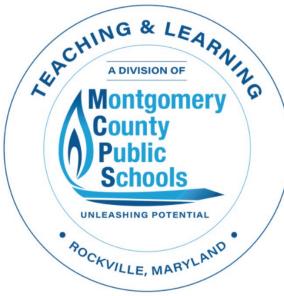
##### **Unit 6: Introduction to Quadratic Functions**

- **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.

#### Honors Geometry

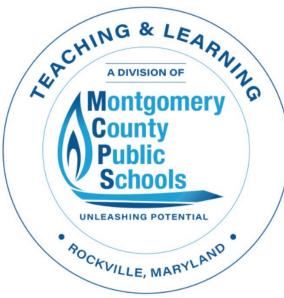
##### **Unit 4: Right Triangle Trigonometry**

- **Key Terms:** Right triangle, acute angle, hypotenuse, opposite side, adjacent side, trigonometric ratio, sine, cosine, tangent,



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	<p>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.</p> <p><b>Unit 5: Solid Geometry</b></p> <ul style="list-style-type: none"> <li>• <b>Key Terms:</b> 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, scaling area, scaling volume, prisms and cylinders, pyramids and cones, modeling with volume and surface area.</li> </ul> <p>**The Board of Education adopted the mathematics curriculum, "Illustrative Math" by Imagine Learning, for the above courses.</p>
<p><b>Humanities Magnet Social Studies</b></p> <p>This unit emphasizes the role of storytelling in shaping identity and history, with an emphasis on ethical reflection and creative expression.</p> <p>Topic Focus: Geographic and Economic Change Shape the Nation, 1820-1853</p> <p><b>Texts</b></p> <ul style="list-style-type: none"> <li>• See ELA Texts (integrated approach)</li> <li>• United States Constitution (with amendments) and The Bill of Rights</li> <li>• Monroe Doctrine (1823)</li> <li>• Indian Removal Act (excerpts) (1830)</li> <li>• Nullification Act (excerpts) (1832)</li> <li>• "Maria W. Stewart" by National Park Service, Boston African American National Historic Site</li> <li>• "This Little-Known Abolitionist Dared to Speak in Public Against Slavery" by Erin Blakemore</li> <li>• "Character Spotlight: Maria Stewart" by</li> </ul>	<p><b>Science</b></p> <p><b>Unit 3: Energy, Forces, and Motion</b></p> <p>In this unit, students explore how different forces make objects move and use math to measure their speed and acceleration. Students also learn about Newton's Laws of Motion and different types of energy and use what they learned to build and launch their own water bottle rockets.</p> <ul style="list-style-type: none"> <li>• <b>Key Terms:</b> Acceleration, Action, Balanced Force, Distance, Force, Friction, Frame of Reference, Inertia, Kinetic, Law, Gravity, Mass, Motion, Reaction, Reference Point, Speed, Static Friction, Time, Unbalanced Force, Velocity</li> </ul>



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<p><a href="http://pbs.org">pbs.org</a></p> <ul style="list-style-type: none"><li>• “Why Sit Ye Here and Die?” by Maria Stewart (speech transcript)</li><li>• “Maria Miller Stewart (1803 – 1880) – Journalist, Lecturer, Abolitionist and Women’s Rights Activist” by VCU Social Welfare History Project</li><li>• <i>Meditations</i> (excerpt with letter from William Lloyd Garrison) by Maria Stewart</li><li>• “Samuel Gridley Howe” by National Park Service, Boston National Park, Boston African American National Historic Site</li><li>• “Samuel Gridley Howe, Romantic Reformer” by Dr. James W. Trent, Jr., Gordon College, VCU Social Welfare History Project</li><li>• “Samuel Gridley Howe” by Perkins School for the Blind</li><li>• <i>Letters and Journals of Samuel Gridley Howe</i> (excerpts) by <a href="http://disabilityhistorymuseum.org">disabilityhistorymuseum.org</a> (editor)</li><li>• “Thomas Hopkins Gallaudet meets Alice Cogswell” by Gallaudet University, National Deaf Life Museum</li><li>• “American Annals of the Deaf and Dumb: Contract Between Thomas Gallaudet And Laurent Clerc (abridged)” by <a href="http://disabilityhistorymuseum.org">disabilityhistorymuseum.org</a> (editor)</li><li>• “Facial Hair Friday: Edward Miner Gallaudet” by Jessie Kratz</li></ul>	
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These supplemental instructional materials might also be included in 8th 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!