

# Gunston Middle School Differentiation Report 1st Quarter, 2022-2023



[ELA/Reading](#)

[Social Studies](#)

[Science](#)

[Mathematics](#)

## ELA / Reading

Grade 6 English Curriculum	Instructional Methods & Practices
<p><b>Unit 1: Finding Courage</b></p> <p><u>6th Grade Standards:</u></p>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>● Levels of Questioning (DOK)</li> <li>● Additional elaboration in writing</li> <li>● Choice texts for writing assignments</li> <li>● Choice reading</li> <li>● Peer revising / editing and coaching</li> <li>● Learning Stations / Self-Directed Learning</li> <li>● Optional Writing Contests</li> <li>● National Novel Writing Month (NaNoWriMo)</li> <li>● Open ended questioning</li> <li>● Optional additional unit text</li> </ul>
<p><b>Grade 6 Reading Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><b>Unit 1: Creating a Lifelong Reader</b></p> <p><b>Unit 2: Characters in Conflict</b></p> <p><u>6th Grade Standards:</u></p>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>● Small group teacher-led rotations differentiated by need &amp; developmental stage in decoding/spelling</li> <li>● Book clubs (student choice for texts &amp; student-led discussion)</li> <li>● Lexia PowerUp (automatically differentiated to reading strengths/weaknesses) <ul style="list-style-type: none"> <li>○ Lexia SkillBuilders assigned as independent work as needed to certain students</li> </ul> </li> <li>● Think-Pair-Share/Turn &amp; Talk</li> <li>● National Novel Writing Month (NaNoWriMo)</li> <li>● Read to self time &amp; Library time to find and read books on their independent level &amp; interest level</li> <li>● Differentiated word work words as an independent station for students working on spelling</li> </ul>

<p><b>Grade 7 English Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><b>Standards covered in Unit 1</b>  <b>7.6b:</b> Identify an author’s organizational pattern using textual clues, such as transitional words and phrases.  <b>7.4e:</b> Use context and sentence structure to determine meanings and differentiate among multiple meanings of words.  <b>7.6c:</b> Make inferences and draw conclusions using explicit and implied textual evidence.</p>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>● Students rotate between stations that involve watching a video, small group activity with teacher, reading an article and or read aloud (audio), comprehension questions and exit tickets.</li> <li>● Think-pair-share activities.</li> <li>● Journal writing activities with sentence starters and frames</li> <li>● Word banks to support vocabulary understanding</li> </ul>
<p><b>Grade 8 English Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><b>Unit 1: Places We Call Home</b>   <u><b>8th Grade Standards:</b></u> 8.5a, 8.5c, 8.5e, 8.6b, 8.6d, 8.6e, 8.7a, 8.7c, 8.7e, 8.7j, 8.8</p>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>● multiple levels of questioning</li> <li>● choice independent reading</li> <li>● graphic organizers for notes and outlining</li> <li>● visual aids</li> <li>● sentence starters and sentence frames</li> <li>● small-group instruction</li> <li>● one-on-one conferences</li> <li>● color-coding parts of essay</li> <li>● Kagan collaborative groups</li> </ul>

# Social Studies

<p><b>Grade 6 US History and Civics I Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><u>6th Grade Standards:</u></p> <p>USI.1 The student will demonstrate skills for historical thinking, geographical analysis, economic decision making, and responsible citizenship.</p> <p>USI.2 The student will interpret maps, globes, photographs, pictures, or tables.</p> <p>USI.3 The student will apply social science skills to understand how early cultures developed in North America</p> <p>USI.4 The student will apply social science skills to understand European exploration in North America and West Africa</p> <p>USI.5 The student will apply social science skills to understand the factors that shaped colonial America</p>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>● DBQ - What Happened to the Cahokians?             <ul style="list-style-type: none"> <li>○ Student were given the option of choosing their own documents out of the 8 sources available.</li> <li>○ Students were given extension options of reading other text.</li> </ul> </li> <li>● Invaders from the East Project             <ul style="list-style-type: none"> <li>○ Students can choose roles within group between four different roles.</li> <li>○ Students could also choose an additional Tribe to research that would require further individual un-scaffolded research.</li> </ul> </li> <li>● Goal: Reading outside of class- historical fiction, historical non-fiction</li> <li>● Brain Teaser Riddles- daily in class- historical thinking routine</li> <li>● Extension Section on Canvas with different choice activities</li> <li>● RAFT Activity</li> </ul>
<p><b>Grade 7 US History and Civics II Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><u>7th Grade Standards:</u></p> <p><b><u>UNIT 1: Foundations and Early Documents</u></b></p> <p><b>History</b> is the study of events in the past, <b>Civics</b> is the study of the rights and responsibilities of people in society, and <b>Social Studies</b> includes both history and civics.</p>	<p><b>Differentiation Strategies Offered</b></p> <p>Lessons include discussions of</p> <ul style="list-style-type: none"> <li>● Why Government?</li> <li>● What is History, What is Civics?</li> <li>● Should government’s power be strong or limited?</li> </ul> <p>Lessons include NearPod presentations, Newsela articles, inquiry questioning, researching, and analyzing primary &amp; secondary sources.</p>
<p><b>Grade 8 World Geography Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>

8th Grade Standards:

**Unit 1: Introduction to World Geography**

**Differentiation Strategies Offered:**

- Overarching Concepts
- Frayer Model
- Hamburger model of persuasive writing
- Vocabulary Web (Chalk Talk visible thinking routine)
- Mind mapping
- Visualizations
- Revised Bloom's Taxonomy
- Visible Thinking Routines (See, Think, Wonder/Claim, Support, Question/Gallery Walk/Chalk Talk/Questions Starts)
- Future Problem Solving
- Student Choice (formative and summative themes)

# Science

<b>Grade 6 Science Curriculum (i.e., summary of standards/content instructed)</b>	<b>Instructional Methods &amp; Practices</b>
<p><u>6th Grade Standards:</u></p> <p><b>Unit 1: Astronomy</b>            The Astronomy Unit is about:</p> <ol style="list-style-type: none"> <li>1) Understanding how life can exist on Earth               <ul style="list-style-type: none"> <li>● I can explain the unique properties of Earth that support life such as Earth’s composition, oceans, ice caps, atmosphere, and magnetic field. (6.2)</li> <li>● I can identify the age of the Earth. (6.2)</li> <li>● I can make a model of our solar system. (6.2)</li> </ul> </li> <li>2) Understanding the relative position and movement of the Earth, Sun and Moon:                I can model and describe...               <ul style="list-style-type: none"> <li>● how day and night occur (6.3)</li> <li>● how seasons occur (tilt and revolution around Sun) - (6.3)</li> <li>● how the phases of the moon occur (6.3)</li> <li>● the cycle of tides (6.3)</li> <li>● how eclipses occur (6.3)</li> </ul> </li> </ol> <p><b>Unit 2: Matter</b></p> <ul style="list-style-type: none"> <li>● I can create and interpret a simplified, modern model of the structure of an atom (6.5 a)</li> <li>● I can compare the atomic structure of two elements (6.5 b)</li> <li>● I can explain that elements are represented by symbols (6.5 c) I can describe the role of bonding in the formation of new substances (6.5 d)</li> <li>● I can identify the name and number of each element present in a simple molecule or compound (6.5 e)</li> <li>● I can model a simple chemical change with an equation and account for all atoms (6.5 e)</li> <li>● I can distinguish the types of elements and number of each element in the chemical equation (6.5 f)</li> </ul>	<p>Differentiation Strategies Offered</p> <p>Use the Think-Pair-Share Strategy</p> <p>Graphic organizers</p> <p>Learning through workstations</p> <p>Choice boards</p> <p>Use Task Cards</p> <p>Game-Based Learning</p> <p>Project-Based Learning</p> <p>Asking Open-Ended Questioning</p> <p>Create Learning Stations</p> <p>Philosophical Chairs</p> <p>Independent Project</p>

<ul style="list-style-type: none"> <li>I can interpret data to identify the predominant elements found in the atmosphere, the oceans, living matter, and Earth’s crust (6.5 g).</li> </ul>	
<p><b>Grade 7 Science Curriculum (i.e., summary of standards/content instructed)</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><u>7th Grade Standards:</u></p> <p><b>Unit 1:</b> Introduction to cells</p> <ol style="list-style-type: none"> <li>I can classify organisms as unicellular or multicellular. <b>(LS.3b)</b></li> <li>I can justify the complexity of unicellular and multicellular organisms using the biological levels of organization as evidence. <b>(LS.3a,b)</b></li> <li>I can label animal and plant cell organelles (cell membrane, cytoplasm, nucleus, cell wall, vacuole, mitochondrion, endoplasmic reticulum, and chloroplast). <b>(LS.2b)</b></li> <li>I can describe the function of animal and plant cell organelles (cell membrane, cytoplasm, nucleus, cell wall, vacuole, mitochondrion, endoplasmic reticulum, and chloroplast). <b>(LS.2b)</b></li> <li>I can develop a model to demonstrate how organelles function as a system <b>(LS.2b)</b>.</li> </ol> <p><b>Unit 2:</b> Cell processes → osmosis, diffusion, photosynthesis and cellular respiration</p> <ol style="list-style-type: none"> <li>I can differentiate between diffusion and osmosis. <b>(LS.2.E)</b></li> <li>I can use models to predict and explain the net movement of materials across a cell membrane (via osmosis and diffusion). <b>(LS.2.E)</b></li> <li>I can create a diagram that explains how the processes of photosynthesis and cellular respiration make energy available to eukaryotic cells. <b>(LS4b)</b></li> <li>I can write the chemical reactions for photosynthesis and cellular respiration and use the reactants and products to explain how the two processes are related. <b>(LS4b)</b>.</li> </ol>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>Choice Boards: Must-Do / May-Do lists</li> <li>Extension readings and videos</li> <li>Voice and choice in presentation materials / styles</li> <li>Encourage students to consider participating in the science fair</li> <li>Implement Reflection and Goal-Setting Exercises</li> <li>Gallery walks to encourage in depth observations and reflect on real-world connections in science</li> <li>Meaningful Student Voice &amp; Choice - choose a place (school, home, shopping mall, etc.) to represent as a cell</li> </ul>
<p><b>Grade 8 Science</b></p>	<p><b>Instructional</b></p>

Curriculum	Methods & Practices
<p><u>8th Grade Standards:</u></p> <p><b>Capstone Independent Science Project:</b>  <b>PS.1</b> The student will demonstrate an understanding of scientific and engineering practices by:</p> <ul style="list-style-type: none"> <li>a. asking questions and defining problems</li> <li>b. planning and carrying out investigations</li> <li>c. interpreting, analyzing, and evaluating data</li> <li>d. constructing and critiquing conclusions and explanations</li> </ul> <p><b>Unit 1:</b>  <b>PS.5</b> The student will investigate and understand that energy is conserved. Key ideas include:</p> <ul style="list-style-type: none"> <li>a. energy can be stored in different ways;</li> <li>b. energy is transferred and transformed; and</li> <li>c. energy can be transformed to meet societal needs.</li> </ul>	<p><b>Differentiation Strategies Offered</b></p> <p><b>Capstone Independent Science Project:</b>  Students began working on their 8th Grade Capstone Independent Science Project, which included time in class to identify their:</p> <ul style="list-style-type: none"> <li>● Experimental design</li> <li>● Materials &amp; procedures</li> <li>● Data collection process &amp; determining the mean, median, mode, &amp; range of their results</li> </ul> <p><b>Unit 1:</b></p> <ul style="list-style-type: none"> <li>● Energy of a Tennis Ball Lab <ul style="list-style-type: none"> <li>○ Students used tennis balls to measure and calculate the potential energy of a tennis ball when being dropped.</li> </ul> </li> <li>● Phet Skate Park Assignment <ul style="list-style-type: none"> <li>○ Students manipulated a virtual simulation to explore potential and kinetic energy.</li> </ul> </li> <li>● Forms of Energy Station Rotations <ul style="list-style-type: none"> <li>○ Students explored stations to identify forms of energy occurring in a device.</li> </ul> </li> </ul>

# Mathematics

Grade 6 - Math 6 Curriculum	Instructional Methods & Practices
<p><u>6th Grade Standards:</u></p> <p><b>Unit 1:</b></p> <p><b>6.3 a)</b> identify and represent integers; <b>b)</b> compare and order integers; and <b>c)</b> identify and describe absolute value of integers.</p> <p><b>6.4</b> Representing Exponents</p> <p><b>6.8</b> Coordinate Plane</p>	<ul style="list-style-type: none"> <li>● Station work (may do) on high level thinking integers word problems with partners.</li> <li>● Simplify expressions within absolute value signs.</li> <li>● Students are offered mini-lesson on negative exponents then work independently on task cards to answer questions on finding fractions to represent terms with negative exponents as well as writing the same term with a positive exponent.</li> </ul> <p>(example; write 10 to the power of -3 as a positive integers and in expanded form; Answer: 1/1,000 to the 3rd power Expanded form: 1/10 x 1/10x 1/10</p> <ul style="list-style-type: none"> <li>● Students are offered station activity with connect the dot with all four quadrants and non-integers ordered pairs.</li> </ul>
Grade 6 - Pre-Algebra 6, 7, 8 Curriculum	Instructional Methods & Practices
<p><b>Unit 1: Operations with Integers, Order of Operations, Exponents, Coordinate Plane Standards:</b></p> <p><b>6.3abc</b> - Represent Integers, Compare/Order, Absolute Value of Integers</p> <p><b>6.4</b> - Exponents and Perfect Squares</p> <p><b>6.6abc</b> - Simplify Expressions involving Integers and solve practical problems involving operations with Integers</p> <p><b>6.8ab</b> - Coordinate Plane (components, identify coordinates of point, graph ordered pairs)</p> <p><b>7.2</b> - Practical problems involving operations with rational numbers</p> <p><b>8.3</b> - TTwo consecutive integers between which square root; positive/negative square roots</p> <p><b>Unit 2: Real Number System &amp;</b></p>	<ul style="list-style-type: none"> <li>● Pre/Post Summative</li> <li>● Tiered Warm-Ups</li> <li>● Task Cards, scavenger hunt game, Blooket game, Gimkit game</li> <li>● Algebraic Thinking Groundworks</li> <li>● Quality questioning to tap into high order thinking,</li> <li>● Pair share</li> <li>● Lunch /after school assistance</li> <li>● Graphic organizers/Anchor Charts</li> <li>● DreamBox</li> <li>● Math workshop stations (Flexible grouping, they have choice, open-ended questioning, problem solving tasks-extension)</li> </ul>



<p><b>Ordering/Comparing All Real Numbers</b>  <u>Standards:</u>  <b>6.2 ab</b> - Equivalencies among Fractions, mixed numbers, decimals, and percents  <b>7.1abcde</b> - Negative Powers of Ten, Scientific Notation, Compare/Order Rational Numbers</p>	<ul style="list-style-type: none"> <li>● Tiered Warm-Ups</li> <li>● Task Cards, Blooket game, Gimkit game</li> <li>● Algebraic Thinking Groundworks</li> <li>● Quality questioning to tap into high order thinking,</li> <li>● Lunch /after school assistance</li> <li>● Graphic organizers/Anchor Charts</li> <li>● DreamBox</li> <li>● Math workshop stations (Flexible grouping, they have choice, open-ended questioning, problem solving tasks-extension)</li> </ul>
<p><b>Grade 7 - Math 7 Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><b>Unit 1:</b>  <u>7th Grade Standards:</u>  <b>7.1a</b> Negative Exponents for Powers of Ten  <b>7.1b</b> Compare &amp; Order Scientific Notation  <b>7.1c</b> Compare &amp; Order Rational Numbers  <b>7.1d</b> Square Roots of Perfect Squares  <b>7.1e</b> Absolute Value of Rational Numbers  <b>7.2</b> Practical Problems involving Rational Operations withNumbers</p>	<p><b>Differentiation Strategies Offered</b></p> <ul style="list-style-type: none"> <li>● Stations with higher level options</li> <li>● Challenge options (may do)</li> <li>● Post voluntary extension work on canvas</li> </ul>
<p><b>Grade 7 - Pre-Algebra Curriculum</b></p>	<p><b>Instructional Methods &amp; Practices</b></p>
<p><u>7th &amp; 8th Grade Standards:</u>  <b>Unit 1: The Real Number System &amp; Compare/Order all Real Numbers</b>  <b>7.1abcde</b> - Negative Powers of Ten, Scientific Notation, Compare/Order Rational Numbers, Square Roots/Perfect Squares  <b>7.2</b> - Practical problems involving operations with rational numbers  <b>8.1</b> - Compare and Order with Real Numbers  <b>8.2</b> - describe the relationships between the subsets of the real number system.  <b>8.3ab</b> - estimate and determine the two consecutive</p>	<ul style="list-style-type: none"> <li>● Pre-Post Assessments</li> <li>● Nearpod</li> <li>● Pair share</li> <li>● Hands-on manipulatives: work with algebra tiles, chain link game, scavenger hunt game, quizizz game</li> <li>● Quality questioning to tap into high order thinking</li> <li>● Weekly Reviews that address previous standards taught</li> <li>● Group work (pulling small group to work with teacher)</li> <li>● Lunch bunch/after school office hours</li> <li>● Graphic organizers/Anchor Charts</li> </ul>

integers between which a square root lies  
**b)** determine both the positive and negative square roots of a given perfect square.

**Unit II - Expressions/Equations/Inequalities**

**7.11** - evaluate algebraic expressions for given replacement values of the variables.  
**7.12** - solve two-step linear equations in one variable, including practical problems that require the solution of a two-step linear equation in one variable.  
**7.13** - solve one- and two-step linear inequalities in one variable, including practical problems, involving addition, subtraction, multiplication, and division, and graph the solution on a number line.  
**8.14ab** - evaluate an algebraic expression for given replacement values of the variables  
**b)** simplify algebraic expressions in one variable.  
**8.17** - solve multistep linear equations in one variable with the variable on one or both sides of the equation, including practical problems.  
**8.18** -solve multi step linear inequalities in one variable with the variable on one or both sides of the inequality symbol, including practical problems, and graph the solution on a number line.

- Learning stations - challenge options (may do)
- Task Cards
- Game-Based Learning
- DreamBox

<b>Grade 8 Pre-Algebra Curriculum</b>	<b>Instructional Methods &amp; Practices</b>
---------------------------------------	----------------------------------------------

8th Grade Standards:

**Unit 1:**  
**8.1** Compare and order rational numbers  
**8.2** real numbers  
**8.3** squares and square roots  
**8.4** application with real numbers  
**8.14** order of operations, evaluating expressions

- Differentiation Strategies Offered**
- Stations with varying degree of difficulty
  - Offer flexible options - negotiate assignments, support self-advocacy
  - Dreambox
  - Group work
  - Game based learning (Gimkit, Quizizz)
  - Projects in addition to standard assessments
  - Office Hours, TA support
  - Anchor Charts, Graphic Organizers
  - Teach-led differentiated stations
  - Daily learning plans customized with activities for students complete

<b>Grade 8 Algebra 1 &amp; Algebra I Int. Curriculum</b>	<b>Instructional Methods &amp; Practices</b>
----------------------------------------------------------	----------------------------------------------

Algebra Standards:

**Unit 1: Solving Equations and Inequalities/Absolute Value Equations and Inequalities/Compound Inequalities**

- A.4 a) multistep linear equations in one variable algebraically;
- b) quadratic equations in one variable algebraically;
- c) literal equations for a specified variable;
- d) systems of two linear equations in two variables algebraically and graphically;
  
- A.5a) solve multistep linear inequalities in one variable algebraically and represent the solution graphically;
- b) represent the solution of linear inequalities in two variables graphically;
- c) solve practical problems involving inequalities;

**Differentiation Strategies Offered**

- Vocabulary Builder - Using fill in the blank sentences for review. Discuss new vocabulary words in class for each unit.
- Interactive worktext that provides engagement and helps students build understanding during instruction.
- Use of the student companion workbook that focuses on students taking notes and focusing on math practices and answering “Habits of Mind” questions(conceptual questions).
- Use of multimedia presentations to engage students.
- Students proposing conjectures that answer the main questions.
- Think Pair Share
- Group work

**Grade 8 Geometry Int.**

**Instructional Methods & Practices**

Geometry Standards:

**Unit 1: - Basics of Geometry**  
Apply the Distance and Midpoint formulas.  
Identify and use Segment Addition Postulate & Angle Addition Postulate.

**Unit 2: - Introduction to Proofs**  
Proofs involving angles and segments

**Differentiation Strategies Offered**

- Group work
- Flexible grouping
- Think-Pair-Share Activities
- Multi-leveled proofs (with statements, skeleton statements, without statements)
- Challenge problems in most lessons
- Methods to derive the Distance formula from the Pythagorean Theorem
- Analogies in comparing theorems and definitions
- Justify statements with appropriate definition, theorem, postulate or property
- Use of Bloom’s Taxonomy in questioning (Identify, Comprehend, Apply, Analyze, Synthesize, Evaluate)
- Choice activities to review multiple topics
- Hands-on manipulatives: card sorts, scavenger hunt, task cards
- Deconstruction of conditional statements
- Logically thinking strategies