

Southern Regional School District

Southern Regional Middle School Curriculum

Course Area:	Mathematics	Grade Level:	7
Course Title:	Mathematics 7		

Pacing Guide

Unit Title		Time frame to complete:
Unit 1:	Integers - (7.NS.1; 7.NS.2; 7.NS.3) 1.1 – Integers and Absolute Value 1.2 – Adding Integers 1.3 – Subtracting Integers 1.4 – Multiplying Integers 1.5 – Dividing Integers (All without calculators)	30 days
Unit 2:	Rational Numbers - (7.NS.1; 7.NS.2; 7.NS.3) 2.1 – Rational Numbers 2.2 – Adding Rational Numbers 2.3 – Subtracting Rational numbers 2.4 – Multiplying and Dividing Rational Numbers (All without calculators)	30 days
Unit 3:	Expressions and Equations - (7.NS.2; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4) 3.1 – Algebraic Expressions 3.2 – Adding & Subtracting Linear Expressions 3.3 – Solving Equations Using Addition or Subtraction 3.4 – Solving Equations Using Multiplication or Division 3.5 – Solving Two-Step Equations (All without calculators)	26 days
Unit 4:	Ratios and Proportions - (7.RP.1; 7.RP.2; 7.RP.3) 5.1 – Ratios and Rates 5.2 – Proportions 5.3 – Writing Proportions 5.4 – Solving Proportions 5.5 – Slope 5.6 – Direct Variation	51 days
Unit 5:	Percents - (7.EE.3; 7.RP.3) 6.1 – Percents and Decimals 6.2 – Comparing and Ordering Fractions, Decimals, and Percents 6.3 – The Percent Proportion 6.4 – The Percent Equation 6.5 – Percents of Increase and Decrease 6.6 – Discounts and Markups 6.7 – Simple Interest	25 days
Unit 6:	Inequalities - (7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4) 4.1 – Writing and Graphing Inequalities 4.2 – Solving Inequalities Using Addition or Subtraction 4.3 – Solving Inequalities Using Multiplication or Division 4.4 – Solving Two-Step Inequalities	20 days
		182 days

Created:	June 2018
Board Approved:	August 2019

Course Title: Mathematics 7

Southern Regional Middle School: **Grade Syllabus**

MP1:	MP2:
<p>Integers - (7.NS.1; 7.NS.2; 7.NS.3) 1.1 – Integers and Absolute Value 1.2 – Adding Integers 1.3 – Subtracting Integers 1.4 – Multiplying Integers 1.5 – Dividing Integers</p> <p>(All without calculators)</p>	<p>Rational Numbers - (7.NS.1; 7.NS.2; 7.NS.3) 2.1 – Rational Numbers 2.2 – Adding Rational Numbers 2.3 – Subtracting Rational numbers 2.4 – Multiplying and Dividing Rational Numbers</p> <p>(All without calculators)</p> <p>Expressions and Equations - (7.NS.2; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4) 3.1 – Algebraic Expressions 3.2 – Adding & Subtracting Linear Expressions 3.3 – Solving Equations Using Addition or Subtraction 3.4 – Solving Equations Using Multiplication or Division 3.5 – Solving Two-Step Equations</p> <p>(All without calculators)</p>
Math Lab	
<p>Probability and Statistics - (7.SP.1; 7.SP.2; 7.SP.3; 7.SP.4; 7.SP.5; 7.SP.7; 7.SP.8) 10.1 – Outcomes and Events 10.2 – Probability 10.3 – Experimental and Theoretical Probability 10.4 – Compound Events 10.5 – Independent and Dependent Events 10.6 – Samples and Populations 10.7 – Comparing Populations</p> <p>Constructions and Scale Drawings - (7.G.1; 7.G.2; 7.G.5) 7.1 – Adjacent and Vertical Angles 7.2 – Complementary and Supplementary Angles 7.3 – Triangles 7.4 – Quadrilaterals</p>	

MP3:	MP4:
<p>Ratios and Proportions - (7.RP.1; 7.RP.2; 7.RP.3)</p> <p>4.1 – Ratios and Rates</p> <p>4.2 – Proportions</p> <p>4.3 – Writing Proportions</p> <p>4.4 – Solving Proportions</p> <p>4.5 – Scale Drawings</p> <p>4.5 – Slope</p> <p>4.6 – Direct Variation</p>	<p>Percents - (7.EE.3; 7.RP.3)</p> <p>5.1 – Percents and Decimals</p> <p>5.2 – Comparing and Ordering Fractions, Decimals, and Percents</p> <p>5.3 – The Percent Proportion</p> <p>5.4 – The Percent Equation</p> <p>5.5 – Percents of Increase and Decrease</p> <p>5.6 – Discounts and Markups</p> <p>5.7 – Simple Interest</p> <p>Inequalities - (7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4)</p> <p>6.1 – Writing and Graphing Inequalities</p> <p>6.2 – Solving Inequalities Using Addition or Subtraction</p> <p>6.3 – Solving Inequalities Using Multiplication or Division</p> <p>6.4 – Solving Two-Step Inequalities</p>
Math Lab	
<p>Circles and Area - (7.G.4; 7.G.6)</p> <p>8.1 – Circles and Circumference</p> <p>8.2 – Perimeters of Composite Figures</p> <p>8.3 – Area of Circles</p> <p>8.4 – Area of Composite Figures</p> <p>Surface Area and Volume - (7.G.3; 7.G.4; 7.G.6)</p> <p>9.1 – Surface Areas of Prisms</p> <p>9.2 – Surface Areas of Pyramids</p> <p>9.3 – Surface Area of Cylinders</p> <p>9.4 – Volumes of Prisms</p> <p>9.5 – Volumes of Pyramids</p>	

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Unit 1 Overview

Content Area:	Mathematics 7		
Unit Title:	Unit Plan 1 Integers - (7.NS.1; 7.NS.2; 7.NS.3) 1.1 – Integers and Absolute Value 1.2 – Adding Integers 1.3 – Subtracting Integers 1.4 – Multiplying Integers 1.5 – Dividing Integers		
Grade Level:	7th	Timeframe for completion:	6 weeks
Unit Summary:	<p>This unit reinforces and extends the skills learned prior to beginning the Pre-Algebra course and lays the foundation for the studies of algebra. Students will learn to solve problems, to evaluate expressions, and to use variables and expressions when solving real-world problems. Students will also learn to compare and order integers, find the absolute value of an expression, and apply the rules of integers to evaluate algebraic expressions. Students will explore rational numbers, learning to multiply and divide fractions and add and subtract unlike fractions.</p>		

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New Jersey Student Learning Standards (NJSL)

Unit 1
Integers - (7.NS.1; 7.NS.2; 7.NS.3)

- 1.1 – Integers and Absolute Value
- 1.2 – Adding Integers
- 1.3 – Subtracting Integers
- 1.4 – Multiplying Integers
- 1.5 – Dividing Integers

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7.NS The Number System	A. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	a. Describe situations in which opposite quantities combine to make 0. <i>For example, in the first round of a game, Maria scored 20 points. In the second round of the same game, she lost 20 points. What is her score at the end of the second round?</i>
		2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real world contexts.
		3. Solve real-world and mathematical problems involving the four operations with rational numbers.	

SUPPORTING and ADDITIONAL STANDARDS:

Code	Critical Area	Category	Subcategory
7.NS The Number System	A. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Solve real-world and mathematical problems involving the four operations with rational numbers. ¹	

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Primary Interdisciplinary Connections for English (Unit I)

Code	Category	Subcategory
NJSLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJSLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W10.	Range of Writing	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Primary Interdisciplinary Connections for Science (Unit 1)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 1)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 1)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards (Unit 1)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 1)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i><u>Mission:</u> 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p><u>Vision:</u> To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:
 Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

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Measurement of Learning/Assessment
(Unit 1)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping		Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
Study Island	Weekly Take Home Tests		
Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

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Unit Overview for Gifted and Talented

Gifted and Talented (Unit 1)

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1. Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2 Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in <u>meaningful and challenging activities</u>.</p>
	<p>4.1.3. Educators create environments that support <u>trust among diverse learners</u>.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

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(Unit 1)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

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(Unit 1)

At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

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(Unit 1)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

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(Unit 1)

Special Education	According to the IEP, could include, but not limited to:
	Clearly sequence instruction
	Monitor use of agenda book
	Arrange peer tutor
	Preferential seating/special seating types, i.e. standing desk
	Choices in tasks
	Extended time
	Provide organizers/study guides
	Frequent check for understanding
	Provide organizers/study guides
	Provide small group instruction
	Allow for repetition and/or clarification of directions
	Directions repeated, clarified, or reworded
	Allow wait time for processing before calling on student for response
	Modification of assignments/assessments
Frequent parent communication	

Unit 1 Essential Questions:

- What is an integer and how is it represented in our number system?
- How are integers used to represent various situations in everyday life?
- How do we develop an understanding of numbers and recognize and apply their relationships in various ways?
- How do we use rational numbers to demonstrate real life situations?

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Unit 1 Objectives:

Students will know...

- Absolute value
- Adding, subtracting, multiplying, & dividing integers
- Least common multiples
- Adding, subtracting, multiplying, & dividing rational numbers.
- Order of operations.
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication

Students will be able to...

- Apply absolute value to simplifying and evaluate expressions.
- Understand placement of integers on a number line.
- Understand and apply rules for integers to evaluate expressions.
- Apply integer rules to simplify algebraic expressions.
- Apply and extend previous understandings of adding, subtracting, multiplying, and dividing rational numbers.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behaviors that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication

Unit 1 Enduring Understandings:

- The representation of integers in our number system.
- Integers are used to represent various situations in everyday life.
- Rational numbers demonstrate real life situations.

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Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 1

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
	Weekly Take Home Test	PARCC 7 Prep

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Unit 2 Overview

Content Area:	Mathematics 7		
Unit Title:	Rational Numbers - (7.NS.1; 7.NS.2; 7.NS.3) 2.1 – Rational Numbers 2.2 – Adding Rational Numbers 2.3 – Subtracting Rational numbers 2.4 – Multiplying and Dividing Rational Numbers (All without calculators)		
Grade Level:	7th	Timeframe for completion:	6 weeks
Unit Summary:	This unit reinforces and extends the skills learned prior to beginning the Pre-Algebra course and lays the foundation for the studies of algebra. Students will learn to solve problems, to evaluate expressions, and to use variables and expressions when solving real-world problems. Students will also learn to compare and order rational numbers and apply the rules of order of operations to evaluate expressions. Students will explore rational numbers, learning to multiply and divide fractions and add and subtract unlike fractions.		

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New Jersey Student Learning Standards (NJSL)

Unit 2

Rational Numbers - (7.NS.1; 7.NS.2; 7.NS.3)

2.1 – Rational Numbers

2.2 – Adding Rational Numbers

2.3 – Subtracting Rational numbers

2.4 – Multiplying and Dividing Rational Numbers

(All without calculators)

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7.NS The Number System	A. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	1. Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.	a. Describe situations in which opposite quantities combine to make 0. <i>For example, in the first round of a game, Maria scored 20 points. In the second round of the same game, she lost 20 points. What is her score at the end of the second round?</i>
		2. Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.	b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real world contexts.
		3. Solve real-world and mathematical problems involving the four operations with rational numbers.	

SUPPORTING and ADDITIONAL STANDARDS:

Code	Critical Area	Category	Subcategory
7.NS The Number System	A. Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.	Solve real-world and mathematical problems involving the four operations with rational numbers. ¹	

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Primary Interdisciplinary Connections for English Language Arts (ELA) (Unit 2)

Code	Category	Subcategory
NJSLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJSLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
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Primary Interdisciplinary Connections for Science (Unit 2)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 2)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 2)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards (Unit 2)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 2)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i>Mission: 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p>Vision: To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

Southern Regional School District
Southern Regional Middle School

Measurement of Learning/Assessment
(Unit 2)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping		Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
Study Island	Weekly Take Home Tests		
Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

Southern Regional School District

Southern Regional Middle School
Unit Overview for Gifted and Talented

Gifted and Talented (Unit 2)

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1 Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2 Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in meaningful and challenging activities.</p>
	<p>4.1.3. Educators create environments that support trust among diverse learners.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

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(Unit 2)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/ Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

Southern Regional School District

Southern Regional Middle School
(Unit 2)

At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

Southern Regional School District

Southern Regional Middle School
(Unit 2)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

Southern Regional School District

Southern Regional Middle School
(Unit 2)

Special
Education

According to the IEP, could include, but not limited to:

Clearly sequence instruction

Monitor use of agenda book

Arrange peer tutor

Preferential seating/special seating types, i.e. standing desk

Choices in tasks

Extended time

Provide organizers/study guides

Frequent check for understanding

Provide organizers/study guides

Provide small group instruction

Allow for repetition and/or clarification of directions

Directions repeated, clarified, or reworded

Allow wait time for processing before calling on student for response

Modification of assignments/assessments

Frequent parent communication

Southern Regional School District
Southern Regional Middle School

Unit 2 Essential Questions:

- What is a rational number and how is it represented in our number system?
- How are rational numbers used to represent various situations in everyday life?
- How do we develop an understanding of numbers and recognize and apply their relationships in various ways?
- How do we use rational numbers to demonstrate real life situations?

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Unit 2 Objectives:

Students will know...

- Absolute value
- Adding, subtracting, multiplying, & dividing integers
- Least common multiples
- Adding, subtracting, multiplying, & dividing rational numbers.
- Order of operations.
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication

Students will be able to...

- Apply absolute value to simplifying and evaluate expressions.
- Understand placement of integers on a number line.
- Understand and apply rules for integers to evaluate expressions.
- Apply integer rules to simplify algebraic expressions.
- Apply and extend previous understandings of adding, subtracting, multiplying, and dividing rational numbers.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behaviors that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication

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Unit 2 Enduring Understandings:

- The representation of rational numbers in our number system.
- Rational numbers are used to represent various situations in everyday life.
- Rational numbers demonstrate real life situations.

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Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 2

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
	Weekly Take Home Test	PARCC 7 Prep

**Southern Regional School District
Southern Regional Middle School
Unit 3 Overview**

Content Area:	Mathematics 7		
Unit Title:	Expressions and Equations - (7.NS.2; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4) 3.1 – Algebraic Expressions 3.2 – Adding & Subtracting Linear Expressions 3.3 – Solving Equations Using Addition or Subtraction 3.4 – Solving Equations Using Multiplication or Division 3.5 – Solving Two-Step Equations (All without calculators)		
Grade Level:	7th	Timeframe for completion:	5 weeks
Unit Summary:	In this unit, students will study how to use Distributive Property to combine like terms in order to simplify algebraic expressions. They will solve equations using properties of equality. Students will learn how to write and solve equations and they will use formulas to solve real-world problems such as finding the area and perimeter of rectangles.		

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New Jersey Student Learning Standards (NJSL)

Unit 3

Expressions and Equations - (7.NS.2; 7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4)

3.1 – Algebraic Expressions

3.2 – Adding & Subtracting Linear Expressions

3.3 – Solving Equations Using Addition or Subtraction

3.4 – Solving Equations Using Multiplication or Division

3.5 – Solving Two-Step Equations

(All without calculators)

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7EE.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.		
7EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i>		
7EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.		
7.EE.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.		

SUPPORTING and ADDITIONAL STANDARDS:

Code	Critical Area	Category	Subcategory
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Primary Interdisciplinary Connections for English Language Arts (ELA) (Unit 3)

Code	Category	Subcategory
NJSLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJSLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W10.	Range of Writing	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Primary Interdisciplinary Connections for Science (Unit 3)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 3)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 3)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards

(Unit 3)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 3)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i><u>Mission:</u> 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p><u>Vision:</u> To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

Southern Regional School District
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Measurement of Learning/Assessment
(Unit 3)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping		Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
Study Island	Weekly Take Home Tests		
Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

Southern Regional School District

Southern Regional Middle School
Unit Overview for Gifted and Talented

Gifted and Talented (Unit 3)

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1. Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2. Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in meaningful and challenging activities.</p>
	<p>4.1.3. Educators create environments that support trust among diverse learners.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

Southern Regional School District

Southern Regional Middle School
(Unit 3)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/ Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

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Southern Regional Middle School
(Unit 3)

At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

Southern Regional School District

Southern Regional Middle School
Unit Overview
(Unit 3)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

Southern Regional School District

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(Unit 3)

Special Education	According to the IEP, could include, but not limited to:
	Clearly sequence instruction
	Monitor use of agenda book
	Arrange peer tutor
	Preferential seating/special seating types, i.e. standing desk
	Choices in tasks
	Extended time
	Provide organizers/study guides
	Frequent check for understanding
	Provide organizers/study guides
	Provide small group instruction
	Allow for repetition and/or clarification of directions
	Directions repeated, clarified, or reworded
	Allow wait time for processing before calling on student for response
	Modification of assignments/assessments
Frequent parent communication	

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Unit 3 Essential Questions:

- How are variables, expressions, and equations used in mathematics?
- How can we describe and represent mathematic relationships through the use of tables, rules and simple equations?
- How can I use a systematic process to solve various equations?
- What is the process and how is it used to solve equations algebraically?
- How do we apply the order of operations to solving equations?

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Unit 3 Objectives:

Students will know...

- Distributive property
- Simplifying expressions
- Solving equations
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication

Students will be able to...

- Write expressions using various symbols to indicate operations.
- Evaluate expressions using order of operations.
- Solve equations by substituting variables.
- Solve simple linear equations using inverse operations.
- Use expressions and equations to represent specific situations.
- Simplify algebraic expressions.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behaviors that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication

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Unit 3 Enduring Understandings:

- Expressions can be written using addition, subtraction, multiplication, and division.
- Mathematic relationships can be described and represented through the use of tables, rules, and simple equations.
- There is a systematic process to solving various equations.
- Equations are solved algebraically by using inverse operations systematically.

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Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 3

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
	Weekly Take Home Test	PARCC 7 Prep

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Unit 4 Overview

Content Area:	Mathematics 7		
Unit Title:	Inequalities - (7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4) 4.1 – Writing and Graphing Inequalities 4.2 – Solving Inequalities Using Addition or Subtraction 4.3 – Solving Inequalities Using Multiplication or Division 4.4 – Solving Two-Step Inequalities		
Grade Level:	7th	Timeframe for completion:	4 weeks
Unit Summary:	<p>In this unit students will be able to write and graph inequalities and use substitution to check weather a number is a solution to an inequality. The students will be able to solve one and two step inequalities using addition, subtraction, multiplication, and division. The students will be able to solve real life inequalities.</p>		

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New Jersey Student Learning Standards (NJSL)

Unit 4

Inequalities - (7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4)

4.1 – Writing and Graphing Inequalities

4.2 – Solving Inequalities Using Addition or Subtraction

4.3 – Solving Inequalities Using Multiplication or Division

4.4 – Solving Two-Step Inequalities

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7EE.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.		
7EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i>		
7EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional $\frac{1}{10}$ of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar $9\frac{3}{4}$ inches long in the center of a door that is $27\frac{1}{2}$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.		
7.EE.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.		

SUPPORTING and ADDITIONAL STANDARDS:

Code	Critical Area	Category	Subcategory
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Primary Interdisciplinary Connections for English Language Arts (ELA) (Unit 4)

Code	Category	Subcategory
NJSLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJSLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W10.	Range of Writing	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Primary Interdisciplinary Connections for Science (Unit 4)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 4)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 4)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards (Unit 4)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 4)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i>Mission: 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p><u>Vision:</u> To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:
 Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

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Measurement of Learning/Assessment (Unit 4)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping		Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
Study Island	Weekly Take Home Tests		
Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

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Southern Regional Middle School
Unit Overview for Gifted and Talented

Gifted and Talented (Unit 4)

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1. Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2. Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in meaningful and challenging activities.</p>
	<p>4.1.3. Educators create environments that support trust among diverse learners.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

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(Unit 4)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/ Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

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(Unit 4)

At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

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(Unit 4)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

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(Unit 4)

Special Education	According to the IEP, could include, but not limited to:
	Clearly sequence instruction
	Monitor use of agenda book
	Arrange peer tutor
	Preferential seating/special seating types, i.e. standing desk
	Choices in tasks
	Extended time
	Provide organizers/study guides
	Frequent check for understanding
	Provide organizers/study guides
	Provide small group instruction
	Allow for repetition and/or clarification of directions
	Directions repeated, clarified, or reworded
	Allow wait time for processing before calling on student for response
	Modification of assignments/assessments
Frequent parent communication	

Unit 4 Essential Questions:

- How are variables, expressions, and equations used in mathematics?
- How can we describe and represent mathematic relationships through the use of tables, rules and simple inequalities?
- How can I use a systematic process to solve various inequalities?
- What is the process and how is it used to solve inequalities algebraically?
- How do we apply the order of operations to solving equations?

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Unit 4 Objectives:

Students will know...

- Solving inequalities
- Writing inequalities.
- Using inequalities in real life situations.
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication
-

Students will be able to...

- Write expressions using various symbols to indicate operations.
- Evaluate expressions using order of operations.
- Solve equations by substituting variables.
- Solve simple linear equations using inverse operations.
- Use expressions and equations to represent specific situations.
- Simplify algebraic expressions.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behaviors that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication

Unit 4 Enduring Understandings:

- Inequalities can be written using addition, subtraction, multiplication, and division.
- Mathematic relationships can be described and represented through the use of tables, rules, and simple inequalities.
- There is a systematic process to solving various inequalities.
- Inequalities are solved algebraically by using inverse operations systematically.

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Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 4

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
	Weekly Take Home Test	PARCC 7 Prep

Southern Regional School District
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Unit 5 Overview

Content Area:	Mathematics 7		
Unit Title:	Percents 5.1 – Percents and Decimals 5.2 – Comparing and Ordering Fractions, Decimals, and Percents 5.3 – The Percent Proportion 5.4 – The Percent Equation 5.5 – Percents of Increase and Decrease 5.6 – Discounts and Markups 5.7 – Simple Interest		
Grade Level:	7th	Timeframe for completion:	5 weeks
Unit Summary:	<p>In this unit students will extend their study of ratios to include percents and the conversion of fractions and decimals to percents. Students will be able to mentally compute percents and estimate percents. Students will be able to solve percents using a percent proportion and percent equations. They will be able to solve real-life problems involving discount and interest</p>		

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New Jersey Student Learning Standards (NJSL)

Unit 5

Percents - (7.EE.3; 7.RP.3)

- 6.1 – Percents and Decimals
- 6.2 – Comparing and Ordering Fractions, Decimals, and Percents
- 6.3 – The Percent Proportion
- 6.4 – The Percent Equation
- 6.5 – Percents of Increase and Decrease
- 6.6 – Discounts and Markups
- 6.7 – Simple Interest

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i>		
7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise; she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.		

SUPPORTING and ADDITIONAL STANDARDS:

Code	Critical Area	Category	Subcategory

Southern Regional School District

Southern Regional Middle School

Primary Interdisciplinary Connections for English Language Arts (ELA) (Unit 5)

Code	Category	Subcategory
NJLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJLSA.W10.	Range of Writing	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Primary Interdisciplinary Connections for Science (Unit 5)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 5)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 5)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards (Unit 5)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 5)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i>Mission: 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p><u>Vision:</u> To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:
 Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

Southern Regional School District

Southern Regional Middle School

Measurement of Learning/Assessment (Unit 5)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping	Computer Buying Options Project	Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
Study Island	Weekly Take Home Tests		
Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

Southern Regional School District

Southern Regional Middle School
Unit Overview for Gifted and Talented

Gifted and Talented

Unit 5

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1. Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2. Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in <u>meaningful and challenging activities</u>.</p>
	<p>4.1.3. Educators create environments that support <u>trust among diverse learners</u>.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

Southern Regional School District

Southern Regional Middle School
(Unit 5)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

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Southern Regional Middle School
(Unit 5)

At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

Southern Regional School District

Southern Regional Middle School
(Unit 5)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

Southern Regional School District

Southern Regional Middle School

(Unit 5)

Special Education	According to the IEP, could include, but not limited to:
	Clearly sequence instruction
	Monitor use of agenda book
	Arrange peer tutor
	Preferential seating/special seating types, i.e. standing desk
	Choices in tasks
	Extended time
	Provide organizers/study guides
	Frequent check for understanding
	Provide organizers/study guides
	Provide small group instruction
	Allow for repetition and/or clarification of directions
	Directions repeated, clarified, or reworded
	Allow wait time for processing before calling on student for response
	Modification of assignments/assessments
	Frequent parent communication

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Unit 5 Essential Questions:

- Why is it important to understand how a percent is used in real-life situations?
- How do we develop, apply, and explain methods for solving problems involving a percent?
- Percent applied to working and earning money

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Unit 5 Objectives:

Students will know...

- Equivalent fractions, decimals, & percents.
- Part/whole method
- Percent increase/decrease
- Successive discounts
- Mental math
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication
-

Students will be able to...

- Understand and apply a percent in a variety of situations.
- Develop, apply, and explain methods for solving problems involving a percent.
- Investigate the relationships among fractions, decimals, and a percent, and use all of them appropriately.
- Develop, apply, and explain a variety of different estimation strategies in problem situations involving a percent.
- Use equivalent representation of numbers such as fractions, decimals, and a percent to facilitate estimation.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behavior that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication
- Understanding the concepts of working and earning money and financial choices

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Unit 5 Enduring Understandings:

- Percents are used in real life.
- Percents can be developed, applied, and explained by problem solving of financial situations.

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Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 5

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
State financial literacy materials	Weekly Take Home Test	PARCC 7 Prep

Southern Regional School District
Southern Regional Middle School
Unit 6 Overview

Content Area:	Mathematics 7		
Unit Title:	Inequalities - (7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4) 4.1 – Writing and Graphing Inequalities 4.2 – Solving Inequalities Using Addition or Subtraction 4.3 – Solving Inequalities Using Multiplication or Division 4.4 – Solving Two-Step Inequalities		
Grade Level:	7th	Timeframe for completion:	4 weeks
Unit Summary:	<p>In this unit students will be able to write and graph inequalities and use substitution to check weather a number is a solution to an inequality. The students will be able to solve one and two step inequalities using addition, subtraction, multiplication, and division. The students will be able to solve real life inequalities.</p>		

Southern Regional School District
Southern Regional Middle School
New Jersey Student Learning Standards (NJSL)

Unit 6

Inequalities - (7.EE.1; 7.EE.2; 7.EE.3; 7.EE.4)

4.1 – Writing and Graphing Inequalities

4.2 – Solving Inequalities Using Addition or Subtraction

4.3 – Solving Inequalities Using Multiplication or Division

4.4 – Solving Two-Step Inequalities

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7.EE.1	Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.		
7.EE.2	Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i>		
7.EE.3	Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.		
7.EE.4	Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.		
9.1.8.B.1	Distinguish among cash, check, credit card, debit card.		
9.1.8.B.2	Construct simple personal savings and spending plan based on various sources of income.		
9.1.8.B.4	Relate the concept of deferred gratification to investment, meeting financial goals, and building wealth.		
9.1.8.B.7	Construct a budget to save for long-term, short-term, and charitable goals.		

Code	Critical Area	Category	Subcategory
9.1.8.B.9	Determine the most appropriate use of various financial products and services.		
9.1.8.B.11	Evaluate the appropriate financial institutions to assist with meeting various personal financial needs and goals.		
9.1.8.C.1	Compare and contrast credit cards and debit cards and the advantages and disadvantages of using each.		
9.1.8.C.2	Compare and contrast the financial products of various institutions		
9.1.8.C.3	Compare and contrast debt and credit management strategies		
9.1.8.C.4	Demonstrate an understanding of the terminology associated with different types of credit		
9.1.8.C.5	Calculate the cost of borrowing various amounts of money		
9.1.8.C.6	Determine ways to leverage debt beneficially		
9.1.8.C.7	Determine potential consequences of using easy access credit		
9.1.8.C.8	Explain the purpose of credit score and credit record		
9.1.8.D.1	Determine how saving contributes to financial well-being		
9.1.8.E.1	Explain what it means to be a responsible consumer		
9.1.8.E.4	Prioritize personal wants and needs when making purchases		
9.1.8.E.5	Analyze interest rates and fees associated with financial services		
9.1.8.G.2	Determine criteria for determining amount of insurance protection needed		
9.1.8.CG.4	Evaluate the need for different types of extended warranties.		

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Primary Interdisciplinary Connections for English Language Arts (ELA) (Unit 6)

Code	Category	Subcategory
NJSLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJSLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W10.	Range of Writing	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Primary Interdisciplinary Connections for Science (Unit 6)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 6)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 6)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards (Unit 6)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 6)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i>Mission: 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p><u>Vision:</u> To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:

Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

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Measurement of Learning/Assessment
(Unit 6)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping		Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
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Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

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Southern Regional Middle School
Unit Overview for Gifted and Talented

Gifted and Talented (Unit 6)

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1. Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2. Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in meaningful and challenging activities.</p>
	<p>4.1.3. Educators create environments that support trust among diverse learners.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

Southern Regional School District

Southern Regional Middle School
(Unit 6)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

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Southern Regional Middle School
(Unit 6)

At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

Southern Regional School District

Southern Regional Middle School
(Unit 6)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

Southern Regional School District

Southern Regional Middle School
(Unit 6)

Special
Education

According to the IEP, could include, but not limited to:

Clearly sequence instruction

Monitor use of agenda book

Arrange peer tutor

Preferential seating/special seating types, i.e. standing desk

Choices in tasks

Extended time

Provide organizers/study guides

Frequent check for understanding

Provide organizers/study guides

Provide small group instruction

Allow for repetition and/or clarification of directions

Directions repeated, clarified, or reworded

Allow wait time for processing before calling on student for response

Modification of assignments/assessments

Frequent parent communication

Southern Regional School District

Southern Regional Middle School

Unit 6 Essential Questions:

- How are variables, expressions, and equations used in mathematics?
- How can we describe and represent mathematic relationships through the use of tables, rules and simple inequalities?
- How can I use a systematic process to solve various inequalities?
- What is the process and how is it used to solve inequalities algebraically?
- How do we apply the order of operations to solving equations?

Southern Regional School District

Southern Regional Middle School

Unit 6 Objectives:

Students will know...

- Solving inequalities
- Writing inequalities.
- Using inequalities in real life situations.
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication
-

Students will be able to...

- Write expressions using various symbols to indicate operations.
- Evaluate expressions using order of operations.
- Solve equations by substituting variables.
- Solve simple linear equations using inverse operations.
- Use expressions and equations to represent specific situations.
- Simplify algebraic expressions.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behaviors that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication

Southern Regional School District

Southern Regional Middle School

Unit 6 Enduring Understandings:

- Inequalities can be written using addition, subtraction, multiplication, and division.
- Mathematic relationships can be described and represented through the use of tables, rules, and simple inequalities.
- There is a systematic process to solving various inequalities.
- Inequalities are solved algebraically by using inverse operations systematically.

Southern Regional School District

Southern Regional Middle School

Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 6

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
	Weekly Take Home Test	PARCC 7 Prep

Southern Regional School District
Southern Regional Middle School
Unit 7 Overview

Content Area:	Mathematics 7		
Unit Title:	Statistics & Probability - (7.SP.1; 7.SP.2; 7.SP.3; 7.SP.4; 7.SP.5; 7.SP.7; 7.SP.8) 10.1 – Outcomes and Events 10.2 – Probability 10.3 – Experimental and Theoretical Probability 10.4 – Compound Events 10.5 – Independent and Dependent Events 10.6 – Samples and Populations 10.7 – Comparing Populations		
Grade Level:	7th	Timeframe for completion:	4 weeks
Unit Summary:	<p>In this unit, students will determine the probability of simple and compound events. They will use a sample to predict the actions of a larger group. Students will use tree diagrams or the Fundamental Counting Principle to count outcomes and to find the probability of an event. Students will also examine the measures of central tendency.</p>		

Southern Regional School District
Southern Regional Middle School
New Jersey Student Learning Standards (NJSL)

Unit 6

Statistics & Probability - (7.SP.1; 7.SP.2; 7.SP.3; 7.SP.4; 7.SP.5; 7.SP.7; 7.SP.8)

10.1 – Outcomes and Events

10.2 – Probability

10.3 – Experimental and Theoretical Probability

10.4 – Compound Events

10.5 – Independent and Dependent Events

10.6 – Samples and Populations

10.7 – Comparing Populations

FOCUS STANDARDS:

Code	Critical Area	Category	Subcategory
7.SP.A.1	Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences.		
7.SP.A.2	Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i>		
7.SP.C.5	Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event.		

SUPPORTING and ADDITIONAL STANDARDS:

Code	Critical Area	Category	Subcategory
7.SP.C.7	Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.		
7.CP.C.6	Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.		

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Primary Interdisciplinary Connections for English Language Arts (ELA) (Unit 7)

Code	Category	Subcategory
NJSLSA.R10.	Integration of Knowledge and Ideas	Read and comprehend complex literary and informational texts independently and proficiently with scaffolding as needed.
RI.7.1.	Informational Text: Key Ideas and Details	Cite several pieces of textual evidence and make relevant connections to support analysis of what the text says explicitly as well as inferences drawn from the text.
RI.7.2.		RI.7.2. Determine two or more central ideas in a text and analyze their development over the course of the text; provide an objective summary of the text
NJSLSA.W1.	Text Types and Purposes	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
NJSLSA.W2.		Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.
NJSLSA.W10.	Range of Writing	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Primary Interdisciplinary Connections for Science (Unit 7)

Code	Critical Area	Category	Subcategory
MS-LS1-3	Structure and Processes	Science is a Human Endeavor	Scientists and engineers are guided by habits of mind such as intellectual honesty, tolerance of ambiguity, skepticism, and openness of new ideas.
MS-LS2-4; MS-LS2-5	Interactions, Energy, and Dynamics	Stability and Change	Small changes in one part of a system might cause large changes in another part.
MS-LS4-4, MS-LSA-5, MS-LSA-6)	Unity and Diversity	Causes and Effect	Phenomena may have more than one cause, and some cause and effect relationships in systems can only be described using probability.

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Primary Interdisciplinary Connections for History (Unit 7)

Code	Critical Area	Category	Subcategory
<p>6.1 U.S. History: America in the World: All students will acquire the knowledge and skills to think analytically about how past and present interactions of people, cultures, and the environment shape the American heritage. Such knowledge and skills enable students to make informed decisions that reflect fundamental rights and core democratic values as productive citizens in local, national, and global communities.</p>			
6.1.8.B.1.a	Three Worlds Meet	Civics, Government, and Human Rights	Evaluate the impact of science, religion, and technology innovations on European exploration
6.1.8.A.3.b	Revolution and the New Nation	Human Rights	Evaluate the effectiveness of the fundamental principles of the Constitution (i.e., consent of the governed, rule of law, federalism, limited government, separation of powers, checks and balances, and individual rights) in establishing a federal government that allows for growth and change over time.
6.1.8.C.4.c	Expansion and Reform	Economics, Innovation, and Technology	Analyze how technological innovations affected the status and social class of different groups of people, and explain the outcomes that resulted.

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Anchor Standards for Reading (Unit 7)

Main Area	Code	Description
Key Ideas and Details	NJSLSA.R1.	Read closely to determine what the text says explicitly and to make logical inferences and relevant connections from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.
	NJSLSA.R2.	Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.
Craft and Structure	NJSLSA.R5.	Analyze the structure of texts, including how specific sentences, paragraphs, and larger portions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and the whole.
	NJSLSA.R6.	Assess how point of view or purpose shapes the content and style of a text.
Integration of Knowledge and Ideas	NJSLSA.R7.	Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.

Anchor Standards for Writing

Text Types and Purposes	NJSLSA.W1.	Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
Production and Distribution of Writing	NJSLSA.W4.	Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
	NJSLSA.W5.	NJSLSA.W5. Develop and strengthen writing as needed by planning, revising, editing, rewriting, or trying a new approach.
Range of Writing	NJSLSA.W10.	Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

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Technology Standards (Unit 7)

Content Statement Student will:	Indicator #	Indicator
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>A. Technology Operations and Concepts: <i>Students demonstrate a sound understanding of technology concepts, systems and operations.</i></p>		
Understand and use technology systems	8.1.8.A.1	Demonstrate knowledge of a real world problem using digital tools.
<p>8.1 Educational Technology: All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaborate and to create and communicate knowledge.</p> <p>D. Digital Citizenship: Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.</p>		
Advocate and practice safe, legal, and responsible use of information and technology.	8.1.8.D.1	Understand and model appropriate online behaviors related to cyber safety, cyber bullying, cyber security, and cyber ethics including appropriate use of social media.
Demonstrate personal responsibility for lifelong learning.	8.1.8.D.2	Demonstrate the application of appropriate citations to digital content.
	8.1.8.D.3	Demonstrate an understanding of fair use and Creative Commons to intellectual property.
Exhibit leadership for digital citizenship.	8.1.8.D.4	Assess the credibility and accuracy of digital content.
	8.1.8.D.5	Understand appropriate uses for social media and the negative consequences of misuse.
<p>8.2 Technology Education, Engineering, Design, and Computational Thinking - Programming: All students will develop an understanding of the nature and impact of technology, engineering, technological design, computational thinking and the designed world as they relate to the individual, global society, and the environment.</p> <p>A. The Nature of Technology: Creativity and Innovation Technology systems impact every aspect of the world in which we live.</p>		
The core concepts of technology.	8.2.8.A.2	Investigate a malfunction in any part of a system and identify its impacts.

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21st Century Life and Careers (Unit 7)

Background:	<p>In today's global economy, students need to be lifelong learners who have the knowledge and skills to adapt to an evolving workplace and world. To address these demands, Standard 9, 21st Century Life and Careers, which includes the 12 Career Ready Practices, establishes clear guidelines for what students need to know and be able to do in order to be successful in their future careers and to achieve financial independence.</p> <p><i><u>Mission:</u> 21st century life and career skills enable students to make informed decisions that prepare them to engage as active citizens in a dynamic global society and to successfully meet the challenges and opportunities of the 21st century global workplace.</i></p> <p><u>Vision:</u> To integrate 21st Century life and career skills across the K-12 curriculum and in Career and Technical Education (CTE) programs to foster a population that:</p> <ul style="list-style-type: none"> ○ Continually self-reflects and seeks to improve the essential life and career practices that lead to success. ○ Uses effective communication and collaboration skills and resources to interact with a global society. ○ Is financially literate and financially responsible at home and in the broader community. ○ Is knowledgeable about careers and can plan, execute, and alter career goals in response to changing societal and economic conditions. ○ Seeks to attain skill and content mastery to achieve success in a chosen career path.
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Career Ready Practices:
 Career Ready Practices describe the career-ready skills that all educators in all content areas should seek to develop in their students. They are practices that have been linked to increase college, career, and life success. Career Ready Practices should be taught and reinforced in all career exploration and preparation programs with increasingly higher levels of complexity and expectation as a student advances through a program of study.

CRP1.	Act as a responsible and contributing citizen and employee.
CRP2.	Apply appropriate academic and technical skills.
CRP3.	Attend to personal health and financial well-being.
CRP4.	Communicate clearly and effectively and with reason.
CRP5.	Consider the environmental, social and economic impacts of decisions.
CRP6.	Demonstrate creativity and innovation.
CRP7.	Employ valid and reliable research strategies.
CRP8.	Utilize critical thinking to make sense of problems and persevere in solving them.
CRP9.	Model integrity, ethical leadership and effective management.
CRP10.	Plan education and career paths aligned to personal goals.
CRP11.	Use technology to enhance productivity.
CRP12.	Work productively in teams while using cultural global competence.

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Measurement of Learning/Assessment (Unit 7)

Formative Evaluation:		Summative Evaluation:	
Observations	Graphic Organizers	Tests/Quizzes	End of unit/chapter tests
Questioning Strategies	Class Polling	Oral Presentations	State Testing
Discussions	Student Record Keeping		Final Exam
Exit/Admit Slips/ Do Now's	Notebooks		
Self/Peer Assessments	Homework		
Class Participation	Problem of the day		
Study Island	Weekly Take Home Tests		
Alternative Assessments		Benchmarks	
Oral Presentations	1-on-1 analysis	SGO (pre/post)	Quarterlies
Customized Projects	Illustrations		
Independent Study			

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Unit Overview for Gifted and Talented

Gifted and Talented (Unit 7)

Standard 1: Learning and Development

Standard 1 Description:

Educators, recognizing the learning and developmental differences of students with gifts and talents, promote ongoing self-understanding, awareness of their needs, and cognitive and affective growth of these students in school, home, and community settings to ensure specific student outcomes.

Student Outcomes	Evidence-Based Practices
<p>1.1 Self-Understanding. Students with gifts and talents demonstrate self-knowledge with respect to their interests, strengths, identities, and needs in socio-emotional development and in intellectual, academic, creative, leadership, and artistic domains.</p>	<p>1.1.1. Educators engage students with gifts and talents in identifying interests, strengths, and gifts.</p>
<p>1.2 Self-Understanding. Students with gifts and talents possess a developmentally appropriate understanding of how they learn and grow; they recognize the influences of their beliefs, traditions, and values on their learning and behavior.</p>	<p>1.2.1. Educators develop activities that match each student’s developmental level and culture-based learning needs.</p>
<p>1.6. Cognitive and Affective Growth. Students with gifts and talents benefit from meaningful and challenging learning activities addressing their unique characteristics and needs.</p>	<p>1.6.1. Educators design interventions for students to develop cognitive and affective growth that is based on research of effective practices.</p>

Standard 4: Learning Environments

Student Outcomes	Evidence-Based Practices
<p>4.1. Personal Competence. Students with gifts and talents demonstrate growth in personal competence and dispositions for exceptional academic and creative productivity. These include self-awareness, self-advocacy, self-efficacy, confidence, motivation, resilience, independence, curiosity, and risk taking.</p>	<p>4.1.1. Educators maintain high expectations for all students with gifts and talents as evidenced in <u>meaningful and challenging activities</u>.</p>
	<p>4.1.3. Educators create environments that support trust among diverse learners.</p>
	<p>4.1.4. Educators provide feedback that focuses on effort, on evidence of potential to meet high standards, and on mistakes as learning opportunities.</p>
	<p>4.1.5. Educators provide examples of positive coping skills and opportunities to apply them.</p>

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(Unit 7)

English Language Learners (ELL's)	Provide visuals of concepts	Scaffolding Strategies	Audio/Visual tape lesson so student can revisit and remediate
	Work in group settings	Peer Tutor/ Mentor	Provide "Flipped Classroom" learning experiences so learner have extended time to master lesson.
	Communicate with ELL teacher	Translate (if needed) using online tools such as Google Translate	Use technology to aid with work productivity and/or understanding concepts.

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At-Risk of Failure	One-to-One Assistance	Frequent check for understanding	Peer Tutor
	Use agenda book	Extra help after school	Frequent parent(s)/guardian(s) Communication
	Goal Setting	Extra time on assignments/assessments	Assignments chunked into manageable parts

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(Unit 7)

Section 504	Based on one's Section 504, modifications/accommodations may include, but are not limited to the following:		
	preferential seating	extended time on tests and assignments	use written directions to supplement oral directions
	verbal, visual, or technology aids	adjusted class schedules or grading	break assignments into a series of smaller assignments

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(Unit 7)

Special
Education

According to the IEP, could include, but not limited to:

Clearly sequence instruction

Monitor use of agenda book

Arrange peer tutor

Preferential seating/special seating types, i.e. standing desk

Choices in tasks

Extended time

Provide organizers/study guides

Frequent check for understanding

Provide organizers/study guides

Provide small group instruction

Allow for repetition and/or clarification of directions

Directions repeated, clarified, or reworded

Allow wait time for processing before calling on student for response

Modification of assignments/assessments

Frequent parent communication

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Unit 7 Essential Questions:

- How can we use charts, graphs, and tables to represent important data?
How and why is the mean, median, mode, and range used in the real life situations?
- How can statistics be used to mislead?

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Unit 7 Objectives:

Students will know...

- Probability and statistics
- Measures of central tendencies
- Data analysis
- Misleading statistics
- Use of digital media
- Strategies to reinforce positive attitudes
- Critical thinking
- Multiple points of view
- Compromise, consensus, community building
- Project management strategy
- Individual responsibility in a group
- Leadership skills
- Conflict resolution strategies
- Inference
- Effective communication
- Ethical online behavior
- Verbal vs. non-verbal communication
-

Students will be able to...

- Use ratios and percents to represent the probability of a specific event.
- Collect, organize, and represent data through charts, graphs, and tables.
- Calculate the measures of central tendencies.
- Analyze data using range and measure of central tendency
- Make inferences and hypothesis from their analysis of the data.
- Predict events based on real-world data.
- Determine the total outcomes of an event.
- Determine the total outcome of multiple events.
- Make use of digital media to enhance findings, reasoning, and evidence.
- Use strategies to reinforce positive attitudes and behavior that impact critical thinking/problem solving skills
- Use multiple points of view to create alternate solutions in a group
- Demonstrate the use of compromise, consensus and community building strategies
- Design and implement a project management strategy
- Determine an individual's responsibility for personal actions and contributions to group activities
- Model leadership skills in the classroom
- Employ appropriate conflict resolution strategies
- Demonstrate the ability to understand inferences
- Use effective communication in face-to-face and online interactions
- Use ethical online behavior
- Compare and contrast nuances in verbal and nonverbal communication

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Unit 7 Enduring Understandings:

- Charts, graphs, and tables can be used to represent important data.
- The mean, median, mode, and range can be used in real life situations.
- Statistics can be misleading.

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Curriculum Development Resources

Teacher Resources/Instructional Materials/Equipment

Unit 7

Resources:	Materials/Equipment:	Websites
Glencoe Pre-Algebra Textbook	Study Island	Teacher/Team Websites
Teacher made materials/resources	Parent/Student Extra Math Reinforcement Agreement (letter & chart)	Khan Academy
	Weekly Take Home Test	PARCC 7 Prep