

Ocean Academy Charter School
Curriculum Guide
Grade 7 - Mathematics



Original Adoption:	August 2025
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OCEAN ACADEMY CHARTER SCHOOL 7th Grade Mathematics Curriculum	
Content Area: Mathematics	
Course Title: 7th Grade Mathematics	
Grade Level: 7th	
Unit Title	Pacing Guide in Days
<u>Unit Plan 1: Operations on Rational Numbers and Expressions</u>	60 Days
<u>Unit Plan 2: Equations and Ratios & Proportions</u>	60 Days
<u>Unit Plan 3: Drawing Inferences about Populations & Probability Models</u>	25 Days
<u>Unit Plan 4: Problem Solving with Geometry</u>	35 Days

OCEAN ACADEMY CHARTER SCHOOL Unit 1 Overview	
Content Area: Mathematics	
Unit Title: Operations on Rational Numbers and Expressions	Duration: 60 Days
Target Course/Grade Level: 7th Grade	
Introduction/Unit Focus: This unit builds on students' previous knowledge of fractions and extends their understanding to encompass all rational numbers, including positive and negative fractions and decimals. Students will deepen their skills in performing arithmetic operations: addition, subtraction,	

multiplication, and division with rational numbers, applying these operations confidently in a variety of mathematical and real-world contexts.

Key areas of focus include:

- Developing fluency with adding, subtracting, multiplying, and dividing rational numbers, extending the strategies learned with fractions to include all forms of rational numbers.
- Applying and reinforcing properties of operations (such as the distributive, associative, and commutative properties) to simplify expressions and generate equivalent forms.
- Exploring how these properties support the rewriting and manipulation of algebraic expressions to solve equations and inequalities involving rational numbers.
- Using equivalent expressions to model and solve real-world problems that involve rational number operations.
- Building a strong foundation for algebra by connecting numerical operations with algebraic reasoning, emphasizing the role of properties of operations in expression simplification and problem solving.

Through problem-solving, exploration, and application, students will gain a deeper conceptual understanding of rational numbers and their operations, preparing them for more advanced topics in algebra and number theory.

Disciplinary Concepts for the Unit

Standard 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills

This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35 A board of education shall include instruction on the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people, in an appropriate place in the curriculum of middle school and high school students as part of the district's implementation of the New Jersey Student Learning Standards (N.J.S.A.18A:35-4.36) A board of education shall have policies and procedures in place pertaining to the selection of instructional materials to implement the requirements of N.J.S.A. 18A:35-4.35.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

"Twenty-first century themes and skills" means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving,

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and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Unit 1 Focus Standards (Major Standards) [New Jersey Student Learning Standards-Mathematics](#)

MP1- Make sense of problems and persevere in solving them.

MP.2- Reason abstractly and quantitatively

MP.3- Reason abstractly and quantitatively

MP.4- Model with mathematics.

MP.5- Reason abstractly and quantitatively

MP.6- Attend to precision.

MP.7- Look for and make use of structure.

MP.8- Look for and express regularity in repeated reasoning.

Content Standards with Statement	iReady Resource	Suggested Mathematical Practices Description of Mathematical Practices	Critical Knowledge Concepts	Skills Objectives
7.NS.A.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. 7.NS.A.1a. Describe situations in which opposite quantities combine to make 0. 7.NS.A.1b. Understand $p + q$ as the number located	1.2, 1.3, 1.4, 1.5	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ Opposite quantities combine to make 0 (additive inverses). ➤ $p + q$ is the number located a distance q from p, in the positive or negative direction depending on whether q is positive or negative. ➤ Subtraction of rational numbers as adding the	➤ represent addition and subtraction on a horizontal number line. ➤ represent addition and subtraction on a vertical number line. ➤ interpret sums of rational numbers in real-world situations. ➤ show that the distance between two rational numbers on the number line is the absolute value of their difference.

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a distance q from p, in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. 7.NS.A.1c. Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real world contexts. 7.NS.A.1d. Apply properties of operations as strategies to add and subtract rational numbers.			additive inverse, $p - q = p + (-q)$ ➤ The product of two whole numbers is the total number of objects in a number of equal groups.	
7.NS.A.2. Apply and extend previous understandings of multiplication and division and of fractions to multiply	2.1, 2.2, 2.3, 2.4, 2.5	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ Every quotient of integers (with non-zero divisor) is a rational number.	➤ multiply and divide signed numbers. ➤ use long division to convert a rational number to a decimal.

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and divide rational numbers. 7.NS.A.2a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts. 7.NS.A.2b. 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 $-(p/q) = (-p)/q = p/(-q)$. 2c. Interpret quotients of rational numbers by describing real world contexts.			➤ Decimal form of a rational number terminates in 0s or eventually repeats. ➤ Integers can be divided, provided that the divisor is not zero. ➤ If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$.	
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7.NS.A.2c. Apply properties of operations as strategies to multiply and divide rational numbers. 7.NS.A.2d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.				
7.NS.A.3. Solve real-world and mathematical problems involving the four operations with rational numbers.	1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.4, 2.5, 3.1, 3.3	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ The process for multiplying and dividing fractions extends to multiplying and dividing rational numbers.	➤ add and subtract rational numbers. ➤ multiply and divide rational numbers using the properties of operations. ➤ apply the convention of order of operations to add, subtract, multiply and divide rational numbers. ➤ solve real world problems involving the four operations with rational numbers
7.EE.A.1. Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.	3.1, 3.2, 3.3, 3.4	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ Rewriting an expression in different forms in a problem context can shed light on the problem.	➤ add and subtract linear expressions having rational coefficients, using properties of operations. ➤ factor and expand linear expressions having rational coefficients, using

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7.EE.A.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. For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”.				properties of operations. ➤ write expressions in equivalent forms to shed light on the problem and interpret the relationship between the quantities in the context of the problem.
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Unit 1 New Jersey Student Learning Standards: Interdisciplinary Connections
New Jersey Student Learning Standards-ELA

NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

W.7.1. Write arguments to support claims with clear reasons and relevant evidence.

NJSLSA.SL1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.

NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

SL.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others’ ideas and expressing their own clearly.

L.7.6. Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases; gather vocabulary knowledge when considering a word or phrase important to comprehension or expression.

RI.CR.7.1. (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.

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SL.PE.7.1. (SL.7.1) Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others' ideas and expressing their own clearly.

L.KL.7.2. (NJSLSA.L7) Acquire and use accurately a range of general academic and domain-specific words and phrases sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when encountering an unknown term important to comprehension or expression.

W.AW.7.1. (NJSLSA.W7) Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Unit 1 New Jersey Student Learning Standards: [Career Readiness, Life Literacies, and Key Skills](#)

Disciplinary Concepts: 9.2 Career Awareness, Exploration, Preparation, and Training by the End of Grade 8 & 9.4 Life Literacies and Key Skills by the End of Grade 8
Career Awareness and Planning(CAP)
Digital Citizenship(DC)

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
An individual's strengths, lifestyle goals, choices, and interests affect employment and income. Communication skills and responsible behavior in addition to education, experience, certifications, and skills are all factors that affect employment and income.	9.2.8.CAP.4: Explain how an individual's online behavior (e.g., social networking, photo exchanges, video postings) may impact opportunities for employment or advancement. 9.2.8.CAP.18: Explain how personal behavior, appearance, attitudes and other choices may impact the job application process. 9.2.8.CAP.19: Relate academic achievement, as represented by high school diplomas, college degrees, and industry credentials to employability and to potential level.
Detailed examples exist to illustrate crediting others when incorporating	9.4.8.DC.1: Analyze the resource citations in online materials for proper use. 9.4.8.DC.4: Explain how information shared digitally is public and can be searched, copied and potentially seen by public audiences.

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their digital artifacts in one's own work. Digital footprints are publicly accessible, even if only shared with a select group. Appropriate measures such as proper interactions can protect online reputations.	9.4.8.DC.5: Manage digital identity and practice positive online behavior to avoid inappropriate forms of self-disclosure.
Unit 1 New Jersey Student Learning Standards: <u>Computer Science and Design Thinking</u>	
Disciplinary Concepts: 8.1 Computer Science by the end of Grade 8	
Algorithm and Programming	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Programmers create variables to store data values of different types and perform appropriate operations on their values.	8.1.8.AP.2 Create clearly named variables that represent different data types and perform operations on their values.

New Jersey Student Learning Standards: <u>Climate Change Mandate</u>	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Multiple solutions often exist to solve a problem.	9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change and use critical thinking skills to predict which one(s) are likely to be effective. 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1)

Unit 1 Knowledge and Skills
Unit Learning Targets (Objectives): <i>Students will be able to...</i>

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- Describe real-world situations involving positive and negative rational numbers, including cases where their sum is zero.
- Represent sums of rational numbers ($p + q$) on horizontal and vertical number lines, showing that the distance moved is the absolute value of q ($|q|$), with examples of both positive and negative q .
- Understand subtraction of rational numbers as adding the additive inverse, and explain that the distance between two points on a number line is the absolute value of their difference.
- Add and subtract signed rational numbers using these number line concepts.
- Multiply and divide signed rational numbers and interpret the results within real-world contexts.
- Convert rational numbers to decimal form through long division, explaining why decimals either terminate or repeat.
- Apply properties of operations to efficiently add, subtract, multiply, and divide rational numbers.
- Use properties of operations to add, subtract, factor, and expand linear expressions with rational coefficients.
- Rewrite algebraic expressions in equivalent forms to clarify relationships between quantities.
- Solve mathematical and real-world problems involving operations with signed rational numbers.

Unit Enduring Understandings:

Students will know...

- Perform addition, subtraction, multiplication, and division with rational numbers, including positive and negative values in various forms (whole numbers, fractions, and decimals).
- Use appropriate strategies and tools to solve multi-step real-world and mathematical problems involving rational numbers.
- Add and subtract algebraic expressions accurately.
- Apply the distributive property to add, subtract, expand, and factor linear expressions.

Unit Essential Questions:

- What are the methods for performing operations on rational numbers and algebraic expressions?
- How can we add and subtract positive and negative rational numbers in different forms?
- How can we multiply and divide positive and negative rational numbers in different forms?
- How do we simplify linear expressions using addition and subtraction?
- In what ways can the distributive property be used to add, subtract, expand, and factor linear expressions?

Instructional Plan

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Suggested Activities: ➤ Guided Notes ➤ iReady Interactive Platform ➤ Task Cards ➤ Scavenger Hunts ➤ Gallery Walks ➤ Videos ➤ Games ➤ Whiteboard Practice ➤ Record and Practice Journal	Resources: ➤ iReady Math ➤ Nearpod ➤ Edpuzzle ➤ Desmos ➤ IXL ➤ Kahoot ➤ Blooket ➤ LinkIt! ➤ NJSLA Digital Library of Released Items
Evidence of Student Learning	
Formative Assessments: ➤ Observation ➤ Do-Now/ Quick Check ➤ Homework ➤ Notebook/journal ➤ Class participation ➤ Whiteboards ➤ Record and Practice Journals ➤ Exit passes ➤ Online platforms: Quizizz, Kahoot!, Quizlet, Quizalize ➤ IXL Summative Assessments: ➤ Chapter Tests ➤ Quizzes ➤ Presentations ➤ Projects ➤ Final Exams ➤ National/State/District Wide Assessments Benchmark Assessments: ➤ SGO Assessments ➤ Common Unit Assessments ➤ Linkit Benchmarks A, B, C Alternative Assessments: ➤ Portfolio ➤ Project	

Performance Tasks: (When appropriate) This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

- iReady Resources - there are performance tasks for multiple standards
- Example Performance Assessment Tasks

Suggested Options for Differentiation and Modifications

Special Education

- Follow all IEP modifications.
 - Use scaffolds, leveled texts, and differentiated assignments.
 - Provide visuals, graphic organizers, and outlines.
 - Pre-teach and review vocabulary/concepts.
 - Offer summaries, study guides, and note-taking supports.
 - Use small-group or one-on-one instruction as needed.
 - Provide peer tutoring or partner support.
 - Allow preferential seating.
 - Give extra time on tests and assignments.
 - Accept oral or dictated responses.
 - Modify workload or number of questions when appropriate.
 - Provide large-print, Braille, or digital text with audio tools.
 - Allow access to scribes or communication devices.
 - Use interactive/multimedia content to reinforce skills.
-

Students with 504 Plans

- Follow the 504 plan.
 - Provide extended time for assignments/tests.
 - Offer small-group or quiet testing settings.
 - Accept oral or dictated responses.
 - Provide large-print, Braille, or digital text with assistive technology.
 - Allow use of scribes or communication devices.
-

Students at Risk of School Failure

- Use visuals, outlines, and step-by-step directions.
- Pre-teach key vocabulary and provide real-world connections.
- Offer small-group instruction and frequent check-ins.
- Model problem-solving processes and think-alouds.
- Assign peer support when appropriate.
- Provide preferential seating and structured routines.

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- Break down multi-step tasks into smaller parts.
 - Provide feedback in manageable, frequent intervals.
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Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
 - Provide opportunities for discovery and independent research.
 - Offer interest-based extensions and advanced texts.
 - Use flexible grouping for enrichment projects.
 - Provide choice in assignments and assessments.
 - Incorporate simulations, debates, and project-based learning.
 - Encourage cross-curricular connections and problem-solving challenges.
 - Provide opportunities for reflection and presentation.
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Multilingual Learners

- Collaborate with ESL/MLL specialists.
 - Provide small-group instruction with language scaffolds.
 - Pre-teach and revisit vocabulary using visuals and cognates.
 - Use sentence frames, discussion stems, and guided writing supports.
 - Allow oral responses and extended time.
 - Provide bilingual glossaries and labeled visuals.
 - Use digital supports (translation tools, audio text, captioning).
 - Scaffold academic conversations with structured partner/group activities.
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Diversity and Inclusion

- Respect and integrate cultural traditions and perspectives.
- Provide alternative assignment formats when needed.
- Use visuals, outlines, and clear academic language.
- Avoid slang and idioms; speak at an appropriate pace.
- Collaborate with cultural liaisons, language specialists, and support staff.
- Foster an inclusive classroom climate with routines and positive relationships.
- Build strong school-family connections.

Supplemental Resources

- Instructional Materials
 - Guided Notes
 - iReady Interactive Platform

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○ Record and Practice Journal ➤ Supplemental Materials ○ Task cards ○ Scavenger hunts ○ Gallery walks ○ Interactive Google activities ○ Desmos ➤ Intervention Materials ○ IXL ○ Videos ○ Translated material ○ LinkIt!
Unit 1 Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL Unit 2 Overview	
Content Area: Mathematics	
Unit Title: Equations and Ratios & Proportions	Duration: 60 Days
Target Course/Grade Level: 7th Grade Mathematics	
Introduction/Unit 2 Focus: This unit emphasizes building students' ability to write, solve, and graph one- and two-step equations and inequalities. Students will develop a strong conceptual understanding of how to manipulate and solve these algebraic expressions, and represent their solutions graphically. Additionally, the unit introduces and deepens understanding of ratios and proportions, enabling students to analyze relationships between quantities and solve problems involving proportional reasoning. Key learning goals include: ➤ Writing and solving one-step and two-step equations to find unknown values. ➤ Writing, solving, and graphing one-step and two-step inequalities, and interpreting solution sets on number lines.	

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- Understanding the concepts of ratios and proportions, and applying proportional reasoning to solve real-world and mathematical problems.

Through hands-on activities, problem solving, and visual representations, students will strengthen their algebraic skills and apply them in various contexts.

Disciplinary Concepts for the Unit

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Unit 2 Focus Standards (Major Standards)
New Jersey Student Learning Standards-Mathematics

Content Standards with Statement	iReady Resource	Suggested Mathematical Practices <u>Description of Mathematical Practices</u>	Critical Knowledge Concepts	Skills Objectives
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7.EE.B.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.	4.1, 4.2, 4.3, 4.5, 4.6, 4.7, 5.1, 5.2, 5.4, 6.1, 6.2, 6.3, 6.4, 6.5, 6.6	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ Rational numbers can take different forms	➤ solve multi-step real-life problems using rational numbers in any form. ➤ convert between decimals and fractions and apply properties of operations when calculating with rational numbers. ➤ estimate to determine the reasonableness of answers.
7.EE.B.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. 7.EE.B.4a. Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently with accuracy and efficiency. Compare	4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ No new concepts introduced	➤ compare an arithmetic solution to a word problem to the algebraic solution of the word problem, identifying the sequence of operations in each solution. ➤ write an equation of the form $px + q = r$ or $p(x + q) = r$ in order to solve a word problem. ➤ fluently solve equations of the form $px + q = r$ and $p(x + q) = r$. write an inequality of the form $px + q > r$, $px + q < r$, $px + q \geq r$ or $px + q \leq r$

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an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. 7.EE.B.4b. Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.				to solve a word problem. ➤ graph the solution set of the inequality. ➤ interpret the solution to an inequality in the context of the problem.
7.RP.A.1. Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. For example, if a person walks $\frac{1}{2}$ mile in each $\frac{1}{4}$ hour, compute the unit rate as the complex fraction $\frac{1}{2} / \frac{1}{4}$ mph, equivalently 2 mph.	5.1, 5.2, 5.3, 5.5	MP2, MP3, MP3, MP4, MP5, MP6, MP8	➤ No new concepts introduced	➤ compute unit rates with ratios of fractions. ➤ compute unit rates with ratios of fractions representing measurement quantities in both like and different units of measure
7.RP.A.2. Recognize and represent proportional relationships between quantities.	5.2, 5.3, 5.5	MP2, MP3, MP4, MP5	➤ Proportions represent equality between two ratios. ➤ Constant of	➤ use tables and graphs to determine if two quantities are in a proportional relationship. ➤ identify the constant of

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7.RP.A.2a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. 7.RP.A.2b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. 7.RP.A.2c. Represent proportional relationships by equations. 7.RP.A.2d. Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.			proportionality	proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. ➤ write equations representing proportional relationships. ➤ Interpret the origin and $(1, r)$ on the graph of a proportional relationship in context. ➤ interpret a point on the graph of a proportional relationship in context
7.RP.A.3: Use proportional relationships to solve multistep ratio and percent problems.	5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 6.2, 6.3, 6.4, 6.5, 6.6	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	➤ Recognize percent as a ratio indicating the quantity	➤ use proportions to solve multi step percent problems including simple interest, tax,

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			per one hundred.	markups, discounts, gratuities, commissions, fees, percent increase, percent decrease, percent error. ➤ use proportions to solve multistep ratio problems.
7.G.A.1: Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale.	5.6	MP1, MP6	➤ Scale and proportion	➤ use ratios and proportions to create scale drawings. ➤ reproduce a scale drawing at a different scale. ➤ computing actual lengths and areas from a scale drawing. ➤ solve problems involving scale drawings using proportions.
Unit 2 New Jersey Student Learning Standards: Interdisciplinary Connections New Jersey Student Learning Standards-ELA				
NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. W.7.1. Write arguments to support claims with clear reasons and relevant evidence. NJSLSA.SL1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.				

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NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

SL.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

Unit 2 New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills

Disciplinary Concepts: 9.1 Personal Financial Literacy by the End of Grade 8, 9.2 Career Awareness, Exploration, Preparation and Training by the End of Grade 8 & 9.4 Life Literacies and Key Skills by the End of Grade 8

Credit and Debt Management (CDM)

Credit Profile (CP)

Financial Institutions (FI)

Financial Psychology (FP)

Planning and Budgeting (PB)

Career Awareness and Planning (CAP)

Core Ideas

Performance Expectations (Identified with Standard Number and statement)

There are strategies to increase your savings and limit debt.

9.1.8.CDM.2: Demonstrate an understanding of the terminology associated with different types of credit (e.g., credit cards, installment loans, mortgages, lines of credit) and compare and calculate the interest rates associated with each.

Credit management includes making informed choices about sources of credit and requires an understanding of the cost of credit.

9.1.8.CDM.3: Compare and contrast loan management strategies, including interest charges and total principal repayment costs.

9.1.8.CP.1: Compare prices for the same goods or services.

9.1.8.CP.2: Analyze how spending habits affect one's ability to save.

There are strategies to build and maintain a good credit history.

9.1.8.FI.2: Determine the most appropriate use of various financial products and services to borrow and access money for making purchases (e.g., ATM, debit cards, credit cards, check books, online/mobile banking).

There are a variety of factors that influence how well suited a financial institution and/or service will be in meeting an

9.1.8.FI.4: Analyze the interest rates and fees associated with financial products.

9.1.8.FP.6: Compare and contrast advertising messages to understand what they are trying to accomplish.

9.1.8.FP.7: Identify the techniques and effects of deceptive advertising.

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individual's financial need. Marketing techniques are designed to encourage individuals to purchase items they may not need or want. A budget aligned with an individual's financial goals can help prepare for life events. Goals (e.g., higher education, autos, and homes, retirement), affect your finances. Early planning can provide more options to pay for post-secondary training and employment. Detailed examples exist to illustrate crediting others when incorporating their digital artifacts in one's own work. Digital footprints are publicly accessible, even if only shared with a select group. Appropriate measures such as proper interactions can protect online reputations.	9.1.8.PD.4: Construct a simple personal savings and spending plan based on various sources of income and different stages of life (e.g., teenager, young adult, family) 9.1.8.PB.6: Construct a budget to save for short-term, long term, and charitable goals. 9.2.8.CAP.6: Compare the costs of postsecondary education with the potential increase in income from a career of choice. 9.4.8.DC.1: Analyze the resource citations in online materials for proper use. 9.4.8.DC.4: Explain how information shared digitally is public and can be searched, copied and potentially seen by public audiences. 9.4.8.DC.5: Manage digital identity and practice positive online behavior to avoid inappropriate forms of self-disclosure. 9.4.8.TL.1: Construct a spreadsheet in order to analyze multiple data sets, identify relationships, and facilitate data-based decision-making. 9.4.8.TL.2: Gather data and digitally represent information to communicate a real-world problem (e.g., MS-ESS3-4, 6.1.8EconET.1, 6.1.8.CivicsPR.4) 9.4.8.tL.3: Select appropriate tools to organize and present information digitally. 9.4.8.TL.4: Synthesize and publish information about a local or global issue or event (e.g., MS-LS4-5, 6.1.8.CivicsPI.3) 9.4.8.TL.5: Compare the process and effectiveness of synchronous collaboration and asynchronous collaboration.
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Some digital tools are appropriate for gathering, organizing, analyzing, and presenting information, while other types of digital tools are appropriate for creating text, visualizations, models, and communicating with others. Digital tools allow for remote collaboration and rapid sharing of ideas unrestricted by geographic location or time.	
Unit 2 New Jersey Student Learning Standards: Computer Science and Design Thinking	
Disciplinary Concepts: 8.1 Computer Science by the end of Grade 8	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Programmers create variables to store data values of different types and perform appropriate operations on their values. Engineering design is a systematic, creative, and iterative process used to address local and global problems.	8.1.8.AP.2 Create clearly named variables that represent different data types and perform operations on their values. 8.2.8.ED.3- Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical; prototype, graphical/technical sketch).

New Jersey Student Learning Standards: Climate Change Mandate	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)

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Multiple solutions often exist to solve a problem.	9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change and use critical thinking skills to predict which one(s) are likely to be effective. 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1) 7.NS.B.3 Solve real-world and mathematical problems involving the four operations with rational numbers. (Clarification: Computations with rational numbers extend the rules for manipulating fractions to complex fractions.) Climate Change Example: Students may solve real-world problems involving the four operations with rational numbers related to the relationship between altitude and the temperature above sea level.7.EE.B.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 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar inches long in the center of a door that is 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. Climate Change Example: Students may solve multi-step real-life problems posed with positive and negative rational numbers in any form related to the relationship between altitude and the temperature above sea level. 7.G.B.6 Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. Climate Change Example: Students may solve real-world problems involving area, surface area, and volume related to deforestation and increasing livestock farming as key
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	contributors to climate change.
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Unit 2 Knowledge and Skills

Unit 2 Learning Targets (Objectives):

- Solve multi-step real-world and mathematical problems involving rational numbers in any form (fractions and decimals) by applying properties of operations and converting between forms as needed. Use mental computation and estimation strategies to assess the reasonableness of solutions.
- Use variables to represent quantities in real-world or mathematical problems by constructing and solving simple equations and inequalities.
- Graph solution sets of inequalities and interpret the solutions in context.
- Calculate and interpret unit rates involving ratios of fractions with like and unlike units.
- Determine whether two quantities have a proportional relationship by testing for equivalent ratios in tables or graphs, and by observing if the graph is a straight line through the origin.
- Identify the constant of proportionality (unit rate) from various representations including tables, graphs, equations, diagrams, and verbal descriptions.
- Write equations to model proportional relationships in real-world contexts.
- Use graphs of proportional relationships to interpret the meaning of points (x,y) , $(x,y)(x,y)$, especially the points $(0,0)(0,0)(0,0)$ and $(1,r)(1, r)(1,r)$, where r represents the unit rate.
- Solve multi-step ratio and percent problems involving applications such as simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, and percent error using proportional reasoning.
- Apply ratio and proportion concepts to solve problems involving scale drawings of geometric figures.

Unit 2 Enduring Understandings:

Students will know...

- Solve one- and two-step equations and inequalities by applying properties of equality and inequality.
- Use equations and inequalities to model and solve problems arising from real-life situations.
- Represent and identify equivalent ratios using tables, graphs, and proportions.
- Model ratio and proportional relationships to solve real-world problems effectively.
- Solve problems involving percentages using proportional reasoning.

Unit 2 Essential Questions:

- How do you solve one- and two-step equations using properties of equality?
- How do you write and solve one- and two-step equations and inequalities based on real-life situations?

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- In what ways can equivalent ratios be represented using tables, graphs, and proportions?
- How can ratio and proportional relationships be modeled to solve real-world problems?
- How can ratios and proportions be applied to solve problems in everyday contexts?
- How can proportions be used to solve percent problems in real life?

Instructional Plan

Suggested Activities:

- Guided Notes
- iReady Interactive Platform
- Task Cards
- Scavenger Hunts
- Gallery Walks
- Videos
- Games
- Whiteboard Practice
- Record and Practice Journal

Resources:

- iReady Math
- Nearpod
- Edpuzzle
- Desmos
- IXL
- Kahoot
- Blooket
- LinkIt!
- NJSLA Digital Library of Released Items

Evidence of Student Learning

Formative Assessments:

- Observation
- Do-Now/ Quick Check
- Homework
- Notebook/journal
- Class participation
- Whiteboards
- Record and Practice Journals
- Exit passes
- Online platforms: Quizizz, Kahoot!, Quizlet, Quizalize
- IXL

Summative Assessments:

- Chapter Tests
- Quizzes
- Presentations
- Projects
- Final Exams
- National/State/District Wide Assessments

Benchmark Assessments:

- SGO Assessments

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- Common Unit Assessments
- Linkit Benchmarks A, B, C

Alternative Assessments:

- Portfolio
- Project

Performance Tasks: (When appropriate) This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

- iReady Resources - there are performance tasks for multiple standards
- Example Performance Assessment Tasks

Suggested Options for Differentiation and Modifications

Special Education

- Follow all IEP modifications.
 - Use scaffolds, leveled texts, and differentiated assignments.
 - Provide visuals, graphic organizers, and outlines.
 - Pre-teach and review vocabulary/concepts.
 - Offer summaries, study guides, and note-taking supports.
 - Use small-group or one-on-one instruction as needed.
 - Provide peer tutoring or partner support.
 - Allow preferential seating.
 - Give extra time on tests and assignments.
 - Accept oral or dictated responses.
 - Modify workload or number of questions when appropriate.
 - Provide large-print, Braille, or digital text with audio tools.
 - Allow access to scribes or communication devices.
 - Use interactive/multimedia content to reinforce skills.
-

Students with 504 Plans

- Follow the 504 plan.
 - Provide extended time for assignments/tests.
 - Offer small-group or quiet testing settings.
 - Accept oral or dictated responses.
 - Provide large-print, Braille, or digital text with assistive technology.
 - Allow use of scribes or communication devices.
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Students at Risk of School Failure

- Use visuals, outlines, and step-by-step directions.
 - Pre-teach key vocabulary and provide real-world connections.
 - Offer small-group instruction and frequent check-ins.
 - Model problem-solving processes and think-alouds.
 - Assign peer support when appropriate.
 - Provide preferential seating and structured routines.
 - Break down multi-step tasks into smaller parts.
 - Provide feedback in manageable, frequent intervals.
-

Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
 - Provide opportunities for discovery and independent research.
 - Offer interest-based extensions and advanced texts.
 - Use flexible grouping for enrichment projects.
 - Provide choice in assignments and assessments.
 - Incorporate simulations, debates, and project-based learning.
 - Encourage cross-curricular connections and problem-solving challenges.
 - Provide opportunities for reflection and presentation.
-

Multilingual Learners

- Collaborate with ESL/MLL specialists.
 - Provide small-group instruction with language scaffolds.
 - Pre-teach and revisit vocabulary using visuals and cognates.
 - Use sentence frames, discussion stems, and guided writing supports.
 - Allow oral responses and extended time.
 - Provide bilingual glossaries and labeled visuals.
 - Use digital supports (translation tools, audio text, captioning).
 - Scaffold academic conversations with structured partner/group activities.
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Diversity and Inclusion

- Respect and integrate cultural traditions and perspectives.
- Provide alternative assignment formats when needed.
- Use visuals, outlines, and clear academic language.
- Avoid slang and idioms; speak at an appropriate pace.
- Collaborate with cultural liaisons, language specialists, and support staff.
- Foster an inclusive classroom climate with routines and positive relationships.
- Build strong school-family connections.

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Supplemental Resources	
➤ Instructional Materials ○ Guided Notes ○ iReady Interactive Platform ○ Record and Practice Journal ➤ Supplemental Materials ○ Task cards ○ Scavenger hunts ○ Gallery walks ○ Interactive Google activities ○ Desmos ➤ Intervention Materials ○ IXL ○ Videos ○ Translated material ○ LinkIt!	
Unit 2 Teacher Notes	
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OCEAN ACADEMY CHARTER SCHOOL Unit 3 Overview	
Content Area: Mathematics	
Unit 3 Title: Drawing Inferences about Populations and Probability Models	Duration: 25 Days
Target Course/Grade Level: 7th Grade Mathematics	
Introduction/Unit 3 Focus: This unit introduces students to foundational concepts in statistics and probability. Students will learn how to collect, analyze, and interpret data through sampling methods, and develop a deeper understanding of chance events by constructing and evaluating probability models. Key learning goals include: ➤ Using random sampling techniques to draw conclusions and make inferences about larger populations based on sample data.	

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- Making informal comparative inferences between two populations by analyzing sample data to identify similarities or differences.
- Investigating chance processes through hands-on experiments and simulations.
- Developing, applying, and critically evaluating probability models to predict and explain outcomes of random events.

Students will engage in real-world contexts and mathematical problems that require data-driven decision making and probabilistic reasoning, fostering critical thinking and quantitative literacy.

Disciplinary Concepts for the Unit

Standard 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills

This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and

secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35 A board of education shall include instruction on the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people, in an appropriate place in the curriculum of middle school and high school students as part of the district's implementation of the New Jersey Student Learning Standards (N.J.S.A.18A:35-4.36) A board of education shall have policies and procedures in place pertaining to the selection of instructional materials to implement the requirements of N.J.S.A. 18A:35-4.35.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

"Twenty-first century themes and skills" means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy."

Unit 3 Focus Standards (Major Standards) New Jersey Student Learning Standards-Mathematics

		Suggested Mathematical Practices	Critical	Skills Objectives

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Content Standards with Statement	iReady Resource	Description of Mathematical Practices	Knowledge Concepts	
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.	8.1, 8.2, 8.4	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Understand how to use random samples to make conclusions about a population.	➤ Explain why a sample is biased or unbiased. ➤ Explain why conclusions made from a biased sample may not be valid. ➤ Use an unbiased sample to make a conclusion about a population.
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	8.1, 8.2 8.4	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Understand variability in samples of a population.	➤ Use multiple random samples to make conclusions about a population. ➤ Use multiple random samples to examine variation in estimates.
7.SP.B.3. Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between	8.3	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Compare populations using measures of center and variation.	➤ Find the measures of center and variation of a data set. ➤ Describe the visual overlap

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the centers by expressing it as a multiple of a measure of variability.				of two data distributions numerically. ➤ Determine whether there is a significant difference in the measures of the center of two data sets.
7.SP.B.4. Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.	8.4	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Use random samples to compare populations.	➤ Compare random samples using measures of center and variation. ➤ Recognize whether random samples are likely to be representative of a population. ➤ Compare populations using multiple random samples.
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	7.1, 7.2, 7.3, 7.4	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Likelihood of an event	➤ Identify possible outcomes of an experiment. ➤ Use probability and relative frequency to describe the likelihood of an event. ➤ Use relative frequency to make predictions

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neither unlikely nor likely, and a probability near 1 indicates a likely event.				
7.SP.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.	7.1, 7.2	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Theoretical and Experimental Probability	➤ Explain the meanings of experimental probability and theoretical probability. ➤ Find experimental and theoretical probabilities. ➤ Use probability to make predictions.
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.SP.C.7a. Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. ○ 7.SP.C.7b. . Develop a probability model (which may not be	7.1, 7.2, 7.3	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	No new skills introduced	➤ Explain the meanings of experimental probability and theoretical probability. ➤ Find experimental and theoretical probabilities. ➤ Use probability to make predictions.

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uniform) by observing frequencies in data generated from a chance process				
7.SP.C.8. Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. ○ 7.SP.C.8a. Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. ○ 7.SP.C.8b. Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday language (e.g., “rolling double sixes”), identify the outcomes in the sample space	7.3, 7.4		Probability of compound events	➤ Find the sample space of two or more events. ➤ Find the total number of possible outcomes of two or more events. ➤ Find probabilities of compound events.

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which compose the event.				
7.SP.C.8c. Design and use a simulation to generate frequencies for compound events.				
Unit 3 New Jersey Student Learning Standards: Interdisciplinary Connections <u>New Jersey Student Learning Standards-ELA</u>				
NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others. NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience. W.7.1. Write arguments to support claims with clear reasons and relevant evidence. NJSLSA.SL1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively. NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience. SL.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.				
Unit 3 New Jersey Student Learning Standards: <u>Career Readiness, Life Literacies, and Key Skills</u>				
Disciplinary Concepts: 9.1 Personal Financial Literacy by the End of Grade 8, 9.2 Career Awareness, Exploration, Preparation, and Training by the End of Grade 8 & 9.4 Life Literacies and Key Skills by the End of Grade 8 Planning and Budgeting (PB) Career Awareness and Planning (CAP) Critical Thinking and Problem-Solving (CT) Information and Media Literacy (IML) Technology Literacy (TL)				
Core Ideas	Performance Expectations (Identified with Standard Number and statement)			

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➤ A budget aligned with an individual's financial goals can help prepare for life events. ➤ Goals (e.g., higher education, autos, homes, retirement), affect your finances. ➤ Early planning can provide more options to pay for postsecondary training and employment. ➤ Communication skills and responsible behavior in addition to education, experience, certifications, and skills are all factors that affect employment and income. ➤ Multiple solutions often exist to solve a problem. ➤ Increases in the quantity of information available through electronic means have heightened the need to check	9.1.8.PB.4: Construct a simple personal savings and spending plan based on various sources of income and different stages of life (e.g. teenager, young adult, family) 9.1.8.PB.6: Construct a budget to save for short-term, long term, and charitable goals. 9.2.8.CAP.6: Compare the costs of postsecondary education with the potential increase in income from a career of choice. 9.2.8.CAP.18: Explain how personal behavior, appearance attitudes and other choices may impact the job application process. 9.2.8.CAP.19: Relate academic achievement, as represented by high school diplomas, college degrees, and industry credentials, to employability and to potential level. 9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change, and use critical thinking skills to predict which one(s) are likely to be effective (e.g., MS-ETS1-2). 9.4.8.IML.2: Identify specific examples of distortion, exaggeration, or misrepresentation of information. 9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b) 9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations. 9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively communicate the data.
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sources for possible distortion, exaggeration, or misrepresentation. ➤ Digital tools make it possible to analyze and interpret data, including text, images, and sound. These tools allow for broad concepts and data to be more effectively communicated.	
Unit 3 New Jersey Student Learning Standards: <u>Computer Science and Design Thinking</u>	
Disciplinary Concepts: 8.1 Computer Science by the end of Grade 8	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
People use digital devices and tools to automate the collections, use and transformation of data. The manner in which data is collected and transformed is influenced by the types of digital devices(s) available and the intended use of the data. The purpose of cleaning data is to remove errors and make it easier for computers to process.	8.1.8.DA.1 Organize and transform data collected using computational tools to make it usable for a specific purpose. 8.1.8.DA.4 Transform data to remove errors and improve the accuracy of the data for analysis. 8.1.8.DA.5 Test, analyze, and refine computational models.

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Computer models can be used to simulate events, examine theories and inferences or make predictions.	
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New Jersey Student Learning Standards: [Climate Change Mandate](#)

Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Multiple solutions often exist to solve a problem.	9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change and use critical thinking skills to predict which one(s) are likely to be effective. 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1)

Unit 3 Knowledge and Skills

Unit 3 Learning Targets (Objectives):

Students will be able to...

- Understand that the probability of an event reflects its likelihood of occurring.
- Develop and use probability models to represent both experimental and theoretical probability.
- Identify possible outcomes (sample space) and calculate the probabilities of compound events.
- Design and conduct simulations to estimate probabilities of compound events in real-world contexts.
- Understand how to use random samples to make inferences about a larger population.
- Recognize and account for variability within and between samples when drawing conclusions.
- Compare two populations using measures of center (mean, median) and measures of variability (range, interquartile range, mean absolute deviation).
- Use data from random samples to draw informal comparative inferences between populations.

Unit 3 Enduring Understandings:

Students will know...

- Identify all possible outcomes of an experiment and determine the total number of outcomes in compound events.
- Use probability and relative frequency to describe the likelihood of an event and make predictions based on data.
- Understand the difference between experimental and theoretical probability and explain their meanings.
- Find and compare experimental and theoretical probabilities for simple and compound events.
- Design and conduct simulations to model real-life situations and use them to estimate probabilities.
- Recognize favorable outcomes in simulations and interpret the results.
- Distinguish between biased and unbiased samples and understand how bias affects the validity of conclusions.
- Use unbiased random samples to draw conclusions about a population.
- Analyze and compare multiple random samples to understand variations in estimates and improve accuracy.
- Calculate and interpret measures of center (mean, median) and variation (range, interquartile range, mean absolute deviation) in data sets.
- Describe and compare two data distributions, including evaluating the visual overlap of data and determining whether differences are significant.
- Evaluate whether random samples are likely to be representative of the population and use them to compare populations effectively.

Unit 3 Essential Questions:

- How can we identify possible outcomes and determine the likelihood of events?
- What is the difference between experimental probability and theoretical probability?
- How do we determine the sample space of compound events and use it to find probabilities?
- In what ways can simulations be used to model and analyze real-life situations?
- How can we use random samples to make informed conclusions about a population?
- How do we compare populations using data from random samples?
- How can we use data to determine whether differences between groups are meaningful or due to variability?

Instructional Plan

Suggested Activities:

- Guided Notes
- iReady Interactive Platform
- Task Cards
- Scavenger Hunts
- Gallery Walks

Resources:

- iReady Math
- Nearpod
- Edpuzzle
- Desmos
- IXL

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➤ Videos ➤ Games ➤ Whiteboard Practice ➤ Record and Practice Journal	➤ Kahoot ➤ Blooket ➤ LinkIt! ➤ NJSLA Digital Library of Released Items
Evidence of Student Learning	
Formative Assessments: ➤ Observation ➤ Do-Now/ Quick Check ➤ Homework ➤ Notebook/journal ➤ Class participation ➤ Whiteboards ➤ Record and Practice Journals ➤ Exit passes ➤ Online platforms: Quizizz, Kahoot!, Quizlet, Quizalize ➤ IXL Summative Assessments: ➤ Chapter Tests ➤ Quizzes ➤ Presentations ➤ Projects ➤ Final Exams ➤ National/State/District Wide Assessments Benchmark Assessments: ➤ SGO Assessments ➤ Common Unit Assessments ➤ Linkit Benchmarks A, B, C Alternative Assessments: ➤ Portfolio ➤ Project Performance Tasks: (When appropriate) This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit. ➤ iReady Resources - there are performance tasks for multiple standards ➤ <u>Example Performance Assessment Tasks</u>	
Suggested Options for Differentiation and Modifications	

Special Education

- Follow all IEP modifications.
 - Use scaffolds, leveled texts, and differentiated assignments.
 - Provide visuals, graphic organizers, and outlines.
 - Pre-teach and review vocabulary/concepts.
 - Offer summaries, study guides, and note-taking supports.
 - Use small-group or one-on-one instruction as needed.
 - Provide peer tutoring or partner support.
 - Allow preferential seating.
 - Give extra time on tests and assignments.
 - Accept oral or dictated responses.
 - Modify workload or number of questions when appropriate.
 - Provide large-print, Braille, or digital text with audio tools.
 - Allow access to scribes or communication devices.
 - Use interactive/multimedia content to reinforce skills.
-

Students with 504 Plans

- Follow the 504 plan.
 - Provide extended time for assignments/tests.
 - Offer small-group or quiet testing settings.
 - Accept oral or dictated responses.
 - Provide large-print, Braille, or digital text with assistive technology.
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Students at Risk of School Failure

- Use visuals, outlines, and step-by-step directions.
 - Pre-teach key vocabulary and provide real-world connections.
 - Offer small-group instruction and frequent check-ins.
 - Model problem-solving processes and think-alouds.
 - Assign peer support when appropriate.
 - Provide preferential seating and structured routines.
 - Break down multi-step tasks into smaller parts.
 - Provide feedback in manageable, frequent intervals.
-

Gifted and Talented

- Ask open-ended and higher-order questions (analyze, evaluate, create).
- Provide opportunities for discovery and independent research.

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- Offer interest-based extensions and advanced texts.
 - Use flexible grouping for enrichment projects.
 - Provide choice in assignments and assessments.
 - Incorporate simulations, debates, and project-based learning.
 - Encourage cross-curricular connections and problem-solving challenges.
 - Provide opportunities for reflection and presentation.
-

Multilingual Learners

- Collaborate with ESL/MLL specialists.
 - Provide small-group instruction with language scaffolds.
 - Pre-teach and revisit vocabulary using visuals and cognates.
 - Use sentence frames, discussion stems, and guided writing supports.
 - Allow oral responses and extended time.
 - Provide bilingual glossaries and labeled visuals.
 - Use digital supports (translation tools, audio text, captioning).
 - Scaffold academic conversations with structured partner/group activities.
-

Diversity and Inclusion

- Respect and integrate cultural traditions and perspectives.
- Provide alternative assignment formats when needed.
- Use visuals, outlines, and clear academic language.
- Avoid slang and idioms; speak at an appropriate pace.
- Collaborate with cultural liaisons, language specialists, and support staff.
- Foster an inclusive classroom climate with routines and positive relationships.
- Build strong school-family connections.

Supplemental Resources

- Instructional Materials
 - Guided Notes
 - iReady Interactive Platform
 - Record and Practice Journal
- Supplemental Materials
 - Task cards
 - Scavenger hunts
 - Gallery walks
 - Interactive Google activities
 - Desmos

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- Intervention Materials
 - IXL
 - Videos
 - Translated material
 - LinkIt!

Unit 3 Teacher Notes

OCEAN ACADEMY CHARTER SCHOOL
Unit 4 Overview

Content Area: Mathematics

Unit 4 Title: Geometry

Duration: 35 Days

Target Course/Grade Level: 7th Grade Mathematics

Introduction/Unit Focus:

In this unit, students will deepen their understanding of geometric concepts by exploring the relationships between two- and three-dimensional shapes. They will apply formulas and geometric reasoning to solve real-world and mathematical problems involving circles, composite figures, angles, surface area, volume, and cross sections.

Students will develop fluency with the following key concepts:

- Understand the parts of a circle and apply the formulas for circumference and area to solve problems in real-world contexts.
- Calculate the area of composite figures by decomposing them into familiar shapes, such as rectangles, triangles, and circles.
- Use angle relationships (such as complementary, supplementary, vertical, and adjacent angles) to find unknown angle measures and solve problems.
- Determine the surface area and volume of three-dimensional figures, including prisms, cylinders, pyramids, and cones, using nets and formulas.
- Explore and describe cross sections formed when three-dimensional figures are sliced with a plane, identifying resulting two-dimensional shapes.

Through hands-on activities, visual models, and problem-solving tasks, students will strengthen their spatial reasoning and geometric thinking in preparation for more advanced concepts in future grades.

Disciplinary Concepts for the Unit

Standard 9.1 Personal Financial Literacy

This standard outlines the important fiscal knowledge, habits, and skills that must be mastered in order for students to make informed decisions about personal finance. Financial literacy is an integral component of a student's college and career readiness, enabling students to achieve fulfilling, financially-secure, and successful careers.

Standard 9.2 Career Awareness, Exploration, Preparation and Training

This standard outlines the importance of being knowledgeable about one's interests and talents, and being well informed about postsecondary and career options, career planning, and career requirements.

Standard 9.4 Life Literacies and Key Skills

This standard outline key literacies and technical skills such as critical thinking, global and cultural awareness, and technology literacy* that are critical for students to develop to live and work in an interconnected global economy.

Standard 8.1 Computer Science

Computer Science outlines a comprehensive set of concepts and skills, such as data and analysis, algorithms and programming, and computing systems.

Standard 8.2 Design Thinking

Technology, outlines the technological design concepts and skills essential for technological and engineering literacy. The framework design includes Engineering Design, Ethics and Culture, and the Effects of Technology on the Natural world among the disciplinary concepts

Amistad Law: N.J.S.A. 18A 52:16A-88 Every board of education shall incorporate the information regarding the contributions of African-Americans to our country in an appropriate place in the curriculum of elementary and secondary school students.

Holocaust Law: N.J.S.A. 18A:35-28 Every board of education shall include instruction on the Holocaust and genocide in an appropriate place in the curriculum of all elementary and secondary school pupils. The instruction shall further emphasize the personal responsibility that each citizen bears to fight racism and hatred whenever and wherever it happens.

LGBT and Disabilities Law: N.J.S.A. 18A:35-4.35 A board of education shall include instruction on the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people, in an appropriate place in the curriculum of middle school and high school students as part of the district's implementation of the New Jersey Student Learning Standards (N.J.S.A.18A:35-4.36) A board of education shall have policies and procedures in place pertaining to the selection of instructional materials to implement the requirements of N.J.S.A. 18A:35-4.35.

Diversity and Inclusion: C.18A:35-4.36a Curriculum to include instruction on diversity and inclusion.

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The instruction shall:

- (1) highlight and promote diversity, including economic diversity, equity, inclusion, tolerance, and belonging in connection with gender and sexual orientation, race and ethnicity, disabilities, and religious tolerance;
- (2) examine the impact that unconscious bias and economic disparities have at both an individual level and on society as a whole; and
- (3) encourage safe, welcoming, and inclusive environments for all students regardless of race or ethnicity, sexual and gender identities, mental and physical disabilities, and religious beliefs.

Asian Americans and Pacific Islanders (AAPI)

Ensures that the contributions, history, and heritage of Asian Americans and Pacific Islanders (AAPI) are included in the New Jersey Student Learning Standards (NJSLS) for Social Studies in kindergarten through Grade 12 (P.L.2021, c.416).

21st Century Themes and Skills

“Twenty-first century themes and skills” means themes such as global awareness; financial, economic, business, and entrepreneurial literacy; civic literacy; health literacy; learning and innovation skills, including creativity and innovation, critical thinking and problem solving, and communication and collaboration; information, media, and technology skills; and life and career skills, including flexibility. Career readiness, life literacies, and key skills education provides students with the necessary skills to make informed career and financial decisions, engage as responsible community members in a digital society, and to successfully meet the challenges and opportunities in an interconnected global economy.”

Unit 4 Focus Standards (Major Standards) [New Jersey Student Learning Standards-Mathematics](#)

Content Standards with Statement	iReady Resource	Suggested Mathematical Practices <u>Description of Mathematical Practices</u>	Critical Knowledge Concepts	Skills Objectives
7.G.A. Draw, construct, and describe geometrical figures and describe the relationships between them ○ 7.G.A.1 Draw (freehand, with	9.4, 10.3, 10.6	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Construct a polygon with given measures.	➤ Use technology to draw polygons. ➤ Determine whether given measures result in one triangle, many triangles,

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ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. ○ 7.G.A.2 Draw (with technology, with ruler and protractor, as well as freehand) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. ○ 7.G.A.3 Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.				or no triangle. ➤ Draw polygons given angle measures or side lengths.
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7.G.B Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. ○ 7.G.B.4 Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. ○ 7.G.B.5 Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. ○ 7.G.B.6 Solve real-world and mathematical problems involving area, volume, and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms	9.1, 9.2, 9.3, 9.5, 10.1, 10.3, 10.4, 10.5	MP.1, MP.2, MP.3, MP.4, MP.5, MP.6, MP.7, MP.8	Find the surface area of a prism, pyramid and cylinder. Find the volume of a prism and pyramid. Describe the cross section of a solid. Calculate the circumference and area of circles. Find the perimeters and areas of shapes that make up composite figures. Identify adjacent, complementary, supplementary, and vertical angles. Find surface area and volume of 3-dimensional figures.	➤ Use a formula to find the surface area of a prism, cylinder ➤ Find the lateral surface area of a prism, regular pyramid and cylinder ➤ Use a net to find the surface area of a regular pyramid. ➤ Use a formula to find the volume of a prism and pyramid ➤ Use the formula for the volume of a prism to find a missing dimension. ➤ Use the volume of a pyramid to solve a real-life problem. ➤ Explain the meaning of a cross section. ➤ Describe cross sections of prisms, pyramids, cylinders and cones. ➤ Explain the relationship between the diameter and circumference of a circle. ➤ Use a formula to find the circumference
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				and area of a circle. ➤ Estimate the area of a circle. ➤ Use a grid to estimate perimeters and areas. ➤ Identify the shapes that make up a composite figure. ➤ Find the perimeters and areas of shapes that make up composite figures. ➤ Identify adjacent, complementary, ➤ supplementary, and vertical angles. ➤ Use equations to find unknown angle measures. ➤ Find unknown angle measures in real-life situations.
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Unit 4 New Jersey Student Learning Standards: Interdisciplinary Connections
New Jersey Student Learning Standards-ELA

NJSLSA.W6. Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

NJSLSA.W4. Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.

W.7.1. Write arguments to support claims with clear reasons and relevant evidence.

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NJSLSA.SL1. Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.

NJSLSA.SL4. Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.

SL.7.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

Unit 4 New Jersey Student Learning Standards: Career Readiness, Life Literacies, and Key Skills

Disciplinary Concepts: 9.2 Career Awareness, Exploration, Preparation, and Training by the End of Grade 8 & 9.4 Life Literacies and Key Skills by the End of Grade 8.

Core Ideas	Performance Expectations (Identified with Standard Number and statement)
Communication skills and responsible behavior in addition to education, experience, certifications, and skills are all factors that affect employment and income.	9.2.8.CAP.18: Explain how personal behavior, appearance attitudes and other choices may impact the job application process.
Multiple solutions often exist to solve a problem.	9.2.8.CAP.19: Relate academic achievement, as represented by high school diplomas, college degrees, and industry credentials, to employability and to potential level.
Increases in the quantity of information available through electronic means have heightened the need to check sources for possible distortion, exaggeration, or misrepresentation.	9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change, and use critical thinking skills to predict which one(s) are likely to be effective (e.g., MS-ETS1-2).
	9.4.8.IML.2: Identify specific examples of distortion, exaggeration, or misrepresentation of information.
	9.4.8.IML.3: Create a digital visualization that effectively communicates a data set using formatting techniques such as form, position, size, color, movement, and spatial grouping (e.g., 6.SP.B.4, 7.SP.B.8b)
	9.4.8.IML.4: Ask insightful questions to organize different types of data and create meaningful visualizations.
	9.4.8.IML.5: Analyze and interpret local or public data sets to summarize and effectively communicate the data.

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Digital tools make it possible to analyze and interpret data, including text, images, and sound. These tools allow for broad concepts and data to be more effectively communicated.	
Unit 4 New Jersey Student Learning Standards: <u>Computer Science and Design Thinking</u>	
Disciplinary Concepts: 8.1 Computer Science by the end of Grade 8	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Engineering design is a systematic, creative, and iterative process used to address local and global problems.	8.2.8.ED.3- Develop a proposal for a solution to a real-world problem that includes a model (e.g., physical; prototype, graphical/technical sketch).

New Jersey Student Learning Standards: <u>Climate Change Mandate</u>	
Core Ideas	Performance Expectations (Identified with Standard Number and Statement)
Multiple solutions often exist to solve a problem.	9.4.8.CT.1: Evaluate diverse solutions proposed by a variety of individuals, organizations, and/or agencies to a local or global problem, such as climate change and use critical thinking skills to predict which one(s) are likely to be effective. 9.4.8.CT.2: Develop multiple solutions to a problem and evaluate short- and long-term effects to determine the most plausible option (e.g., MS-ETS1-4, 6.1.8.CivicsDP.1)

Unit 4 Knowledge and Skills	
Unit Learning Targets (Objectives): <i>Students will be able to...</i> ➤ Find the circumference and area of a circle using appropriate formulas. ➤ Calculate the perimeter and area of composite figures by breaking them into simpler shapes. ➤ Construct polygons based on given side lengths and angle measures.	

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- Use properties of angle relationships (such as supplementary, complementary, vertical, and adjacent angles) to find unknown angle measures.
- Determine the surface area of three-dimensional figures, including prisms, cylinders, and pyramids, using nets and formulas.
- Calculate the volume of prisms and pyramids by applying volume formulas.
- Identify and describe the two-dimensional cross sections formed when slicing three-dimensional solids.

Unit Enduring Understandings:

Students will know...

- Explain the relationship between a circle's diameter and its circumference.
- Use formulas to calculate the circumference and area of a circle, including semi-circles.
- Estimate the area of a circle and the perimeter and area of two-dimensional shapes.
- Identify individual shapes that make up a composite figure and calculate their combined perimeter and area.
- Use technology and tools to accurately draw polygons.
- Determine whether a given set of measurements can create one triangle, multiple triangles, or no triangle.
- Construct polygons based on given angle measures or side lengths.
- Classify angles (adjacent, complementary, supplementary, vertical) and use equations to find unknown angle measures.
- Apply knowledge of angles to solve problems in real-world contexts.
- Use surface area formulas to find the total and lateral surface area of prisms, cylinders, and pyramids.
- Apply volume formulas to calculate the volume of prisms and pyramids, including finding missing dimensions.
- Solve real-world problems involving the volume of three-dimensional figures.
- Explain and describe the concept of a cross section.
- Identify and describe cross sections of prisms, pyramids, cylinders, and cones.

Unit Essential Questions:

- How can you calculate the surface area, lateral surface area, and volume of three-dimensional figures?
- How do you determine a missing side length to find the perimeter or area of a shape?
- What strategies help calculate the perimeter and area of composite shapes?
- How do you use radius and diameter to find the circumference and area of a circle or semi-circle?
- How can you accurately classify angles, triangles, and quadrilaterals using precise vocabulary?
- How do you find unknown angle measures in angle pairs, triangles, and quadrilaterals?

Instructional Plan

Suggested Activities:

Resources:

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➤ Guided Notes ➤ iReady Interactive Platform ➤ Task Cards ➤ Scavenger Hunts ➤ Gallery Walks ➤ Videos ➤ Games ➤ Whiteboard Practice ➤ Record and Practice Journal	➤ iReady Math ➤ Nearpod ➤ Edpuzzle ➤ Desmos ➤ IXL ➤ Kahoot ➤ Blooket ➤ LinkIt! ➤ NJSLA Digital Library of Released Items
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Performance Tasks: (When appropriate) This type of task demonstrates students transfer of learning and application to a performance task. Think about what you want the students to be able to do at the end of the unit.

- iReady Resources - there are performance tasks for multiple standards
- Example Performance Assessment Tasks

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- Break down multi-step tasks into smaller parts.
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