Township of Ocean Schools

Assistant Superintendent
Office of Teaching and Learning

SPARTAN MISSION:
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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Curriculum Development Timeline

School: Township of Ocean Intermediate School

Course: Mathematics, Grade 7

Department: Mathematics

Board Approval	Supervisor	Notes
January 2009	Janet Bluefield	Born Date/Alignment to NJCCCS
July 2012	Janet Bluefield	Revisions
August 2016	Amanda Maltese	Revisions
July 2017	Nichole Kerney	Revisions/Alignment to NJSIS
August 2018	Nichole Kerney	Revisions
March 2019	Nichole Kerney	Review
August 2022	Gerard Marrone	Alignment to Standards

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Township of Ocean Pacing Guide			
Week	Marking Period 1	**Week**	Marking Period 3
1	Negative Numbers	21	Rates & Proportional Reasoning
2	Negative Numbers	22	Rates & Proportional Reasoning
3	Negative Numbers	23	Fractions, Decimals, & Percentages
4	Negative Numbers	24	Fractions, Decimals, & Percentages
5	Negative Numbers	25	Fractions, Decimals, & Percentages
6	Negative Numbers	26	Fractions, Decimals, & Percentages
7	Negative Numbers	27	Geometry
8	Negative Numbers	28	Geometry
9	Expressions, Equations & Inequalities	29	Geometry
10	Expressions, Equations & Inequalities	30	Geometry
Week	Marking Period 2	**Week**	Marking Period 4
11	Expressions, Equations & Inequalities	31	Geometry
12	Expressions, Equations & Inequalities	32	Geometry
13	Expressions, Equations & Inequalities	33	Geometry
14	Expressions, Equations & Inequalities	34	Geometry
15	Expressions, Equations & Inequalities	35	Statistics & Probability
16	Expressions, Equations & Inequalities	36	Statistics & Probability

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

17	Expressions, Equations & Inequalities	37	Statistics & Probability
18	Rates & Proportional Reasoning	38	Statistics & Probability
19	Rates & Proportional Reasoning	39	Statistics & Probability
20	Rates & Proportional Reasoning	40	Statistics & Probability

Core Instructional & Supplemental Materials including various levels of Texts
Core Instruction: Big Ideas Math: Modeling Real Life Grade 7 (Big Ideas Learning) Supplemental: IXL Math, Khan Academy, and NJSLA Released Questions Special Education Supplemental: Prodigy

Time Frame	8 Weeks
Topic	
Negative Numbers	
Alignment to Standards	
7.NS.1a-d, 7.NS.2a-d, 7.NS.3	
Learning Objectives and Activities	
Students will perform addition, subtraction, multiplication and division with integers and then deepen knowledge of these operations with rational numbers. This concept is applied these to real-life situations and reason why the chosen operation is appropriate. (Formal knowledge of properties is not assessed.) They will be able to select and apply various computational methods including mental math, estimation, paper-and-pencil techniques, and the use of calculators when appropriate for the following key concepts. SWBAT answer the following questions: • How are integers and their opposites related? • How do we use what we know about absolute value to add integers? • How is subtracting integers related to adding integers? • How do the signs of factors affect their products?	

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- How does dividing integers relate to multiplying integers?
- How are multiplying and dividing integers related to multiplying and dividing other rational numbers?

SWBAT demonstrate understanding of the following:

- An integer, n, and its opposite, -n, combine to make 0.
- When adding integers with the same sign, find the sum of the absolute values. When adding integers with different signs, find the difference of absolute values.
- When subtracting integers, such as a-b, you can use the additive inverse to write subtraction as an equivalent addition expressions. The distance between any two rational numbers p and q on a number line is the absolute value of their difference.
- When multiplying two integer numbers, the sign of the product depends on the sign of the factors: same sign factors have positive products and different sign factors have negative products.
- The rules for dividing integers numbers are the same as the rules for multiplying integer numbers: divisor and dividend have the same sign, the quotient is positive; if the dividend and divisor have different signs the quotient is negative.
- The same rules for multiplying and dividing integers apply to multiplying and dividing rational numbers.

Learning Activities:

- Integer Chips and Algebra Tiles
- Number line manipulatives
- Integer Bingo
- Discuss and explore where integers and opposites are applied in the real-world
- Math “Trails”
- Punchline worksheets
- Interactive Websites: Kahoot, Quizizz, Quizlet

Assessments

Formative:

- Classwork and Homework
- Daily Practice Problems
- Khan Academy or IXL Practice

Summative:

- Quizzes/Quests
- Topic Tests

Alternative:

- Kahoot
- Quizizz

Interdisciplinary Connections

Science: MS-PS1-4: When adding and subtracting positive and negative numbers students develop a model that predicts and describes changes in temperature.

Career Readiness, Life Literacies, and Key Skills

Technology Integration

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Students will use internet based game sites such as Quizizz, Kahoot, and Quizlet live to reflect on their learning progress.

- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.

Students will use IXL math in order to extend learning and apply skills to new content.
Students will consider the appropriateness of the digital tool for the task.

- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task.

Additional resources and extension activities will be posted on Google Classroom in order to encourage students to reflect on their learning and expand on their knowledge.

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Career Education

CRP4: Communicate clearly and effectively with reason.
CRP6: Demonstrate creativity and innovation.

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Time Frame	9 Weeks

Topic

Expressions, Equations, & Inequalities

Alignment to Standards

7.EE.1, 7.EE.2, 7.EE.3, 7.EE.4a-b, 7.NS.1a-d, 7.NS.2a-d, 7.NS.3

Learning Objectives and Activities

Students will begin the unit by generating equivalent expressions by way of factoring and distributive property. Students build on this knowledge to solve two-step and multi-step equations and apply this to real world situations. Knowledge is then applied to solving two-step and multi-step inequalities in practical applications. Problems include fractions, mixed numbers and decimals. Use of manipulatives, calculators, and computers will enhance understanding and provide a means for students with different learning styles to master concepts.

SWBAT answer the following questions:

- How can algebraic expression be used to represent and solve problems?
- How do you write equivalent expressions?
- How are properties of operations used to simplify expressions?
- How does the value of an expression change when it is expanded?
- How does the Distributive Property relate to factoring expressions?
- How can writing equivalent expressions show how quantities are related?
- How does an equation show the relationship between variables and other quantities in a situation?
- How is solving a two-step equation similar to solving a one-step equation?
- How does the Distributive Property help you solve equations?
- How is solving inequalities similar to and different from solving equations?
- How is solving a two-step inequality similar to and different from solving a two-step equation?

SWBAT demonstrate understanding of the following:

- Algebra expressions can be used to represent problems with unknown or variable values. Variables can be substituted for variable to evaluate the expression.
- Expressions can be condensed and expanded.
- The greatest common factor can be used to factor an expression to create an equivalent expression.
- Rewriting expressions can clarify relationships among quantities or variables.

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- Write an equation with more than one operations to represent a situation; known as a two-step equation
- The properties of equality can be applied the same way when solving two-step equations as when solving one-step equations. The inverse relationship between operations determines the property of equality to "undo" the operations in the equation.
- Solving inequalities with addition and subtraction is the same as solving equations with addition and subtraction. Solving inequalities with multiplication and division is the same as solving equations with multiplication and division when the values are positive. When multiplying or dividing by negative values, the inequality symbol is reversed.
- Like two step equations, solving two-step inequalities involve carrying out two different operations-addition and subtraction, and multiplication or division. Unlike two-step equations, which have a single solution, two-step inequalities have multiple solutions

Learning Activities:

- Algebra Tiles and Communicators
- Using a scale and weights to model solving algebraic equations
- Math Trail
- Interactive Websites: Kahoot, Quizizz, Quizlet
- Discussion of real-life activities that must be done in a certain order (cooking, construction, etc.)
- Punchline worksheets

Assessments

Formative:

- Classwork and Homework
- Math Scavenger Hunt/Trail
- Khan Academy or IXL Practice
- Class Debate of Approaches/Mathematical Methods

Summative:

- Quizzes/Quests
- Topic Tests

Alternative:

- Observation Assessment with problem solving using algebra tiles
- Kahoot/Quizizz
- Individual or group productive struggle assessment during introductory lessons

Interdisciplinary Connections

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Career Readiness, Life Literacies, and Key Skills
Technology Integration
All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge. • 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem. Students will use internet based game sites such as Quizizz, Kahoot, and Quizlet live to reflect on their learning progress. • 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems. Students will use IXL math in order to extend learning and apply skills to new content. Students will consider the appropriateness of the digital tool for the task. • 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task. Additional resources and extension activities will be posted on Google Classroom in order to encourage students to reflect on their learning and expand on their knowledge. • 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.
Career Education
CRP2: Apply appropriate academic and technical skills. CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	5 Weeks
Topic	
Rates and Proportional Reasoning	

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Alignment to Standards

7.RP.1, 7.RP.2a-d, 7.RP.3, 7.G.1, 7.EE.2, 7.EE.3, 7.EE.4a

Learning Objectives and Activities

Students will analyze proportional relationships using rational numbers in the same and different units. They will distinguish these from other types of relationships. This knowledge is applied real-world problems such as scale drawings. Connects to algebraic concepts are made when equations are generated from proportional relationships. They will select and apply various computational methods including mental math, estimation, paper-and-pencil techniques, and the use of calculators.

SWBAT answer the following questions:

- How are ratios, rates, and unit rates used to solve problems?
- Why is it useful to write a ratio of fractions as a unit rate?
- How are proportional quantities described by equivalent ratios?
- How can you represent a proportional relationship with an equation?
- What does the graph of a proportional relationship look like?
- How do scale drawings and actual measurements represent proportional relationships?

SWBAT demonstrate understanding of the following:

- Use equivalent ratios and rates including unit rates, to compare ratios and to solve problems.
- Use knowledge about equivalent ratios and operations with fractions to write a ratio of fractions as a unit rate.
- The quantities x and y have proportional relationship if all the ratios y/x for related pairs of x and y are equivalent.
- Two proportional quantities x and y are related by a constant multiple or “constant of proportionality”,k, and are represented by the equation y=kx.
- The graph of a proportional relationship is a straight line through the origin.
- The scale factor of a scale drawing is the ratio of an actual length, y, to the corresponding length, x, in the drawing. The raio is of the constant of proportionality, k, that relates the actual figure to the scale drawing. You can use a proportion or use an equation of the form y=kx to solve problems using scale drawings.

Learning Activities:

- Math Trail
- Geogebra (similar figures, scale, etc.)
- Create Scale Drawings
- Interactive Websites: Kahoot, Quizizz, Quizlet

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Assessments

Formative:
- Classwork and Homework
- Daily Practice Problems
- Khan Academy or IXL Practice
- Teacher Observation

Summative:
- Quizzes/Quests
- Topic Tests

Benchmark:
- Cumulative midterm exam with multiple choice, short answer, and extended constructed response questions.

Alternative:
- Kahoot
- Quizizz

Interdisciplinary Connections

Science: MS-PS3-1: In writing and solving proportional equations students will construct and interpret graphical displays of data to describe the relationships of kinetic energy to the mass of an object and to the speed of an object.

Career Readiness, Life Literacies, and Key Skills

Technology Integration

Students will utilize Geogebra to further investigate scale drawings and similar figures to demonstrate understanding of standards.
- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task.

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.
- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

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- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

problems.
Students will use IXL math in order to extend learning and apply skills to new content.
Students will consider the appropriateness of the digital tool for the task.

- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task.

Additional resources and extension activities will be posted on Google Classroom in order to encourage students to reflect on their learning and expand on their knowledge.

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Career Education

CRP6: Demonstrate creativity and innovation.
CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Time Frame	4 Weeks

Topic

Fractions, Decimals, & Percentages

Alignment to Standards

7.RP.3, 7.EE.2, 7.EE.3, 7.EE.4a

Learning Objectives and Activities

Recognizing that a fraction, decimal and percent of rational numbers are equivalent representations, students will apply their knowledge of ratios and proportions to real world situations including commission, gratuity, tax, markup, discount (markdown), percent increase and decrease, and simple interest. They will select and apply various computational methods including mental math, estimation, paper-and-pencil techniques, and the use of calculators.

SWBAT answer the following questions:

- How are rational numbers written as decimals?
- How do percents show the relationship between quantities?
- How are percent problems such as finding tax, gratuity, and commission related to proportional reasoning?
- How is finding percent error similar to finding percent change?

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- What is and how do you calculate percent markup and percent markdown?
- How does simple interest show proportional reasoning and relate to the percent equation?

SWBAT demonstrate understanding of the following:

- All rational numbers can be expressed as a fraction.
- A percent is one way to represent the relationship between two quantities, generally that of a part to the whole.
- Percent problems such as finding tax, gratuity, and commission represent a kind of proportional relationship that can be used to solve percent problems. The percent equation shows how a percent relates to proportional quantities where the percent is a constant of proportionality and the equation is of the form $y = mx$(or $part = percent \times whole$)
- Percent change and error problems are types of percent problems that can be solved using the percent equation in this form: $amount\ of\ change = percent\ change \times original\ amount$.Percent change describes how much a quantity has increased or decreased relative to its original amount. Percent error describes the accuracy of a measured or estimated value compared to an actual value; it is written as a positive percent.
- Markup (or Markdown) is the amount of increase (or decrease) from the original cost of an item to its selling (sale) price. Solve such problems using the percent equation in this form: $markup\ (discount) = percent\ markup\ (percent\ discount) \times original\ value$
- Simple interest represents a proportional relationship between the yearly interest and the principal, or initial amount. The ratio of yearly interest to principal is the interest rate. Solve simple interest problems using this equation: $simple\ interest\ amount = principal\ (initial\ amount) \times interest\ rate \times time$

Learning Activities:

- “Punchline” Worksheets
- Real world applications of shopping (better buy)
- Working with a Budget (including coupons and tax)
- Fractions, Decimals, Percents Math Trail
- Interactive Websites: Kahoot, Quizizz, Quizlet

Assessments

Formative:

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- Classwork and Homework
- Class Debate of Approaches/Mathematical Methods
- Khan Academy or IXL Practice

Summative:

- Quizzes/Quests
- Topic Tests

Alternative:

- Kahoot/Quizizz
- Individual or group productive struggle assessment during introductory lessons

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task
9.1.8.EG.1: Explain how taxes affect disposable income and the difference between net and gross income
9.1.8.EG.2: Explain why various sources of income are taxed differently.

Technology Integration

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Career Education

CRP11: Use technology to enhance productivity.

Time Frame	8 Weeks

Topic

Geometry

Alignment to Standards

7.G.2, 7.G.3, 7.G.4, 7.G.5, 7.G.6, 7.NS.3, 7.EE.3, 7.EE.4a

Learning Objectives and Activities

Students will be able to understand that geometric shapes that construction of a shape is dependent on side and angle measurements. Students with draw, construct, and describe two dimensional and three-dimensional geometrical figures and describe the relationships between them. They will examine cross sections of three-dimensional objects. These are applied to real-world problems by way of numerical and algebraic expressions and equations. Lastly, problems involving area, surface area, and volume of Circles (area & circumference), Volume of rectangular prisms, cylinders & cones, and Surface area of prisms are calculated. Students will develop a strong spatial sense using a wide variety of activities organized around physical models, mapping, and measuring. They will discover geometric relationships, and use mathematical procedures such as drawing, sorting, classifying, finding patterns, and solving geometric problems.

SWBAT answer the following questions:

- How does the circumference of a circle relate to the length of its diameter?
- How are angles formed by intersecting lines related?
- How can a triangle that meets given conditions be drawn?
- How can you find the area of a circle?
- How do the faces of three-dimensional figures determine the two dimensional shapes created by slicing the figure?
- How is finding the area of a composite two-dimensional figure similar to finding the surface area of three-dimensional figures?

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- How does the formula for volume of a prism help you understand what volume of a prism means?

SWBAT demonstrate understanding of the following:

- Circumference is the distance around a circle. The ratio of the circumference of a circle to its diameter is Π, or 3.14 or $\frac{22}{7}$. The circumference is calculated using the formulas: $C = \Pi d \; or \; C = 2\Pi r$.
- Angles that form a straight like and up add up to 180◦are supplementary. Shared lines are adjacent. Angles opposite each other are called vertical. Angles that add up to 90◦ are called complementary.
- Given conditions may include properties of geometric figures and relationships between parts of the figures. Analyze given conditions of side lengths and angle measures to determine one unique triangle, more than one unique triangle, or no triangle can be drawn. Triangles can be drawn freehand, with a ruler & protractor, or with technology.
- Area of a circle is determined using the formula $A = \Pi r^2$where r is the radius of the circle.
- A cross section is the two-dimensional shape exposed when a three dimensional figure is sliced vertically or horizontally..The shape and dimensions of a cross section are the same as the faces that are parallel to the direction of the slice.
- The area of a two-dimensional composite figure is the sum of the areas of all the shapes that compose it. The surface area of a three-dimensional composite figure is the sum of the area of all its faces.
- The equation $V = Bh,$ uses the area of the base, $B,$ of a three dimensional figure to then multiply by the height to find volume, the amount of space inside a three-dimensional object.

Learning Activities:

- Geogebra activities
- Discovering Pi activity
- “Punchline” worksheets
- Interactive websites: Quizizz, Kahoot, Quizlet
- Math Trail

Assessments

Formative:

- Daily Practice Problems

- Khan Academy or IXL Practice
- Math Scavenger Hunt/Trail

Summative:

- Quizzes/Quests
- Topic Tests

Alternative:

- Project utilizing real-world application of surface area and volume
- Kahoot/Quizizz

Interdisciplinary Connections

Career Readiness, Life Literacies, and Key Skills

Technology Integration

Students will utilize Geogebra to further investigate scale drawings and similar figures to demonstrate understanding of standards.

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Additional resources and extension activities will be posted on Google Classroom in order to encourage students to reflect on their learning and expand on their knowledge.

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Career Education
CRP2: Apply appropriate academic and technical skills. CRP8: Utilize critical thinking to make sense of problems and persevere in solving them. CRP11: Use technology to enhance productivity.

Time Frame	6 Weeks

Topic
Statistics & Probability

Alignment to Standards
7.SP.1, 7.SP.2, 7.SP.3, 7.SP.4, 7.SP.5, 7.SP.6, 7.SP.7a-b, 7.SP.8a-c

Learning Objectives and Activities
For the statistics portion,. students will demonstrate formal statistical methods such as measures of center and measures of variability to gain information about a population. Students use the data from a random sample to draw inferences. Data displays such as dot plots and box plots helps students to visualize the data to make informal inferences. By exploring a variety of high interest real world examples, students will develop a sense of the application of statistics. Students develop a probability model and use it to find the appropriate probabilities of events.Additionally, probability of compound events using lists, tables, tree diagrams, and simulation are also discussed. Lastly, students will approximate probability by collecting data. SWBAT answer the following questions: • How can you determine a representative sample of a population? • How can inferences be drawn about a population from data gathered from samples? • How can data displays be used to compare populations? • What is probability? • How can the probability of an event help make predictions? • How is experimental probability similar to and different from theoretical probability? • How can a model be used to find the probability of an event? • How can all the possible outcomes or sample space of a compound event be represented? • How can a model help you find the probability of a compound event?

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- How can you use simulations to determine the probability of events?

SWBAT demonstrate understanding of the following:

- When you ask a statistical question about population, it is often more efficient to gather data from a sample of the population. A representative sample of a population has the same characteristics as the population. Generating a random sample is one reliable way to produce a representative sample.
- Analyze numerical data from a random sample to draw inferences about the population. Measures of center, like mean and median, and measures of variability, like range, can be used to analyze the data in a sample.
- Data displays such as box plot and dot plots make informal comparative inferences about two populations. You can compare the shapes of data displays or draw comparative inferences about two populations using median and interquartile range (IQR).
- Probability is the likelihood an event will occur and is a value from 0 to 1. It can be written as a ratio, fraction or percent.
- Theoretical probability of an event, P(event), can be determined if you know all the possible outcomes and they are equally likely.
- Relative frequency, or experimental probability is based on the actual results of an experiment, while theoretical probability is based on the calculated results from the knowledge of the possible outcomes.Theoretical probability may be close but are rarely exactly the same.
- A probability model can help you evaluate a chance process and its outcomes. The model consists of sample space of an action, events within the sample space, and probabilities associated with each event.
- An organized list, table, or tree diagram can be used to represent the sample space of a compound event.
- The probability of a compound event can be represented by a ratio of the number of favorable outcomes to the total number of possible equally likely outcomes which can be determined from an organized list, table, or tree diagram.
- A simulation is a model of a real-world situation that can be used to predict results or outcomes when actual event is difficult to perform or record. Model using a tool such as a spinner, number cube, coin, or random number generator for which outcomes have the same probabilities as the actual event.

Learning Activities:

- *Is the Game Fair?* dice game
- “Punchline” worksheets
- Interactive websites: Quizizz, Kahoot, Quizlet

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- Math Trail

Assessments

Formative:
- Teacher Observation
- Classwork and Homework
- Khan Academy or IXL Practice
- Graphic Organizer

Summative:
- Quizzes/Quests
- Topic Tests

Benchmark:
- Cumulative final exam with multiple choice, short answer, and extended constructed response questions.

Alternative:
- Project on measures of central tendency and sampling
- Kahoot/Quizizz
- Individual or group productive struggle assessment during introductory lessons

Interdisciplinary Connections

Science: MS-ETS1-4: In discussing experimental probability students will develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.
ELA: W.7.1: When students are justifying their reasoning on short answer and extended constructed response questions they write arguments to support claims with clear reasons and relevant evidence.

Career Readiness, Life Literacies, and Key Skills

9.4.12.CT.1: Identify problem-solving strategies used in the development of an innovative product or practice.
9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities and utility for accomplishing a specified task
9.4.12.TL.4: Collaborate in online learning communities or social networks or virtual worlds to analyze and propose a resolution to a real-world problem.

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DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

Technology Integration

All students will use digital tools to access, manage, evaluate, and synthesize information in order to solve problems individually and collaboratively and to create and communicate knowledge.

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Students will use internet based game sites such as Quizizz, Kahoot, and Quizlet live to reflect on their learning progress.

- 9.4.5.CT.3: Describe how digital tools and technology may be used to solve problems.

Students will use IXL math in order to extend learning and apply skills to new content.
Students will consider the appropriateness of the digital tool for the task.

- 9.4.12.TL.1: Assess digital tools based on features such as accessibility options, capacities, and utility for accomplishing a specified task.

Additional resources and extension activities will be posted on Google Classroom in order to encourage students to reflect on their learning and expand on their knowledge.

- 9.4.8.TL.6: Collaborate to develop and publish work that provides perspectives on a real-world problem.

Career Education

CRP2: Apply appropriate academic and technical skills.
CRP4: Communicate clearly and effectively with reason.
CRP8: Utilize critical thinking to make sense of problems and persevere in solving them.

Modifications (ELL, Special Education, At Risk Students, Gifted & Talented, & 504 Plans)

ELL:

- Work toward longer passages as skills in English increase
- Use visuals
- Introduce key vocabulary before lesson
- Teacher models reading aloud daily
- Provide peer tutoring
- Use of Bilingual Dictionary
- Guided notes and/or scaffold outline for written assignments

- Provide students with English Learner leveled readers.

Supports for Students With IEPs:

- Allow extra time to complete assignments or tests
- Guided notes and/or scaffold outline for written assignments
- Work in a small group
- Allow answers to be given orally or dictated
- Use large print books, Braille, or books on CD (digital text)
- Follow all IEP modifications

At-Risk Students:

- Guided notes and/or scaffold outline for written assignments
- Introduce key vocabulary before lesson
- Work in a small group
- Lesson taught again using a differentiated approach
- Allow answers to be given orally or dictated
- Use visuals / Anchor Charts
- Leveled texts according to ability

Gifted and Talented:

- Create an enhanced set of introductory activities (e.g. advance organizers, concept maps, concept puzzles)
- Provide options, alternatives and choices to differentiate and broaden the curriculum
- Organize and offer flexible small group learning activities
- Provide whole group enrichment explorations
- Teach cognitive and methodological skills
- Use center, stations, or contracts
- Organize integrated problem-solving simulations
- Propose interest-based extension activities
- Expose students to beyond level texts.

Supports for Students With 504 Plans:

- Follow all the 504 plan modifications
- Text to speech/audio recorded selections
- Amplification system as needed
- Leveled texts according to ability
- Fine motor skill stations embedded in rotation as needed

DEPARTMENT: Mathematics COURSE: Mathematics, Grade 7

- Modified or constrained spelling word lists
- Provide anchor charts with high frequency words and phonemic patterns