

Thinkfinity.org MST Standard 3 Math: Grade6

Through the integrated study of number sense and operations, algebra, geometry, measurement and probability, students will:

- *understand the concepts of and become proficient with the skills of mathematics;
- *communicate and reason mathematically;
- *become problem solvers by using appropriate tools and strategies;

Algebra

Students will represent and analyze algebraically a wide variety of problem solving situations.

Variables and Expressions

6.A.1	Translate two-step verbal expressions into algebraic expressions	Revisiting a Difference of Squares
		Building Bridges to Algebraic Thinking

Algebra

Students will perform algebraic procedures accurately.

Equations and Inequalities

6.A.3	Translate two-step verbal sentences into algebraic equations	Revisiting a Difference of Squares
		Building Bridges to Algebraic Thinking

6.A.4	Solve and explain two-step equations involving whole numbers using inverse operations	Revisiting a Difference of Squares
		Orbiting Satellites

6.A.5	Solve simple proportions within context
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6.A.6	Evaluate formulas for given input	Revisiting a Difference of Squares
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Algebra

Students will perform algebraic procedures accurately.

Variables and Expressions

6.A.2	Use substitution to evaluate algebraic	Revisiting a Difference of Squares
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Communication

Students will organize and consolidate their mathematical thinking through communication.

6.CM.3	Organize and accurately label work
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6.CM.2	Explain a rationale for strategy	The "Mangoes Problem"
6.CM.1	Provide an organized thought process that is correct, complete, coherent,	Birthdays and the Binary System: A Magical Mixture The "Mangoes Problem" The "Mangoes Problem"

Communication

Students will communicate their mathematical thinking coherently and clearly to peers, teachers, and others.

6.CM.5	Answer clarifying questions from others	
6.CM.4	Share organized mathematical ideas	Birthdays and the Binary System: A Magical Mixture

Communication

Students will analyze and evaluate the mathematical thinking and strategies of others.

6.CM.8	Consider strategies used and solutions found by others in relation to their own work	
6.CM.7	Raise questions that elicit, extend, or challenge others' thinking	
6.CM.6	Understand mathematical solutions shared by other students	

Communication

Students will use the language of mathematics to express mathematical ideas precisely.

6.CM.11	Decode and comprehend mathematical visuals and symbols to construct meaning	
6.CM.10	Use appropriate vocabulary when	The "Mangoes Problem"
6.CM.9	Increase their use of mathematical vocabulary and language when communicating with others	

Connections

Students will recognize and use connections among mathematical ideas.

6.CN.2 Explore and explain the relationship between mathematical ideas

6.CN.3 Connect and apply mathematical information to solve problems

6.CN.1 Understand and make connections and conjectures in their everyday experiences to mathematical ideas

Connections

Students will understand how mathematical ideas interconnect and build on one another to produce a col

6.CN.4 Understand multiple representations and how they are related

6.CN.5 Model situations with objects and representations and be able to draw conclusions

Connections

Students will recognize and apply mathematics in contexts outside of mathematics.

6.CN.9 Recognize and apply mathematics [An Introduction to Remote Sensing](#)

6.CN.7 Apply mathematics to problem [An Introduction to Remote Sensing](#)

6.CN.6 Recognize and provide examples of the presence of mathematics in their daily lives

6.CN.8 Investigate the presence of mathematics in careers and areas of interest

Geometry

Students will use visualization and spatial reasoning to analyze characteristics and properties of geometr

Shapes

6.G.1	Calculate the length of corresponding sides of similar triangles, using proportional reasoning	Another View
		Blue Squares and Beyond
6.G.2	Determine the area of triangles and quadrilaterals (squares, rectangles, rhombi, and trapezoids) and develop formulas	Go With Green Rectangles
		Fill'r Up
6.G.3	Use a variety of strategies to find the area of regular and irregular polygons	Purple Prisms
		Covering the Plane With Rep-Tiles
6.G.1		Polygon Capture: A Geometry Game
		Finding Our Top Speed
6.G.2		Another View
		Blue Squares and Beyond
6.G.3		Go With Green Rectangles
		Fill'r Up
6.G.1		Purple Prisms
		Patterns and Function
6.G.2		Covering the Plane With Rep-Tiles
		Polygon Capture: A Geometry Game
6.G.3		Discovering the Area Formula for Triangles: Lesson 1 of 4
		Finding the Area of Irregular Figures
6.G.1		Building A Box: Using Nets and Three-Dimensional Visualization
		Sorting Activities for Polygons
6.G.2		Finding Our Top Speed
		Patterns and Function
6.G.3		Covering the Plane With Rep-Tiles
		Polygon Capture: A Geometry Game
6.G.1		Discovering the Area Formula for Triangles: Lesson 1 of 4
		Finding the Area of Irregular Figures
6.G.2		Building A Box: Using Nets and Three-Dimensional Visualization
		Sorting Activities for Polygons
6.G.3		Finding Our Top Speed
		Exploring Front-Right-Top Views
6.G.1		Building from the Front-Right-Top Views
		Mat Plans

[Another View](#)
[Do They Match?](#)
[Blue Squares and Beyond](#)
[Go With Green Rectangles](#)
[Fill'r Up](#)
[Purple Prisms](#)
[Patterns and Function](#)

[Polygon Capture: A Geometry Game](#)
[Discovering the Area Formula for Triangles: Lesson 1 of 4](#)

[Finding the Area of Irregular Figures](#)
[Sorting Activities for Polygons](#)

6.G.4	Determine the volume of rectangular prisms by counting cubes and develop the formula	
6.G.5	Identify radius, diameter, chords and central angles of a circle	
6.G.6	Understand the relationship between the diameter and radius of a circle	
6.G.7	Determine the area and circumference of a circle, using the appropriate formula	Discovering the Area Formula for Triangles: Lesson 1 of 4 Finding the Area of Irregular Figures
6.G.8	Calculate the area of a sector of a circle, given the measure of a central angle and the radius of the circle	
6.G.9	Understand the relationship	Sorting Activities for Polygons

Geometry

Students will apply coordinate geometry to analyze problem solving situations.

Coordinate Geometry

[Tips for Teaching Cartesian Graphing: Linking Concepts and Procedures](#)

[Tips for Teaching Cartesian Graphing: Linking Concepts and Procedures](#)
[Sorting Activities for Polygons](#)

6.G.10	Identify and plot points in all four quadrants	
	Calculate the area	Another View

6.G.11	of basic polygons drawn on a coordinate plane (rectangles and shapes composed of rectangles having sides with integer lengths)	Building A Box: Using Nets and Three-Dimensional Visualization Tips for Teaching Cartesian Graphing: Linking Concepts and Procedures Sorting Activities for Polygons
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Measurement

Students will determine what can be measured and how, using appropriate methods and formulas.

Units of Measurement

6.M.3	Identify equivalent customary units of capacity (cups to pints, pints to quarts, and quarts to gallons)	Finding Our Top Speed Water, Water What Is Ratio? Do You Measure Up? Discovering Gallon Man Off the Scale Measuring Up: Looking Back and Moving Forward Scaling Away: Investigating the Effects of Scale Factor Cylinders and Scale What Is Ratio?
6.M.4	Identify metric units of capacity (liter and milliliter)	Finding Our Top Speed What Is Ratio? Do You Measure Up? Discovering Gallon Man Off the Scale Measuring Up: Looking Back and Moving Forward Scaling Away: Investigating the Effects of Scale Factor Cylinders and Scale What Is Ratio?
6.M.5	Identify equivalent metric units of capacity (milliliter to liter and liter to milliliter)	Finding Our Top Speed Water, Water Fill'r Up Purple Prisms

[Off the Scale](#)

[Measuring Up: Looking Back and Moving Forward](#)

[Building A Box: Using Nets and Three-Dimensional Visualization](#)

6.M.1 Measure capacity and calculate volume of a rectangular prism

[Scaling Away: Investigating the Effects of Scale Factor Cylinders and Scale](#)
[What Is Ratio?](#)

[Finding Our Top Speed](#)

[Water, Water](#)

[What Is Ratio?](#)

[Do You Measure Up?](#)

[Discovering Gallon Man](#)

[Off the Scale](#)

[Measuring Up: Looking Back and Moving Forward](#)

6.M.2 Identify customary units of capacity (cups, pints, quarts, and gallons)

[Scaling Away: Investigating the Effects of Scale Factor Cylinders and Scale](#)
[What Is Ratio?](#)

Measurement

Students will determine what can be measured and how, using appropriate methods and formulas.

Tools and Methods

[Finding Our Top Speed](#)

[Water, Water](#)

[Off the Scale](#)

[Measuring Up: Looking Back and Moving Forward](#)

6.M.6 Determine the tool and technique to measure with an appropriate level of precision: capacity

[Constant Dimensions: Using Measurement and Algebra to Investigate the Relationship of the Length and Width of a Rectangle](#)

[Scaling Away: Investigating the Effects of Scale Factor Cylinders and Scale](#)

Measurement

Students will develop strategies for estimating measurements.

Estimation

[Finding Our Top Speed](#)

[Building A Box: Using Nets and Three-Dimensional Visualization](#)

		Constant Dimensions: Using Measurement and Algebra to Investigate the Relationship of the Length and Width of a Rectangle
		Discovering the Area Formula for Triangles: Lesson 1 of 4
6.M.7	Estimate volume, area, and circumference (see figures identified in geometry strand)	Finding the Area of Irregular Figures Cylinders and Scale
		Finding Our Top Speed Playing the Product Game Classifying Numbers
6.M.8	Justify the reasonableness of estimates	The Product Game: Connections and Extensions
6.M.9	Determine personal references for capacity	

Number Sense and Operations

Students will understand numbers, multiple ways of representing numbers, relationships among numbers

Number Systems

6.N.15	Order rational numbers (including positive and negative)	Multiplying Integers Using Videotape Birthdays and the Binary System: A Magical Mixture
6.N.14	Locate rational numbers on a number line (including positive and negative)	Multiplying Integers Using Videotape Birthdays and the Binary System: A Magical Mixture
6.N.13	Define absolute value and determine the absolute value of rational numbers (including positive and negative)	

[A Penny Saved Is a Penny at 4.7% Earned Time Value of Money](#)

[Where Does the Money Come From?](#)

[Grid and Percent It \(Former Title: A Conceptual Model for Solving Percent Problems\)](#)

		Having Fun with Baseball Statistics Parking at the Mall Shops at the Mall Baseball Stats What's Happening in Darfur? Shops at the Mall
		Q T Pi Fashions - Learning About Credit Card Use
		Trish and Scott's Big Adventure: An Investigation of Regional Housing Costs
		The Economics of Homebuying
6.N.12	Solve percent problems involving percent, rate, and base	Show Me the Money! A Lesson on the Unforeseen Costs of Car and House Loans
6.N.6	Understand the concept of rate	Time Value of Money What's Your Rate?
		Paper Pool Game Explore More Tables Look for Patterns The Golden Ratio What's Your Rate? Foreign Currency Off the Scale
		Measuring Up: Looking Back and Moving Forward Playing the Product Game Classifying Numbers
6.N.7	Express equivalent ratios as a proportion	The Product Game: Connections and Extensions Scaling Away: Investigating the Effects of Scale Factor
		The Golden Ratio What's Your Rate? Off the Scale
6.N.8	Distinguish the difference between rate and ratio	Measuring Up: Looking Back and Moving Forward
6.N.9	Solve proportions using equivalent	What's Your Rate?
		About Our Class What's Your Rate? Playing the Product Game Classifying Numbers
6.N.10	Verify the proportionality using the product of the means equals the product of the extremes	The Product Game: Connections and Extensions

6.N.5	Define and identify the zero property of multiplication	Five's a Crowd: A Game of Population Density
		Understanding Rational Numbers and Proportions
		Algebraic Transformations: The Rectangle
		Algebraic Transformations: The Plus Sign and Triangle
6.N.4	Define and identify the identity and inverse properties of addition and multiplication	Algebraic Transformations: The Rectangle
		Algebraic Transformations: The Plus Sign and Triangle
6.N.3	Define and identify the distributive property of multiplication over addition	Understanding Rational Numbers and Proportions Patterns and Function
		Create an Address Number Grades: 7-8
		Understanding Rational Numbers and Proportions Patterns and Function
		Create an Address Number Grades: 7-8
		Algebraic Transformations: The Rectangle
6.N.2	Define and identify the commutative and associative properties of addition and multiplication	Algebraic Transformations: The Plus Sign and Triangle
		Algebraic Transformations: The Rectangle
		Algebraic Transformations: The Plus Sign and Triangle
6.N.1	Read and write whole numbers to trillions	Grid and Percent It (Former Title: A Conceptual Model for Solving Percent Problems)
		Birthdays and the Binary System: A Magical Mixture Travel in the Solar System
		Time Value of Money
		Where Does the Money Come From?
		Grid and Percent It (Former Title: A Conceptual Model for Solving Percent Problems)
		Having Fun with Baseball Statistics About Our Class

[Parking at the Mall](#)
[Shops at the Mall](#)
[What's in a Graph?](#)
[What's Happening in Darfur?](#)
[Shops at the Mall](#)

[Q T Pi Fashions - Learning About Credit Card Use](#)

[Trish and Scott's Big Adventure: An Investigation of Regional Housing Costs](#)

[The Economics of Homebuying](#)

6.N.11 Read, write, and identify percents of a whole (0% to 100%)
[Show Me the Money! A Lesson on the Unforeseen Costs of Car and House Loans](#)

Number Sense and Operations

Students will understand meanings of operations and procedures, and how they relate to one another.

Operations

6.N.24 Represent exponential form as repeated multiplication

6.N.25 Evaluate expressions having [How Many Triangles Can You Construct?](#)

6.N.23 Represent repeated multiplication in exponential form

6.N.22 Evaluate numerical expressions using order of operations (may include exponents of two) [Developing Number Sense Patterns and Function](#)
[Create an Address Number Grades: 7-8](#)

6.N.21 Find multiple representations of [Where Does the Money Come From?](#)

[The Factor Game: Playing The Factor Game](#)

[The Factor Game: Playing to Win](#)

6.N.20 Represent fractions as terminating or repeating decimals [The Factor Game: Making Connections](#)

6.N.19 Identify the multiplicative inverse (reciprocal) of a number

Add, subtract, multiply, and divide mixed numbers with [Developing Number Sense](#)
[Having Fun with Baseball Statistics](#)

6.N.18 unlike denominators

[Multiplying Integers Using Videotape](#)
[Developing Number Sense](#)

[Having Fun with Baseball Statistics](#)
[Travel in the Solar System](#)

[Understanding Rational Numbers and Proportions](#)
[Football Finances](#)
[Playing the Product Game](#)

[Making Your Own Product Game](#)
[Classifying Numbers](#)

6.N.17 Multiply and divide
fractions with unlike
denominators

[The Product Game: Connections and Extensions](#)
[The "Mangoes Problem"](#)

[Multiplying Integers Using Videotape](#)
[Developing Number Sense](#)

[Having Fun with Baseball Statistics](#)
[Travel in the Solar System](#)

[Understanding Rational Numbers and Proportions](#)
[Football Finances](#)
[Playing the Product Game](#)

[Making Your Own Product Game](#)
[Classifying Numbers](#)

6.N.16 Add and subtract
fractions with unlike
denominators

[The Product Game: Connections and Extensions](#)
[The "Mangoes Problem"](#)

Number Sense and Operations

Students will compute accurately and make reasonable estimates.

Estimation

6.N.27 Justify the
reasonableness of
answers using
estimation
(including rounding)

[Developing Number Sense](#)
[Orbiting Satellites](#)
[Magic Squares: Discovering Their History and Their
Magic](#)
[Football Finances](#)
[Parking at the Mall](#)
[Playing the Product Game](#)
[Classifying Numbers](#)

[The Product Game: Connections and Extensions](#)

[Time Value of Money](#)

[Where Does the Money Come From?](#)

[Parking at the Mall](#)

[Shops at the Mall](#)

[What's in a Graph?](#)

[What's Happening in Darfur?](#)

[Shops at the Mall](#)

[Q T Pi Fashions - Learning About Credit Card Use](#)

[Trish and Scott's Big Adventure: An Investigation of Regional Housing Costs](#)

[The Economics of Homebuying](#)

6.N.26 Estimate a percent of quantity (0% to 100%) [Show Me the Money! A Lesson on the Unforeseen Costs of Car and House Loans](#)

Problem Solving

Students will build new mathematical knowledge through problem solving.

6.PS.2 Understand that some ways of [The "Mangoes Problem"](#)

6.PS.3 Interpret information correctly, identify [The "Mangoes Problem"](#)

6.PS.1 Know the difference between relevant and irrelevant information when solving problems

Problem Solving

Students will solve problems that arise in mathematics and in other contexts.

6.PS.8 Select an appropriate [The "Mangoes Problem"](#)

6.PS.9 Understand the basic language of logic in mathematical situations (and, or, and not)

6.PS.6 Translate from a picture/diagram to a numeric expression

6.PS.7 Represent problem situations verbally, [The "Mangoes Problem"](#)

6.PS.4	Act out or model with manipulatives activities involving mathematical content from literature	
6.PS.5	Formulate problems and solutions from everyday situations	Paper Pool Game Explore More Tables Look for Patterns

Problem Solving

Students will apply and adapt a variety of appropriate strategies to solve problems.

6.PS.14	Analyze problems by observing patterns	Counting Embedded Figures Desert Graphics
6.PS.15	Make organized lists or charts to	Bouncing Tennis Balls
6.PS.13	Model problems with	The "Mangoes Problem"
6.PS.11	Translate from a picture/diagram to a	The "Mangoes Problem"
6.PS.12	Use trial and error and the process of elimination to solve problems	
6.PS.10	Work in collaboration with	The "Mangoes Problem"

Problem Solving

Students will monitor and reflect on the process of mathematical problem solving.

6.PS.23	Verify results of a problem	
6.PS.22	Discuss whether a solution is reasonable in the context of the original problem	
6.PS.16	Discuss with peers to understand a problem situation	
6.PS.17	Determine what information is needed to solve problem	

6.PS.18	Determine the efficiency of different representations of a problem
6.PS.21	Explain the methods and The "Mangoes Problem"
6.PS.19	Differentiate between valid and invalid approaches
6.PS.20	Understand valid counterexamples

Reasoning and Proof

Students will recognize reasoning and proof as fundamental aspects of mathematics.

6.RP.2	Understand that mathematical statements can be supported, using models, facts, and relationships to explain their thinking
6.RP.1	Recognize that mathematical ideas can be supported using a variety of strategies

Reasoning and Proof

Students will make and investigate mathematical conjectures.

6.RP.4	Make and evaluate conjectures, using a Five's a Crowd: A Game of Population Density
6.RP.3	Investigate conjectures, using Five's a Crowd: A Game of Population Density

Reasoning and Proof

Students will develop and evaluate mathematical arguments and proofs.

6.RP.7	Verify claims other students make, using examples and counterexamples when appropriate
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6.RP.6 Develop and explain an argument verbally, numerically, algebraically, and/or graphically

6.RP.5 Justify general claims or conjectures, using manipulatives, models, expressions, and mathematical relationships

Reasoning and Proof

Students will select and use various types of reasoning and methods of proof.

6.RP.9 Devise ways to verify results

6.RP.8 Support an argument through examples/counterexamples and special cases

Representation

Students will create and use representations to organize, record, and communicate mathematical ideas.

[Printing Books](#)

[Algebraic Transformations: The Rectangle](#)

[Algebraic Transformations: The Plus Sign and Triangle](#)

[Constant Dimensions: Using Measurement and Algebra to Investigate the Relationship of the Length and Width of a Rectangle](#)

6.R.1 Use physical objects, drawings, charts, tables, graphs, symbols, equations, or objects created using technology as representations

6.R.2 Explain, describe, and defend mathematical ideas using representations

6.R.3 Read, interpret, and extend external models

6.R.4 Use standard and nonstandard representations with accuracy and detail

Representation

Students will select, apply, and translate among mathematical representations to solve problems.

6.R.5 Use representations to explore problem [Printing Books](#)

Investigate relationships [The Next Billion](#)
[Printing Books](#)

6.R.6 between different

Representation

Students will use representations to model and interpret physical, social, and mathematical phenomena.

6.R.8 Use mathematics to show and understand social phenomena (e.g., construct tables to organize data showing book sales)

6.R.9 Use mathematics to show and understand mathematical phenomena (e.g., Find the missing value: $(3 + 4) + 5 = 3 + (4 + \underline{\quad})$)

6.R.7 Use mathematics to show and [An Introduction to Remote Sensing](#)

Statistics and Probability

Students will collect, organize, display, and analyze data.

Collection of Data

[Who Knows What Inefficiencies Lurk in the Hearts of Rent Controlled Housing Markets? The Shadow Market Knows!](#)

[Who Is Working?](#)

[Where's the Beef?](#)

[State Population Projections](#)

[Paper Pool Game](#)

[Explore More Tables](#)

[Look for Patterns](#)

[Skin Weight](#)

[Bouncing Tennis Balls](#)

[Let's Compare](#)

[Five's a Crowd: A Game of Population Density](#)
[The Bread Basket](#)

[Food Court: Looking Back and Moving Forward](#)
[Pitching Cards](#)
[Spinning Tops](#)
[Parents](#)

[How Do You Organize the Counties in Your State?:
Looking Back and Moving Forward](#)
[Name Your Tune](#)
[History of Populations](#)
[About Our Class](#)
[Weather Watchers](#)
[Problem Solving: Dealing With Data In the Elementary
School](#)

[Simulating Probability Situations Using Box Models](#)
[Long Distance Airplanes](#)
[Aluminum Cans](#)
[How to Bag it?](#)
[First Names First](#)
[Last Names Next](#)

Develop the
concept of sampling
when collecting
data from a
population and
decide the best
method to collect
data for a
particular question

[What's in a Name: Looking Back and Moving Forward](#)
[What's in a Graph?](#)
[Measuring Shadows](#)
[Marble Mania](#)

[Interpreting Population Statistics](#)

6.S.1

Statistics and Probability

Students will collect, organize, display, and analyze data.

Organization and Display of Data

[Who Knows What Inefficiencies Lurk in the Hearts of
Rent Controlled Housing Markets? The Shadow Market
Knows!](#)
[Where's the Beef?](#)

[Planning a Class Trip to a Local Attraction](#)

[Planning a Trip to the State Capitol](#)

[Planning a Trip to Disneyland or Disney World](#)

[Planning a Trip to Disneyland or Disney World, Part Two](#)

[Choosing the Best Option](#)
[State Population Projections](#)
[Paper Pool Game](#)
[Explore More Tables](#)
[Look for Patterns](#)
[Skin Weight](#)
[Whale Weight](#)
[Bouncing Tennis Balls](#)
[Let's Compare](#)
[The Bread Basket](#)

[Food Court: Looking Back and Moving Forward](#)
[Pitching Cards](#)
[Spinning Tops](#)

[How Do You Organize the Counties in Your State?:
Looking Back and Moving Forward](#)
[Weather Watchers](#)
[Every Breath You Take](#)
[Problem Solving: Dealing With Data In the Elementary
School](#)
[Long Distance Airplanes](#)
[Aluminum Cans](#)

[Monty's Dilemma: Should You Stick or Switch?](#)
[First Names First](#)
[Last Names Next](#)

[What's in a Name: Looking Back and Moving Forward](#)

[State Names: Investigating Real-World Data](#)
[What's in a Graph?](#)
[Measuring Shadows](#)
[Marble Mania](#)

[Interpreting Population Statistics](#)
[Baseball Economics 101](#)

6.S.2 Record data in a
frequency table

[Choice and Chance in Life: The Game of "Skunk"](#)

[Where's the Beef?](#)

[Planning a Class Trip to a Local Attraction](#)

[Planning a Trip to the State Capitol](#)

[Planning a Trip to Disneyland or Disney World](#)

[Planning a Trip to Disneyland or Disney World, Part Two](#)
[Choosing the Best Option](#)
[Skin Weight](#)

6.S.3

Construct Venn diagrams to sort data

[Bouncing Tennis Balls](#)
[Spinning Tops](#)
[Sorting Activities for Polygons](#)
[Aluminum Cans](#)

[Monty's Dilemma: Should You Stick or Switch?](#)
[Playing the Product Game](#)
[Classifying Numbers](#)

[The Product Game: Connections and Extensions](#)

[State Names: Investigating Real-World Data](#)
[What's in a Graph?](#)
[Baseball Economics 101](#)

[Who Knows What Inefficiencies Lurk in the Hearts of Rent Controlled Housing Markets? The Shadow Market Knows!](#)
[Who Is Working?](#)
[Where's the Beef?](#)

[Planning a Class Trip to a Local Attraction](#)

[Planning a Trip to the State Capitol](#)

[Planning a Trip to Disneyland or Disney World](#)

[Planning a Trip to Disneyland or Disney World, Part Two](#)
[Choosing the Best Option](#)

[National Population Projections](#)
[Skin Weight](#)
[Whale Weight](#)
[Bouncing Tennis Balls](#)
[Alphabet Soup](#)
[Exploring Histograms](#)

[Five's a Crowd: A Game of Population Density](#)
[The Clucking Chicken](#)
[The Pizza Palace](#)

[Food Court: Looking Back and Moving Forward](#)
[Spinning Tops](#)
[Sorting Activities for Polygons](#)

[Students as Researchers: An Inclined Plane Activity](#)

[How Do You Organize the Counties in Your State?: Looking Back and Moving Forward](#)

[What's the Beat?](#)
[Name Your Tune](#)
[The Next Billion](#)
[Water, Water](#)
[Weather Watchers](#)
[Every Breath You Take](#)

[Simulating Probability Situations Using Box Models](#)
[Long Distance Airplanes](#)
[In Your Shadow](#)
[Home Is Where the Heart Is](#)
[Aluminum Cans](#)
[How to Bag it?](#)
[Shops at the Mall](#)

[Monty's Dilemma: Should You Stick or Switch?](#)
[Heartifacts](#)

[State Names: Investigating Real-World Data](#)
[What's in a Graph?](#)
[Measuring Shadows](#)

[Interpreting Population Statistics](#)
[Desert Graphics](#)
[What's Happening in Darfur?](#)
[Baseball Economics 101](#)

Determine and justify the most appropriate graph to display a given set of data (pictograph, bar graph, line graph, histogram, or circle graph)

6.S.4

Statistics and Probability

Students will collect, organize, display, and analyze data.

Analysis of Data

[Where's the Beef?](#)

[National Population Projections](#)
[State Population Projections](#)
[Bouncing Tennis Balls](#)
[Let's Compare](#)
[Alphabet Soup](#)
[Exploring Histograms](#)

[Five's a Crowd: A Game of Population Density](#)
[The Bread Basket](#)
[The Clucking Chicken](#)
[The Pizza Palace](#)

[Food Court: Looking Back and Moving Forward](#)

[Comparing Categorical and Numerical Data](#)
[Pitching Cards](#)
[Spinning Tops](#)

[Students as Researchers: An Inclined Plane Activity](#)

[Comparing Counties](#)

[How Do You Organize the Counties in Your State?:](#)

[Looking Back and Moving Forward](#)

[History of Populations](#)

[Survey of Hair and Eye Colors](#)

[About Our Class](#)

[Problem Solving: Dealing With Data In the Elementary School](#)

[Long Distance Airplanes](#)

[In Your Shadow](#)

[Aluminum Cans](#)

[How to Bag it?](#)

[Shops at the Mall](#)

[First Names First](#)

[Last Names Next](#)

[What's in a Name: Looking Back and Moving Forward](#)

[State Names: Investigating Real-World Data](#)

[Baseball Stats](#)

[The One in the Middle](#)

[Baseball Economics 101](#)

[Choice and Chance in Life: The Game of "Skunk"](#)

6.S.5 Determine the mean, mode and median for a given set of data

[Where's the Beef?](#)

[National Population Projections](#)

[Paper Pool Game](#)

[Explore More Tables](#)

[Look for Patterns](#)

[Bouncing Tennis Balls](#)

[Let's Compare](#)

[Alphabet Soup](#)

[Exploring Histograms](#)

[The Bread Basket](#)

[The Clucking Chicken](#)

[The Pizza Palace](#)

[Food Court: Looking Back and Moving Forward](#)

[Pitching Cards](#)

[Spinning Tops](#)

[Students as Researchers: An Inclined Plane Activity](#)

[Survey of Hair and Eye Colors](#)

[Every Breath You Take](#)

[In Your Shadow](#)

[Aluminum Cans](#)

[How to Bag it?](#)

[Shops at the Mall](#)

[First Names First](#)
[Last Names Next](#)

[What's in a Name: Looking Back and Moving Forward](#)

6.S.6 Determine the range for a given set of data

[State Names: Investigating Real-World Data](#)
[Baseball Stats](#)

[Let's Compare](#)
[The Bread Basket](#)
[First Names First](#)
[Last Names Next](#)

[What's in a Name: Looking Back and Moving Forward](#)

[Who Knows What Inefficiencies Lurk in the Hearts of Rent Controlled Housing Markets? The Shadow Market Knows!](#)
[Where's the Beef?](#)

[Looking Back and Moving Forward](#)

[National Population Projections](#)
[State Population Projections](#)
[Paper Pool Game](#)
[Explore More Tables](#)
[Look for Patterns](#)
[Skin Weight](#)
[Whale Weight](#)
[Bouncing Tennis Balls](#)

[Food Court: Looking Back and Moving Forward](#)
[Spinning Tops](#)

[Students as Researchers: An Inclined Plane Activity](#)
[What's the Beat?](#)
[Name Your Tune](#)
[The Next Billion](#)
[Survey of Hair and Eye Colors](#)
[Water, Water](#)
[Weather Watchers](#)
[Every Breath You Take](#)
[In Your Shadow](#)
[Home Is Where the Heart Is](#)
[Aluminum Cans](#)
[How to Bag it?](#)

[Mathematics as Communication: Graphing Information Collected Over Time](#)
[Shops at the Mall](#)

[Heartifacts](#)

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[Desert Graphics](#)

[Simulating Probability Situations Using Box Models](#)

[Income: It Ain't Where You Start, It's What You Got, and Where You End](#)

[A Case Study: United States International Trade in Goods and Services](#)

[Mad Cattlemen Sue Oprah](#)

6.S.7 Read and interpret graphs

Statistics and Probability

Students will make predictions that are based upon data analysis.

Predictions from Data

[Who Knows What Inefficiencies Lurk in the Hearts of Rent Controlled Housing Markets? The Shadow Market Knows!](#)

[Choice and Chance in Life: The Game of "Skunk"](#)

[What's the Beat?](#)

[Survey of Hair and Eye Colors](#)

[Weather Watchers](#)

[Problem Solving: Dealing With Data In the Elementary School](#)

[Home Is Where the Heart Is](#)

[Monty's Dilemma: Should You Stick or Switch?](#)

[Heartifacts](#)

[What's in a Graph?](#)

[Baseball Stats](#)

[Simulating Probability Situations Using Box Models](#)

[Income: It Ain't Where You Start, It's What You Got, and Where You End](#)

[A Case Study: United States International Trade in Goods and Services](#)

[Mad Cattlemen Sue Oprah](#)

6.S.8 Justify predictions made from data

Statistics and Probability

Students will understand and apply concepts of probability.

Probability

6.S.9	List possible outcomes for compound events	The Creamery Shorts and Shirts Ice Cream Cones Monty's Dilemma: Should You Stick or Switch? Choice and Chance in Life: The Game of "Skunk"
6.S.10	Determine the probability of dependent events	The Creamery Shorts and Shirts Ice Cream Cones Simulating Probability Situations Using Box Models Monty's Dilemma: Should You Stick or Switch? Choice and Chance in Life: The Game of "Skunk"
6.S.11	Determine the number of possible outcomes for a compound event by using the fundamental counting principle and use this to	The Creamery Shorts and Shirts Ice Cream Cones Monty's Dilemma: Should You Stick or Switch? Choice and Chance in Life: The Game of "Skunk"

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