Math Grade 6 AAC
Overview
2024-2025

This document is designed to provide parents/guardians/community an overview of the curriculum taught in the FBISD classroom. This document supports families in understanding the learning goals for the course, and how students will demonstrate what they know and are able to do. The overview offers suggestions or possibilities to reinforce learning at home.

Included at the end of this document, you will find:

- A glossary of curriculum components
- The content area instructional model
- Parent resources for this content area

To advance to a particular grading period, click on a link below.

At Home Connections

The following are suggestions for reinforcing number sense and mathematical reasoning at home. These ideas can be used throughout the school year. You will find additional ideas to reinforce learning at home within each unit below.

- Ask questions that require students to describe and elaborate on their thinking and reasoning. Topics can be about everyday things as well as mathematics.
- Engage students in situations that challenge them to inquire and persevere through questioning.
- Play card games with students
- Play games with students such as Mancala, Yahtzee, Blokus, Rack-O, Mastemind, etc.
- Work number puzzles such as Sudoku, KenKen, Kakuro, or Numbrix.

Process Standards

The process standards describe ways in which students are expected to engage in the content. The process standards weave the other knowledge and skills together so that students may be successful problem solvers and use knowledge learned efficiently and effectively in daily life.

The student uses mathematical processes to acquire and demonstrate mathematical understanding. The student is expected to:

- 6.1A Apply mathematics to problems arising in everyday life, society, and the workplace
- 6.1B Use a problem-solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution
- 6.1C Select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems
- 6.1D Communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate
- 6.1E Create and use representations to organize, record, and communicate mathematical ideas
- 6.1F Analyze mathematical relationships to connect and communicate mathematical ideas
- 6.1G Display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

Grading Period 1

Unit 1: Adding and Subtracting Rational Numbers

Estimated Date Range: Aug. 8 – Sept. 6
Estimated Time Frame: 21 days

Unit Overview: In this unit, students will learn the meaning of integers, absolute value and rational numbers as well as how to classify, compare and order rational numbers. Students will learn how to add and subtract integers and then rational numbers. Students will spend significant time modeling the operations in order to develop a conceptual understanding of the operations and how/why they work the way they do when positive and negative numbers are involved. Instruction will include contextual, real-world problems that allow students to reason through their work and justify the reasonableness of their solutions.

At home connections:

- Ask student to share real world situations involving integers
- Discuss with student the difference between a fraction and an integer
- Use monetary examples to practice adding and subtracting integers (i.e., How much will you have left if you paid the person that you owe 3 dollars and I give you 10 dollars for allowance? Write a mathematical sentence or equation for this situation: -3 + 10 = 7)
- Use sport examples to practice adding and subtracting integers (i.e., A football team received a 5-yard penalty on the first play. On the second play, the team received a 10-yard penalty. How many yards was the team penalized on the first and second plays? Write a mathematical sentence or equation for this situation: -5 + (-10) = -15 or -5 – 10 = -15

Concepts within Unit #1 **Link to TEKS**	**Success Criteria for this concept**
Establishing a Positive Math Community TEKS: 6.1A, 6.1B, 6.1C, 6.1D, 6.1E, 6.1F, 6.1G	• Demonstrate active listening skills while sharing in the community circle. • Make positive and supportive connections with my peers. • Engage in circle dialogues using the circle guidelines. • Share my math ideas and strategies when given a problem during the number sense routine. • Explain what a Respect Agreement is and why it is created.

	• Work in a group to solve a mathematical problem. • Describe strategies that I can use to solve math problems. • Provide feedback to peers using guidelines and protocol.
Concept #1: Integers and Absolute Value TEKS: 6.2B, 6.2C, 6.2D	• Graph a whole number and its opposite on a number line. • Discuss and identify the absolute value of an integer. • Define numbers that are zero pairs. • Explain how to compare integers on a number line by using < > symbols or words. • Write or say the order integers on a number line from least to greatest or greatest to least • Write or say the order of several integers that come from a real-world situation either greatest to least or least to greatest
Concept #2: Understanding Rational Numbers TEKS: 6.2A, 6.2B, 6.2C, 6.2D, 7.2A	• Locate and graph a fraction and decimal and its opposite on a number line. • Compare rational numbers on a number line by using inequality symbols or words. • Order a set of rational numbers on a number line from least to greatest or greatest to least verbally and in writing
Concept #3: Add and Subtract Integers TEKS: 6.2B, 6.3C, 6.3D, 6.7A, 6.7C, 6.7D, 7.3A, 7.3B	• Use models to represent integer operations • Apply zero pairs when adding and subtracting integers. • Connect models to algorithms for integer operations. • Write an expression to represent a situation involving integers. • Use properties of operations to solve problems involving addition and subtraction of integers • Solve problems with mathematical and real-world context involving addition and subtraction of integers
Concept #4: Adding and Subtracting Rational Numbers TEKS: 6.2B, 6.2C, 6.3C, 6.3D, 6.7A, 6.7C, 6.7D, 7.3A, 7.3B	• Solve problems involving addition and subtraction of positive fractions and decimals

Unit 2: Multiplying and Dividing Rational Numbers

Estimated Date Range: Sept. 9 – Oct. 9

Estimated Time Frame: 21 days

Unit Overview: In this unit, students will discover algorithms for multiplying and dividing rational numbers (integers, fractions, and decimals) through exploration and modeling. Students will come to understand that multiplying any number by a positive fraction less than one will result in a smaller product than the original factor. Students will also learn that dividing any number by a positive fraction less than one will result in a quotient larger than the dividend. In the Pre-AP math class, students will extend their understanding of integer operations to fractions and decimals and will work with both positive and negative fractions and decimals. The concepts in this unit include the following: Multiplying and Dividing Integers, Multiplying Rational Numbers, and Dividing Rational Numbers.

At home connections:

- Use monetary examples to practice multiplying and dividing integers
- Ask the student to find the recipe for his/her favorite food. Choose an ingredient in the recipe to highlight. Ask the student to use multiplication to determine how much of the ingredient is needed if the recipe is doubled or halved.
- Have student to determine a fraction of a time (I.e., What is 1/3 of an hour? What is 0.25 of an hour?)

Concepts within Unit # 2 Link to TEKS	**Success Criteria for this concept**

Concept #1: Multiplying and Dividing Integers TEKS: 6.2B, 6.2C, 6.2E, 6.3C, 6.3D, 6.7A, 7.3A, 7.3B	• Use models to represent integer operations. • Connect models to the standard algorithm for integer operations. • Write an expression to represent a situation involving integers
Concept #2: Multiplying Rational Numbers TEKS: 6.3B, 6.3E, 6.4G, 6.7A, 6.7D, 7.3A, 7.3B	• Explain why a number increases or decreases in value when it is multiplied by a fraction. • Estimate fractions and mixed numbers to a whole number or halves to find a reasonable range of products. • Use models to solve problems involving multiplication of positive fractions and decimals
Concept #3: Dividing Rational Numbers TEKS: 6.3A, 6.3E, 6.7A, 6.7D, 7.3A, 7.3B	• Explain the connection between multiplying and dividing fractions. • Estimate quotients of fractions and mixed numbers to a whole number or halves to find a reasonable range of products. • Use models to solve problems involving division of positive fractions and decimals • Make connections to the models and the standard algorithm. • Recognize that dividing by a fraction is the same as multiplying by its reciprocal • Solve division problems with fraction and/or decimals using the standard algorithm

Grading Period 2

Unit 3: Proportional Reasoning

Estimated Date Range: Oct. 16 – Nov. 22
Estimated Time Frame: 26 days

Unit Overview: In this unit, students will develop proportional reasoning skills as they relate to fractions, decimals and percents. Students will represent percents with concrete models and pictorial models, such as 10x10 grids, strip diagrams and number lines that will aid them in developing a proportional understanding of equivalent fractions, decimals, and percents. Students will also use their proportional understanding to find either the part, the whole, or the percent, given the other two values to aid in solving. The concepts in this unit include the following: Equivalent Forms of Fractions, Decimals, and Percents, Percent Application and Application of Ratios, Rates, and Proportions.

At home connections:

- Ask student to create ratios using individuals in the household (I.e., 3 females to 2 males; 2 adults to 3 children)
- Use a bag of candy (Skittle, M&Ms, etc.) to provide students practice with creating part to part and part to whole ratios
- Have student to create a matching game for equivalent fractions, decimals, and percentages
- Ask the student to find (at home or online) a representation of a gallon, a cup, a quart, and a pint of liquid.
- Play a game that requires the student to convert a customary measurement into other customary measurements (I.e., A gallon = 4 quarts; A gallon = 8 pints or A day = 24 hours; A day = 1,440 minutes)
- Ask students to estimate the tax of a sales item given a tax rate of 8%.
- Show student receipts of various sales items and ask them to calculate the tax rate.
- Have the student determine the cost of an item he/she would like to purchase after taking a percentage off, such as 25%.

Concepts within Unit # 3 Link to TEKS	Success Criteria for this concept
Concept #1: Solving Problems Involving Ratios and Rates TEKS: 6.4A, 6.4B, 6.4C, 6.4D, 6.4E, 6.4H, 7.3B, 7.4B, 7.4D, 7.4E	• Represent ratios using models • Represent a ratio using a fraction or decimal • Write ratios in multiple ways including as a fraction, verbally with the word to, and with a colon • Use objects to represent part to part and part to whole ratio comparisons • Use models to determine equivalent ratios • Use a ratio table to determine equivalent ratios • Scale up and scale down to determine equivalent ratios • Find a multiplicative scale factor to determine equivalent ratios • Represent a rate as a quotient • Explain how a rate is a comparison of two quantities including providing examples of rates • Determine the rate in a given problem • Determine and apply unit rates • Use a rate to convert within a measurement system including metric and customary • Convert between measurement systems using a rate. • Compare different ratios or rates to determine which ratio or rate is greater, less, or better in context of the situation. • Use proportions to make predictions and comparisons involving ratios, rates of an unknown value • Predict and compare for a given part or whole, given an equivalent ratio or rate using a real-world word problem

Concept #2: Equivalent forms of Fractions, Decimals, and Percents TEKS: 6.2E, 6.4E, 6.4F, 6.4G, 6.5C	• Use base 10 blocks to represent percents. • Use a 100s grid to represent percents and their equivalent fraction and decimal values. • Use strip diagrams to represent benchmark fractions and percents. • Represent percents with strip diagrams that show a part to whole relationship. • Represent equal parts of the same whole with a percent, fraction, and decimal. • Use concrete models to generate equivalent forms of fractions, decimals, and percent. • Generate equivalent forms of fractions, decimals and percents using pictorial models. • Generate equivalent forms of fractions, decimals and percents using algebraic methods • Generate equivalent forms of fractions, decimals and percents to solve problems.

Concept #3: Percent Applications
TEKS: 6.5B, 7.3A, 7.3B, 7.4D, 7.13A, 7.13E, 7.13F
	• Use concrete and pictorial models to find the unknown value when the part, percent or the whole is given
	• Use a model to find the unknown value when the part, whole or percent is given
	• Find the whole given the part and percent.
	• Find the part given the whole and the percent.
	• Find the percent given the part and the whole
	• Use proportional reasoning and/or models to find the missing value (part, whole, or percent) when given the other values.
	• Solve real-world problems involving:
	  • Percent increase/decrease
	  • Sales Tax
	  • Gratuity
	  • Income Tax
	  • Discount
	  • Simple Interest
	  • Compound Interest

Unit 4: Multiple Representations (Continues in Grading Period 3)

Estimated Date Range: Dec. 2 – Jan. 17
Estimated Time Frame: 22 days

Unit Overview: In this unit, students need to understand that there are multiple ways to represent a problem. Students will extend their knowledge of graphing ordered pairs (*x, y*) on the coordinate plane in quadrant 1, where *x* and *y* are positive whole numbers, to graphing ordered pairs in all four quadrants where *x* and *y* are rational numbers. Students will identify the independent and dependent variables from tables, graphs, and equations and explain their meanings in context of real-world situations. Students will explore the similarities and differences between additive ($y = a + x$) and multiplicative ($y = ax$) relationships and apply this knowledge to represent linear relationships using tables, graphs, equations, and verbal descriptions.

At home connections:

- Have the student draw and label the axes and quadrants on the coordinate grid.
- Ask the student to draw three, 2-dimensional shapes (I.e., square, rectangles, triangles, etc.) on the coordinate grid and label the ordered pairs of the vertices.
- Have student explain the difference between the equations y = 2x and y = x + 2 and to provide a real-world example.
- Ask student to identify the "change" in the following situations: Max earns $12 per hour; The cost of the homecoming dance tickets is $7 per ticket.

Concepts within Unit # 4 Link to TEKS	**Success Criteria for this concept**
Concept #1: Graphing on the Coordinate Plane TEKS: 6.6A, 6.6C, 6.11A	• Identify and label the four quadrants of the coordinate plane. • Locate and determine which quadrant or axis an ordered pair is located. • Graph ordered pairs of rational numbers. • Name the ordered pair that represents a graphed point on the coordinate plane. • Describe the relationship between points on a coordinate plane • Describe the independent and dependent variable for a graph in context of the situation • Explain the meaning of an ordered pair in real world situations. • Graph a situation from a table or set of ordered pairs
Concept #2: Additive vs. Multiplicative TEKS: 6.4A, 6.4B, 6.5A, 6.6A, 7.4C	• Identify an additive relationship from a table, graph, verbal description, or equation. • Identify a multiplicative relationship from a table, graph, verbal description, or equation. • Identify similarities and differences between additive and multiplicative relationships. • Compare and contrast additive and multiplicative relationships
Concept #3: Writing Equations and Translating Between Views TEKS: 6.4B, 6.6B, 6.6C, 7.4C, 7.7A	• Represent constant rates of change with verbal descriptions, tables, graphs, and/or equations. • Understand how the parts of the equation y=mx+b is represented in each of the representations. • Calculate the constant of proportionality from tables, graphs, and equations. • Identify the constant of proportionality in tables, graphs, and equations.

Grading Period 3

Unit 4: Multiple Representations (Continued)

Estimated Date Range: Dec. 2 – Jan. 17
Estimated Time Frame: 22 days
See Grading Period 2 for details

Unit 5: Equations and Inequalities Estimated Date Range: Jan. 21 – Feb. 21 Estimated Time Frame: 22 days	
Unit Overview: In this unit, students will use the properties of operations and order of operations to generate equivalent expressions. Students will write real world situations from both one-step and two-step equations, as well as write one-step and one-variable, two-step equations, and inequalities from verbal situations. Students will use concrete models, manipulatives, and inverse operations to solve one-and two-step equations and inequalities, represent solutions to equations and inequalities, and determine if a solution makes an equation or inequality true. To build conceptual understanding for solving equations it is essential that all the students have practice with writing equations, then representing and solving with models before solving using inverse operations. In the Multiple Representations unit, students wrote one-step and one-variable, two-step equations from verbal descriptions, therefore embed real-life problems when solving equations. **At home connections:** • Ask student to identify phrases or signs that represent inequalities in the real-world (I.e., a speed limit sign) • Utilize websites such as Solve me Puzzles to practice finding the value of various shapes.	
Concepts within Unit # 5 **Link to TEKS**	**Success Criteria for this concept**
Concept #1: Generating Equivalent Expressions TEKS: 6.7B, 6.7C, 6.7A, 6.7D	• Factor composite numbers and re-write in exponential form. • Expand exponent notation to generate equivalent numeric value. • Identify when two numeric expressions are equivalent. • Find a single number solution for an expression with multiple steps using the order of operations. • Find equivalent expressions for multi-step problems. • Compare and contrast expressions and equations. • Write expressions from models. • Write expressions from verbal descriptions. • Find the value of an algebraic expression when given the value of the variables. • Generate equivalent numerical expressions using order of operations. • Use properties of arithmetic to generate equivalent numerical expressions from mathematical situations and real-world scenarios. • Use properties of algebra and arithmetic to generate algebraic expressions from mathematical situations and real-world scenarios. • Use models, pictures, and algebraic representations to determine if two expressions are equivalent.
Concept #2: Representing Equations and Inequalities TEKS: 6.9A, 6.9C, 7.10A, 7.10C	• I will identify situations as equations or inequalities • Write an expression to represent a verbal situation for an equation or inequality • Write a one-variable two step equation that represents a situation • Write a one-variable, two-step inequality that represents a situation • Write an equation or inequality verbally (I.e., two times the value of x minus 5 is greater than 3) • Create a situation for a one-variable, two-step equation. • Create a situation for a one-variable, two-step inequality
Concept #3: Solving Equations and Inequalities TEKS: 6.9B, 6.10A, 6.10B, 7.10B, 7.11A, 7.11B	• Explain (written or verbally) what a solution to an equation represents • Model a one-variable, one-step equation • Model a one-variable, two-step equation • Describe how to solve a one-variable, one-step equation

	• Describe how to solve a one-variable, two-step equation using models. • Make connections between using models and inverse operations • Solve one-variable, one-step equations using inverse operations • Solve one-variable, two-step equations using inverse operations. • Solve equations from real-world situations. • Explain (verbally or written) what the solution of an inequality represents • Graph solutions for an inequality on a number line • Model one-variable, one-step inequalities • Model a one-variable, two-step inequality • Explain/describe how to solve a one-variable, one-step inequality using model or manipulatives • Explain/describe how to solve a one-variable, two-step inequality using models or manipulatives • Explain and justify when to reverse the inequality symbol while solving an inequality • Solve a one-variable, one-step inequality using inverse operations • Solve a one-variable, two-step inequality using inverse operations • Solve a one-variable, one-step inequality from a real-world situation • Solve a one-variable, two-step inequality from a real-world situation. • Solve equations that represent geometric concepts including perimeter, area, measure of angle, supplementary angles, and complementary angles.

Unit 6: Geometric Application of Equations (Continues in Grading Period 4)

Estimated Date Range: Feb. 24 – Mar. 28
Estimated Time Frame: 19 days

Unit Overview: In this unit, students will explore relationships that exist in triangles: sum of angles in a triangle, when three side lengths form a triangle, and the relationship between sides and angles in a triangle. It is important for students to have time to explore these relationships before having a formal lesson during which they are explicitly given the relationships. Students will also explore area formulas for parallelograms, triangles, and trapezoids by decomposing the shapes and rearranging them. By doing so, they can relate them to other shapes and develop the formulas for finding area of these shapes. Finally, students will deepen their understanding of volume by solving problems related to volume of rectangular and triangular prisms and pyramids. Throughout this unit, students should be writing and solving equations and inequalities.

At home connections:

- Play an "I Spy" game that requires the student to identify parallelograms, triangles, rectangular and triangular prisms.
- Play a "Shape Guessing" game to help students describe the parts of a shape and utilize appropriate vocabulary (I.e., Hid a shape behind your back and the student will ask questions about the shape, such as "Does the shape have four right angles? Is the shape composed of two triangles?"
- Have the student find objects in the home representing parallelograms, triangles, rectangular prisms, and triangular prisms.

Concepts within Unit # 6 Link to TEKS	Success Criteria for this concept
Concept #1: Properties of Triangles TEKS: 6.8A, 6.10A	• Understand that the sum of the angles in a triangle is 180°. • Determine when 3 angles form a triangle. • Find the missing angle in a triangle. • Determine if three lengths could be the sides of a triangle. • Understand the relationship between the side lengths and angles of a triangle. • Determine when 3 side lengths form a triangle.

	• Use the relationship between sides and angles of a triangle to identify/label sides and angles of a triangle
Concept #2: 2D Measurement TEKS: 6.8B, 6.8C, 6.8D, 6.10A	• Decompose and rearrange parts of shapes to model area formulas of 2D shapes. • Relate the formulas for area of 2D shapes to the formulas for area of other 2D shapes. • Write an equation representing a problem situation involving area. • Use equations to find the area of a 2D shape. • Use equations to find a missing dimension of a 2D shape when given the area. • Interpret mathematical information related to area contained in a problem situation to write an equation representing the situation. • Write an equation to find missing dimension
Concept #3: 3D Measurement TEKS: 6.8C, 6.10A, 7.8A, 7.8B, 7.9A	• Write equations representing situations involving volume. • Determine the volume of a rectangular prism. • Determine the missing dimension of a rectangular prism when given the volume. • Identify whether a shape is a prism or a pyramid. • Explain in words and mathematically the relationships between volume of a pyramid and volume of a prism with congruent bases and heights. • Determine which real-world applications are asking for volume. • Identify the base of the prism or pyramid. • Identify the height of the prism or pyramid. • Identify the appropriate formula for the volume of the figure • Calculate volume of triangular prisms and pyramids when given pictures • Calculate the volume of rectangular prisms and pyramids when given pictures • Solve application problems involving volume of rectangular and triangular prisms and pyramids.

Grading Period 4

Unit 6: Geometric Application of Equations (Continued)

Estimated Date Range: Feb. 24 – Mar. 28
Estimated Time Frame: 19 days

Unit 7: Data and Statistics

Estimated Date Range: April 1 – May 9
Estimated Time Frame: 27 days

Unit Overview: In this unit, students will determine which questions yield variable data and which questions do not. Students will represent and summarize categorical data using relative frequency and percent bar graphs, and will represent numerical data using histograms, dot plots, stem and leaf plots, and box plots. Students will generate numerical summaries for data using mean, median, mode, range, and interquartile range. Data distributions will be described based on their shape. For Pre-AP, students will make comparisons of two sets of data represented in dot plots or box plots using center, spread, and shape.

At home connections:

- Have the student find the mean, median, and mode of the ages of the immediate or extended family.
- Have the student create a dot plot or stem and leaf plot of the ages of the immediate or extended family.

Concepts within Unit # 7 Link to TEKS	Success Criteria for this concept

Concept #1: Analyzing and Interpreting Categorical Data TEKS: 6.12D, 6.13B	• Create a frequency table to represent categorical data. • Create a relative frequency table to represent categorical data • Connect strip diagrams to percent bar graphs by creating a segmented (or stacked) bar graph. • Create a percent bar graph to represent categorical data. (Bars are separate) • Connect • Determine the mode of the data • Describe the variability, if any, in the data
Concept #2: Representing, Analyzing and Interpreting Numerical Data TEKS: 6.12A, 6.12B, 6.13A, 6.13B, 7.12A	• Create a dot plot, from numeric data • Create a stem-and-leaf plot from numeric data • Create a histogram from numeric data • Create a box plot from numeric data • Solve problems from graphical representations • Determine numerical summaries of data by calculating the mean, median, range and interquartile range (IQR) of the numeric data. • Describe the shape of a data distribution using vocabulary such as skewed, left skewed, right skewed, symmetrical, and uniform • Describe the center of the data using median and mean • Describe the spread of the data using the range and the IQR • Describe the variability of the data • Solve problems from graphical representation • Compare the shapes of two sets of data • Compare the centers of two sets of data • Compare the spreads of two sets of data

Unit 8: Financial Literacy

Estimated Date Range: May 12 – May 29
Estimated Time Frame: 13 days

Unit Overview: In this unit, students will continue to learn about concepts affecting consumers. Students will learn the similarities and differences between debit cards and credit cards as well as the factors to consider when choosing a bank. Students will experience balancing a checkbook register using their understanding of integer operations.

At home connections:

- Discuss how to write a check for a specific amount and the importance of balancing a checkbook
- Discuss the differences between a credit card and a debit card and the advantages and disadvantages of using each card
- Require student to research various ways to pay for college (i.e., scholarships, loans, work-study, etc.)
- Ask student to share his/her interest, strengths, and skills and possible jobs that connect to those strengths and interests.
- Have student research the starting income for the jobs aligned to his/her skills, interests, and strengths

Concepts within Unit # 8 **Link to TEKS**	**Success Criteria for this concept**
Concept #1: Credit Cards vs Debit Cards and Checking Accounts TEKS: 6.14B, 6.14A, 6.14C	• List features of credit cards. • List features of debit cards. • Compare and contrast credit cards and debit cards. • Explain features of a checking account. • Understand checking account fees. • Understand debit card fees.

	• Identify withdrawals and deposits and record them on a check register • Determine checking account fees and record them on a check register • Balance a check register
Concept #2: Credit Reports TEKS: 6.14D, 6.14E, 6.14F	• Determine activities that lead to positive credit history and activities that lead to negative credit history. • Explain why a positive credit history is important • Explain the length of time information is reported on a credit report • Explain how creditors use information on a credit report. • Explain how consumers use information on a credit report
Concept #3: Paying for College and Jobs and Income TEKS: 6.14G, 6.14H	• Explain how scholarships pay for college • Explain how grants pay for college • Explain how work study pays for college • Explain how student loans pay for college • Explain how savings pays for college • Research jobs and record their education required and annual salary • Create a scatterplot to show the relationship between education and income • Calculate the effects of salaries on lifetime income

Glossary of Curriculum Components

Overview– The content in this document provides an overview of the pacing and concepts covered in a subject for the year.
TEKS – Texas Essential Knowledge and Skills (TEKS) are the state standards for what students should know and be able to do.
Unit Overview – The unit overview provides a brief description of the concepts covered in each unit.
Concept – A subtopic of the main topic of the unit.
Success Criteria—a description of what it looks like to be successful in this concept.

Parent Resources
The following resources provide parents with ideas to support students' understanding. For sites that are password protected, your child will receive log-in information through their campus.

Resource	How it supports parent and students
Open Up Resources – Family Resources (Grade 6) Open Up Resources – Family Resources (Grade 7)	This is a family resource for information regarding the content that is being covered in your student's math class. Please note the units do not align to the unit's in FBISD's curriculum, however the content aligns.
Didax Virtual Manipulatives Math Learning Center Math Apps Polypad: Mathigon – Virtual Manipulatives	These online resources provide access to virtual manipulatives.
Parent Resources from youcubed.org	This resource from youcubed.org includes articles for parents on ways to support their students in learning and understanding mathematics.
Student Resources from youcubed.org	This resource from youcubed.org includes videos concerning growth mindset in mathematics.
Math: Why Doesn't Yours Look Like Mine?	This resource provides an explanation of why math looks different now as opposed to how parents learned mathematics and how to support students in learning mathematics.

Supplemental Resource and Tool Designation:

- The TI Nspire CX calculator is a standardized technology integration tool used for Mathematics and Science in FBISD.
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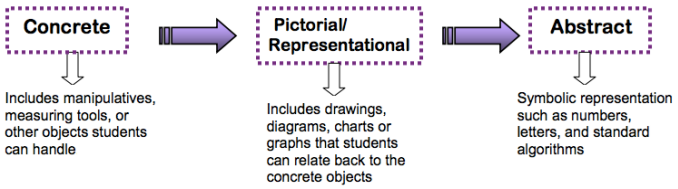
Instructional Model
The structures, guidelines or model in which students engage in a particular content that ensures understanding of that content.



The instructional model for mathematics is the Concrete-Representational-Abstract Model (CRA).
The CRA model allows students to access mathematics content first through a concrete approach ("doing" stage) then representational ("seeing" stage) and then finally abstract ("symbolic" stage). The CRA model allows students to conceptually develop concepts so they have a deeper understanding of the mathematics and are able to apply and transfer their understanding across concepts and contents. The CRA model is implemented in grades K-12 in FBISD.

Math Workshop:

During math instruction in grades K-8 in FBISD, we follow the Math Workshop structures. Instruction during a math class follows one of the three structures: Task and Share, Mini Lesson, Guided Math and Learning Stations, and Guided Math and Learning Stations. The structure that is used each day is determined by the content covered as well as student need.

<table>
<tr><th>Task and Share</th><th colspan="2">Mini Lesson, Guided Math and Learning Stations</th><th colspan="2">Guided Math and Learning Stations</th></tr>
<tr><td>Number Sense Routine</td><td colspan="2">Number Sense Routine</td><td colspan="2">Number Sense Routine</td></tr>
<tr><td rowspan="2">Math Task</td><td colspan="2">Mini Lesson</td><td rowspan="2">Guided Math</td><td rowspan="2">Learning Stations</td></tr>
<tr><td>Guided Math</td><td>Learning Stations</td></tr>
<tr><td>Task Share and Student Reflective Closure</td><td colspan="2">Student Reflective Closure</td><td colspan="2">Student Reflective Closure</td></tr>
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Number Sense Routine – An engaging accessible, purposeful routine to begin math class that promotes a community of positive mathematics discussion and thinking.

Math Task – A problem-solving task that students work on in small groups. The teacher monitors and probes student thinking through questions. The task should have multiple entry points, allowing for all students to have access to the problem.

Task Share with Student Reflective Closure – Students come together as a whole class and discuss the various strategies they used to solve a rich mathematical task. Students ask questions, clarify their thinking, modify their work, and add to their collection of strategies.

Mini Lesson – A well-planned whole group lesson focused on the day's learning intention and accessible to all levels of learners.

Guided Math – Small group instruction that allows the teacher to support and learn more about students' understandings and misconceptions. Can include intervention, more on-level support, or enrichment.

Learning Stations – Activity in which students engage in meaningful mathematics and are provided with purposeful choices. Could include individual, partner or group tasks.

Student Reflective Closure – A deliberate and meaningful time for students to reflect on what they've learned and experienced during a math task, at activities in learning stations, or in a guided math group.