

SUMMER SCHOOL TEACHER GUIDE



Math/6th Grade

Summer School Table of Contents

4

Day	Grade Results Title	Lesson #	Standard #	Page #
1	Ratio Relationship between Two Quantities	1	6.RP.A.1	4
2	Unit Rate Associated with a Ratio	2	6.RP.A.2	6
3	Solving Problems with Unit Rates	3	6.RP.A.3.b	8
4	Converting Fractions to Percents and Vice Versa	4	6.NS.A.1	10
5	Interpret and Compute Quotients of Fractions	5	6.NS.A.1	12
6	Integers	6	6.NS.C.5	14
7	Operations on Decimals	7	6.NS.B.3	16
8	Locate Points on a Number Line and on a Coordinate Plane	8	6.NS.C.6.c	19
9	Ordering Rational Numbers on a Number Line	9	6.NS.7.a, 6.NS.7.b	22
10	Interpreting Absolute Value of a Rational Number	10	6.NS.C.7.c	24
11	Placing Figures in the Coordinate Plane	11	6.NS.C.8	26
12	Variables and Expressions	12	6.EE.A.2.a, 6.EE.B.6, 6.EE.A.2.b	28
13	Equivalent Expressions	13	6.EE.A.3	30
14	Write and Evaluate Numerical Expressions	14	6.EE.A.1	33
15	Evaluating Expressions	15	6.EE.A.2.c	35
16	Solving One-Step Equations	16	6.EE.B.7	37
17	Solving Linear Equations	17	6.EE.B.5	39
18	Solving Linear Inequalities	18	6.EE.B.5	42
19	Post-Test Review and Post-Test	-	-	43
20	Review Lessons & Quizzes	-	-	44
	Algebraic Expression Anchor Chart			45

Summer School Curriculum Guide

The Elementary and Middle Summer School Program will be for 20 days. Students will have a total of 18 daily lessons and day 19 and 20 will be for reviewing lessons/quizzes and post-test.

- Eighteen (18) days of daily lessons
- One (1) day post-test review and post-test
- One (1) day of reviewing lessons, retake daily post-tests, and makeup missed lessons.

All students and staff will use Grade Results for their summer curriculum. Each lesson will open daily, and students will not be able to work ahead; however, students can work on previously opened lessons. Students can retake a daily post-test 3 times before it locks. If a student needs to retake a daily lesson post-test for a 4th time, then the teacher will have to open the lesson post-test again. Teachers should not delete any prior lesson post-test. Grade Results will post the highest grade from each students' lesson post-test.

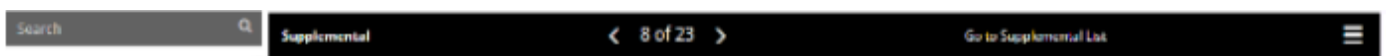
MS Classroom Schedule – Time below is an *approximate* breakdown of time.

- **Attendance in PowerSchool** – 5 minutes
- **Lesson Introduction (I Do)** – 5 minutes
- **Lesson Activities/Supplemental (We Do)** – 60 minutes
- **Break** – 10 Minutes (Site Administrator will work with teachers on breaks)
- **Teacher Lesson Review** – 5 minutes
- **Independent Work** – Student Lesson Review*/Post-test (They Do) – 40 minutes
- **Closing/Wrap Up**– 5 minutes
- **Total Time: 2 hours 10 minutes**

***Lesson Review** – Students will review lesson for essential knowledge/information prior to the daily test.

The following will be used within Grade Results:

- **Lessons** with Content Area, Videos, and Activities
- **Supplemental** Teacher Resources:
 - o Click on Supplemental o Click on Resource to view (Example: Flocabulary, BrainPOP, Others)
 - o Teacher will review with the students the items that need to be completed.
 - o Teachers can select additional Supplemental Resources as needed if time permits.
 - o To view another resource once you are in a resource, use the Toggle Sidebar in the top righthand corner. It has three dashes. An example is listed below.



Post-Test – Each lesson will have a daily post-test.

Graded Work – The Post-Test will be the daily graded work. Graded work is automatically calculated by the Grade Results Software.

Anchor Charts – Some subjects may have Anchor Charts available with their lesson.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 1

Topic/Lesson Title & Grade Results #: Lesson #1: Ratio Relationship between Two Quantities

Objective(s): Students will be able to:

Describe the concept of ratio by using ratio language to describe relationships between two quantities.

Guiding Question(s):

- What is a ratio and how can it be written?
- What are the different types of ratios?
- How can we solve real world problems using ratios?

TN Curriculum Standard(s):

6.RP.A.1: Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities. For example, “The ratio of wings to beaks in the bird house at the zoo was 2:1, because for every 2 wings there was 1 beak.” “For every vote candidate A received, candidate C received nearly three votes.”

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMs meeting (if applicable)

KEY VOCABULARY/TERMS:

Counting numbers: The numbers which are used for counting from one to infinity are called counting numbers.

Fraction: A part of a whole.

Ratio: A comparison between two or more quantities.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Introduce yourself and classroom expectations, procedures, and rules. Allow for student introductions as well. Provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson.

- Objectives (Slide 1)

The teacher will ask students to compare the number of girls in the class to the number of boys and explain how that would be expressed as a ratio using the mathematical language, “for every ___ girls, there are ___ boys.

*For this activity virtual students when use the classmates logged on to the computer.

- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Ratios (Slide 3)
- Representation of Ratio (Slide 4)
- Ratio - Example (Slide 5 - includes video)
- Finding Ratios (Slides 6 – includes video), 7, 8 (activity 1), Slide 9 (activity 2 - drag and drop)
- Finding Equivalent Ratios (Slides 10 – 12- (includes videos), 13,

- Finding Unknown Value by Using Ratio (**Slide14 (includes video), 15, 16 (includes video), 17 and 18 activity-drag and drop**)

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Safari: Watch the supplemental videos “Simplifying Rates with Ratios 1, 2, and 3.”

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 19) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- Lesson Review Ratio is a relationship between two quantities.
- Ratio can be written as $a : b$, or a to b . Reminder – whatever category that’s stated first, is the number that’s listed first.
- Ratios written should also be simplified when possible.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 2

Topic/Lesson Title & Grade Results #: Lesson #2: Unit Rate Associated with a Ratio

Objective(s): Students will be able to:

- Solve problems involving ratios.
- Understand rate language (per, each, of the, @ symbol).
- Convert ratios into unit rate.
- Solve problems involving unit rate.

Guiding Question(s):

- What are the differences between ratio, rate, and unit rate?

TN Curriculum Standard(s):

6.RP.A.2: Understand the concept of a unit rate a/b associated with a ratio $a:b$ with $b \neq 0$. Use rate language in the context of a ratio relationship. For example, "This recipe has a ratio of 3 cups of flour to 4 cups of sugar, so there is $3/4$ cup of flour for each cup of sugar." "Also, we paid \$75 for 15 hamburgers, which is a rate of \$5 per hamburger."

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Each: Every individual in a group.

Per: Means for each once.

Equivalent ratios: Two ratios with the same value after simplifying.

Rate: Comparison of two quantities with different units of measure.

Ratio: Comparison of two similar quantities.

Rational Number: A number that can be written as a/b where a and b are integers, but b is not equal to 0.

Unit rate: Says how many units of the first quantity correspond to one unit of the second quantity.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Rate (Slide 3)
- Ratio (Slide 4)

- Ratio activity (Slide 5)
- Finding Ratios (includes video Slides 6)
- Finding Ratios activity (Slide 7)
- Unit Rate (includes video Slide 8)
- Finding Unit Rate (includes videos Slides 9 and 10)
- Drag and Drop Activity (Slide 11)
- Unit Rate Videos (Slides 12 and 13)
- Finding Unit Rate cont....(Slide 14- includes additional content activities)
- Drag and Drop Activity (Slide 15)

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Safari, Watch the following supplemental videos: **1. Unit Rates, 2. Determine Unit Rate and 3. Rates and Unit Rates.**

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 16) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- A ratio is a relationship between two quantities with identical units, normally expressed as the quotient of one divided by other.
- A rate is a ratio that compares two things with different units.
- A unit rate describes how many units of the first quantity correspond to one unit of the second quantity.
- When using rates $\frac{a}{b}$, "b" cannot be 0 (because division by 0 is undefined).

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 3

Topic/Lesson Title & Grade Results #: Lesson #3: Solving Problems with Unit Rates

Objective(s): Students will be able to:

- Define unit rates.
- Find unit rates in verbal problems.
- Solve verbal problems involving unit price and constant speed.

Guiding Question(s):

- What are the differences between ratio, rate, and unit rate?

TN Curriculum Standard(s):

6.RP.A.3b Solve unit rate problems including those involving unit pricing and constant speed. For example, if a runner ran 10 miles in 90 minutes, running at that speed, how long will it take him to run 6 miles? How fast is he running in miles per hour?

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Ratio: Comparing two quantities of same type.

Rate: Comparing two quantities of different types.

Proportion: A proportion is when two ratios are equal.

Unit Rate: It is described as how many units of the first quantity to one unit of the second quantity.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Rate or Unit Rate (Slide 3)
- Rate or Unit Rate -Activity (Slide 4)
- Finding Unit Rate (Slide 5)
- Finding Unit Rate Activity (Slides 6 and 7)
- Use Unit Rate to find other Values (Slides 8 and 9)
- Use Unit Rate to find other Values Activity (Slide 10)
- Comparison of Rates (Slide 11)

- Comparison of Unit Rates -**includes video (Slide 12)**
- Comparison of Unit Rates **Activity (Slide 13)**
- Real Life Problems on Constant Speed **(Slide 14)**
- Real Life Problems on Constant Speed **Activity (Slide 15)**
- Real Life Problems on Unit Price- **includes additional content activities (Slide 16)**
- Real Life Problems on Unit Price **Activity (Slide 17)**
- **Drag and Drop Activity (Slide 18)**

Supplemental (10 minutes): - **The teacher will show the videos to use for review or support of the lesson. If time permits. From Flocabulary, Watch the following supplemental video: Rate, and from Safari, Watch the following supplemental videos: 1. Unit Rate and 2. Determine Unit Rate.**

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 19) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- Rate is the comparison of two quantities of different units.
- Rate is also called as unit rate or unit cost.
- The values of a proportional relationship can be found using unit rate.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 4

Topic/Lesson Title & Grade Results #: Lesson #4: Converting Fractions to Percents and Vice Versa

Objective(s): Students will be able to:

- Write percents as fractions.
- Write fractions as percents.

Guiding Question(s):

- How can you express ratios as percent?
- How can a visual model help to find the percent of a quantity?
- How can a visual model help to find a quantity given the part of the whole?

TN Curriculum Standard(s):

6.RP.A.3c Find a percent of a quantity as a rate per 100 (e.g., 30% of a quantity means 30/100 times the quantity); solve problems involving finding the whole, given a part and the percent.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Fraction: A part of a whole.

Percent: Per hundred or out of hundred.

Proportion: An equation stating that two ratios are equal.

Ratio: A comparison of two quantities of the same kind expressed as "a to b" or "a : b" or "a/b."

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Writing Percents as Fractions – Example (includes video Slide 3), Slide 4
- Writing Percents Greater Than 100 – (includes video Slide 5)
- Fractions **Drag and Drop Activity (Slide 6)**
- Writing Fractions as Percents (includes video Slide 7) and Example with video (Slide 8)
- Writing Fractions as Percents includes additional content activities (Slide 9)
- Converting Fractions to Percent and Vice Versa **Drag and Drop Activity 1 (Slide 10) Activity 2 (Slide 11)**

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Safari, Watch the following supplemental videos: **1 Introduction to Percents**, **2. Understanding percentages**, and **3. Percent Proportion**, and from Teachertube, Watch the following supplemental video: **Percent Proportion**.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 12) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- To convert a percent to a fraction:
 - (i) Remove the percent symbol.
 - (ii) Divide the result by 100.
 - (iii) Reduce the fraction to the lowest term.
- To convert a fraction to a percent:
 - (i) Multiply the fraction by 100.
 - (ii) Write the answer with the percent symbol.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 5

Topic/Lesson Title & Grade Results #: Lesson #5: Interpret and Compute Quotients of Fractions

Objective(s): Students will be able to:

- Identify and write reciprocal fractions.
- Divide a fraction by a whole number.
- Divide a whole number by a fraction.
- Divide a fraction by a fraction.
- Solve real-world problems involving quotients of fractions.

Guiding Question(s):

- How does division of fractions relate to multiplication of fractions?
- How is division of fractions used in the real world?
- What strategies can be used to add and subtract decimals?

TN Curriculum Standard(s):

6.NS.A.1 Interpret and compute quotients of fractions and solve contextual problems involving division of fractions by fractions (e.g., using visual fraction models and equations to represent the problem is suggested).

For example, create a story context for $(2/3) \div (3/4)$ and use a visual fraction model to show the quotient; use the relationship between multiplication and division to explain that $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. $((a/b) \div (c/d) = ad/bc)$

Further example: How much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How wide is a rectangular strip of land with length $3/4$ mi and area $1/2$ square mi?

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Fraction: Fraction is a part of a whole.

Inverse Operation: It is the opposite operation.

Reciprocal: Reciprocal is the multiplicative inverse of a number

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Divide a Fraction by a Whole Number (Slides 3 and 4)

- Divide a Fraction by a Whole Number (**Activity- Slide 5**)
- Divide a Fraction by a Whole Number (**includes videos Slide 6**)
- Divide Fractions by Fractions (**includes videos for Slides 7 through Slide 11**)
- Dividing Fractions (**Activity Slide 12**)
- **Drag and Drop Activity (Slide 13)**

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From **Flocabulary**, Watch the following supplemental video: **Dividing Fractions**, and from **Safari**, Watch the following supplemental videos: **1. Multiplying and Dividing Fractions** and **2. Dividing Involving Fractions**.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 14) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- A reciprocal is the inverse or opposite form of a fraction. We can find the reciprocal of any fraction by simply flipping the numerator and denominator.
- We can also divide a whole number by a fraction. When we divide a whole number by a fraction, we are taking a whole and dividing into new wholes.
- When we divide fractions, we need to perform the inverse operation. To divide a fraction by another fraction, we have to multiply by the reciprocal of the second fraction.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 6

Topic/Lesson Title & Grade Results #: Lesson #6: Integers

Objective(s): Students will be able to:

- Locate positive and negative integers on the number line.
- Represent opposite integers on the number line.
- Use positive and negative numbers to represent quantities in real-world contexts.

Guiding Question(s):

How are positive and/or negative numbers used in real-life situations?

TN Curriculum Standard(s):

6.NS.C.5 Understand that positive and negative numbers are used together to describe quantities having opposite directions or values (e.g., temperature above/below zero, elevation above/below sea level, credits/debits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Integers: The set of natural numbers, their negatives, and zero.

Number Line: An infinite line that represents ordered real numbers marked at regular intervals.

Opposites: Numbers that are the same distance from zero on the number line, but in the opposite direction.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Integers (includes videos - Slide 2)
- Integers on a Number Line (includes video -Slide 3)
- Integer Activity Slide 4
- Opposite Integers (includes video - Slide 5)
- Example of Opposite Integers (includes videos – Slides 6 through Slide 8)
- Opposite Integer (Activity – Slide 9)
- Drag and Drop Activity – Slide 10)

BREAK – 10 MINUTES

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From **Flocabulary**, Watch the following supplemental video: **The Number Line**, and from **Safari**, Watch the following supplemental video: **Introduction to Integers**.

Teacher Lesson Review: (Slide 11) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- On a number line, the positive numbers lie to the right of zero and the negative numbers lie to the left of zero.
- Opposite integers are equidistant from zero and lie on either side of zero.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 7

Topic/Lesson Title & Grade Results #: Lesson #7: Operations with Decimals

Objective(s): Students will be able to:

Add, subtract, multiply, and divide with decimals.

Guiding Question(s):

What are the specific steps to adding and subtracting decimals?

What are the specific steps to multiplying decimals?

What are the specific steps to dividing decimals?

How do you solve problems with the four mathematical operations using questions?

TN Curriculum Standard(s): 6. NS.B.3

Fluently add, subtract, multiply, and divide multi-digit decimals using a standard algorithm for each operation.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Decimals: Numbers between whole numbers.

Dividend: A polynomial that is being divided.

Divisor: A polynomial that is dividing.

Quotient: A result obtained by dividing one quantity by another.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

Addition of Two Decimal Numbers Example 1 and video (Slide 2)

Continued of Two Decimal Numbers Example 2 and video (Slide 3)

Continued of Two Decimal Numbers Example 3 (Slide 4)

Matching Activity (Slide 5)

Subtracting Decimals with Example 1 with Video (Slide 6)

Subtracting Decimals with Example 2 (Slide 7)

Subtracting Decimals with Example 3 with video (Slide 8)

Computation and matching activity (Slide 9)

Multiplying Decimals with Example 1 with video **(Slide 10)**
Multiplying Decimals with Example 2 **(Slide 11)**
Multiplying Decimals with Example 3 **(Slide 12)**
Multiplying Decimals with Example 4 **(Slide 13)**
Multiplying Decimals with Example 5 **(Slide 14)**
Dividing Decimals of Whole Numbers with Example 1 **(Slide 15)**
Dividing Decimals of Whole Numbers with Example 2 **(Slide 16)**
Adding Additional Zeros **(Slide 17)**
Dividing Decimals by Decimals with Example 1 **(Slide 18)**
Dividing Decimals by Decimals with Example 2 **(Slide 19)**
Dividing Decimals by Decimals with Example 3 **(Slide 20)**
Matching Activity **(Slide 21 and Slide 22)**

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From **Flocabulary**, Watch the following supplemental videos: **1. Decimals** and **2. Math Terms & Word Problems** and from **Safari**, Watch the following supplemental videos: **1. Adding and Subtracting Decimals**, **2. Dividing Decimals**, and **3. Multiplying Decimals**.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 23) (10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Steps to add or subtract decimal numbers:
 1. Write the decimal numbers one below the other, so that the decimal points are lined up.
 2. Ignore the decimal point and add or subtract the numbers column wise and bring down the decimal point.
- Steps to multiply a decimal number with a whole number:
 1. Ignore the decimal point and multiply the numbers as usual.
 2. Count the number of digits to the right of the decimal point in the decimal number.
 3. Place the decimal point in the answer so that it has the same number of decimal places as in the decimal number.
- Steps to multiply decimal numbers:
 1. Ignore the decimal points and multiply the numbers as usual.
 2. Count the number of digits to the right of the decimal point in the decimal numbers.
 3. Place the decimal point in the answer so that it has the same number of decimal places as the total number of decimal places in the two numbers being multiplied.
- Steps to divide a decimal number by a whole number:
 1. Place the decimal point in the quotient directly above the decimal point in the dividend.
 2. Ignore the decimal point and divide as usual.
 3. If the divisor doesn't divide into the dividend evenly, add zeroes to the right of the last digit in the dividend and keep dividing until there is no remainder.
- Steps to divide a decimal number by a decimal number:

1. Count the number of digits after the decimal point in the divisor (say, n).
2. Multiply the numerator and the denominator with 1 followed by " n " number of zeros.
3. If the numerator is a whole number, then divide as usual.
4. If the numerator is not a whole number, then line up the decimal point and divide.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 8

Topic/Lesson Title & Grade Results #: Lesson #8: Locate Points on a Number Line and on a Coordinate Plane

Objective(s): Students will be able to:

- Find and position integers on a horizontal or vertical number line.
- Find and position rational numbers on a horizontal or vertical number line.
- Find and position pairs of integers on a coordinate plane.
- Find and position pairs of rational numbers on a coordinate plane.

Guiding Question(s):

- What is a coordinate plane?
- How many quadrants are there, and how are they identified?
- How do we plot points within the coordinate plane?
- What is a reflection, and how are points and figures reflected across the y and x axis?

TN Curriculum Standard(s):

6.NS.C.6.c Find and position integers and other rational numbers on a horizontal or vertical number line diagram; find and position pairs of integers and other rational numbers on a coordinate plane.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

coordinate plane: A two-dimensional plane region determined by a pair of axes perpendicular to each other and uses numerical values to represent the location of an object.

X-axis: The horizontal number line on the Cartesian coordinate plane.

Y-axis: The vertical number line on the Cartesian coordinate plane.

Quadrant: One of the four regions on a Coordinate plane, formed by the intersection of x-axis and y-axis.

Origin: The point of intersection of the vertical (y-axis) and the horizontal (x-axis) axes of a Cartesian plane. The coordinates of the origin are (0, 0).

Ordered pair: A pair of numbers, (x, y), that indicate the position of a point on a Cartesian plane.

X-coordinate: The first number in an ordered pair that represents the position of a point relative to the horizontal axis.

Y-coordinate: The second number in an ordered pair that represents the position of a point relative to the vertical axis.

Positive Numbers: Set of numbers greater than zero.

Negative Numbers: Set of numbers less than zero.

Sign: A symbol that indicates whether a number is positive or negative.

Reflection: A transformation that "flips" a figure over a mirror or reflection line.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)

- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- First Quadrant (**Slide 3**)
- Plotting Points on the Coordinate Plane(**Slide 4**)
- Second Quadrant (**Slide 5**)
- Plotting Points on the Coordinate Plane (**includes video-Slide 6**)
- Quick Check Activity(**Slide 7**)
- Third Quadrant (**Slide 8**)
- Plotting Points on the Coordinate Plane (**Slide 9**)
- Fourth Quadrant (**Slides 10**)
- Plotting Points on the Coordinate Plane (**includes video Slides 11**)
- Coordinate Plane (**Slide 12**)
- Identifying Points on the Coordinate Plane (**includes video and Quick check activity-Slide 13**)
- Match the Coordinates to the Correct Quadrant (**Activity Slide 14**)
- Reflection (**Slide 15**)
- Reflections on the y -axis (**Slide 16**)
- Reflection on the $y= x$ axis (**Slide 17**)
- Activity Quick Check (**Activity Slide 18**)
- Drag and Drop (**Activity Slide 19 & 20**)

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Safari, Watch the following supplemental videos: **1. Identifying the quadrant of a coordinate plane, 2. Introduction to Cartesian plane, 3. Introduction to Cartesian plane, 4. Plotting points and identifying coordinates on a coordinate plane, and 5. Plotting points on the coordinate plane.**

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 21) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- In the first quadrant, both x and y are positive. x goes to the right from zeros and y goes up from zeros.
- In the second quadrant, x is negative and y is positive. x goes to the left from zeros and y goes up from zeros.
- In the third quadrant, both x and y are negative. x goes to the left from zeros and y goes down from zeros.
- In the fourth quadrant, x is positive and y is negative. x goes to the right from zeros and y goes down from zeros.
- To reflect the point over the y -axis, change the sign of x -coordinate (positive to negative or negative to positive).
- To reflect the point over the x -axis, change the sign of y -coordinate (positive to negative or negative to positive).
- To reflect a point to opposite quadrant, change the sign of both x and y -coordinate
- In (x, y) , if x is positive, then (x, y) lies either in the 1st quadrant or in the 4th quadrant.
- In (x, y) , if x is negative, then (x, y) lies either in the 2nd quadrant or in the 3rd quadrant.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you

learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 9

Topic/Lesson Title & Grade Results #: Lesson #9: Ordering of Rational Numbers on a Number Line

Objective(s): Students will be able to:

- Describe the relationship between rational numbers in real-world situations and with respect to numbers' positions on the number line.
- Write, interpret, and explain inequality statements involving rational numbers.

Guiding Question(s):

- What is an absolute value and how is it used in the real world?
- How does absolute value relate to distance on a number line?

TN Curriculum Standard(s):

6.NS.7.a, 6.NS.7.b Understand ordering and absolute value of rational numbers.

a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret $-3 > -7$ as a statement that -3 is located to the right of -7 on a number line oriented from left to right.

b. Write, interpret, and explain statements of order for rational numbers in real-world contexts. For example, write $-3^{\circ}\text{C} > -7^{\circ}\text{C}$ to express the fact that -3 o C is warmer than -7°C .

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Negative number: A number less than zero.

Opposite: Numbers with opposite sign but equal absolute value, situated equidistant from zero on either side of the number line.

Positive number: A number greater than zero.

Rational number: A fraction or the opposite of a fraction on the number line.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Describe the Relationship between Rational Numbers in Real Life Situation (Slide 3) including video (Slide 4)
- Describe the Relationship between Rational Numbers in Real Life Situation Activity (Slide 5)

- Describe the Relationship between Rational Numbers in Real Life Situation **(including videos - Slides 6 through 8)**
- Describe the Relationship between Rational Numbers in Real Life Situation **Activity (Slide 9)**
- Drag and Drop **Activity (Slide 10)**

Supplemental (10 minutes): - **The teacher will show the videos to use for review or support of the lesson. If time permits. From Flocabulary, Watch the following supplemental video: The Number Line, and from Safari, Watch the following supplemental videos: 1 integers and Absolute value , 2. Converting, Comparing, and Ordering, 3. Comparing Rational Numbers and 4. Comparing Fractions.**

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 11) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- A rational number is any number that can be expressed as the quotient or fraction p/q of two integers, with the denominator q not equal to zero.
- Rational numbers have an order that exists related to their location on a number line.
- On the number line, the location of a number and its opposite are at the same distance from zero, but on opposite sides of zero.
- The numbers on the number line decrease as they move to the left and increase as they move to the right. So, the number that is the least would be at the farthest left, and the number that is the greatest would be at the farthest right

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 10

Topic/Lesson Title & Grade Results #: Lesson #10: Interpreting Absolute Value of a Rational Number

Objective(s): Students will be able to:

- Describe the absolute value of a rational number.
- Interpret absolute values as magnitude for a positive or negative quantity in a real-world situation.
- Distinguish comparisons of absolute value from statements about order.

Guiding Question(s):

- What is an absolute value and how is it used in the real world?
- How does absolute value relate to distance on a number line?

TN Curriculum Standard(s):

6.NS.C.7.c Understand the absolute value of a rational number as its distance from 0 on the number line and distinguish comparisons of absolute value from statements about order in a real-world context. For example, an account balance of –24 dollars represent a greater debt than an account balance -14 dollars because -24 is located to the left of -14 on the number line.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Absolute value: The absolute value of a number is the distance between a number and zero on a number line.

Number line: A straight line which is extended in both directions on which every point represents a real number and every real number as a point.

Rational number: Any real number written as a fraction p/q of two integers with the denominator q not equal to zero.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (includes video -Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Absolute Value -review the absolute value symbol and complete the **Quick Check Activity (Slide 3)**
- Rational Number – Define and complete the examples (Slides 4 and 5)
- Real Time Examples (Slides 6 through 8)
- Distinguishing Comparison of Absolute Value from Statements About Order (Slides 9 through 11 -includes video)
- Ascending Order of Numbers **Quick Check Activity (Slide 12)**
- **Drag and Drop Activities (Slides 13 and 14)**

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From **Flocabulary**, Watch the following supplemental video: **The Number Line**, and from **Safari**, Watch the following supplemental videos: **1. Absolute value and number line** and **2. Comparing absolute values**.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 15) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- Absolute value of a number is the distance of it from 0 on a number line.
- Absolute value gives only the magnitude for a positive or negative quantity in a real-world situation.
- The absolute value symbol is represented by " $|$ ".
- Rational number is a real number that can be expressed as a fraction.
- As the value of a negative number decreases, its absolute value increases.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 11

Topic/Lesson Title & Grade Results #: Lesson #11: Placing Figures in the Coordinate Plane

Objective(s): Students will be able to:

- Find the missing coordinates of a rectangle in the coordinate plane.
- Find the missing coordinates of a parallelogram in the coordinate plane.
- Find distances between points with the same first coordinate or the same second coordinate.

Guiding Question(s):

- How do you locate points in the coordinate plane?
- How can you find distances between points on the same vertical or horizontal line?

TN Curriculum Standard(s):

6.NS.C.8 Solve real-world and mathematical problems by graphing points in all four quadrants of the coordinate plane. Include use of coordinates and absolute value to find distances between points with the same first coordinate or the same second coordinate.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Coordinate Plane: A plane in which a horizontal number line and a vertical number line intersect at zero.

Line: A straight set of points that extend forever in both directions.

Line Segment: A part of a line that is bounded by two distinct end points.

Midpoint: A point on the line segment that divides it into two equal parts.

Slope: A number that measures the steepness and direction of a line.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (**Slide 1**)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Review on Lines, Line Segments, and Coordinate Planes (**Slide 2**)
- Finding Missing Coordinates (**Slides 3 and 4**)
- Identifying Quadrilaterals (**Slide 5**)
- Finding Missing Coordinate **Activity** (**Slide 6**)
- Find the Distance Between Two Points on the Horizontal Line (**Slides 7 and 8**)
- Find the Distance Between Two Points on the Vertical Line (**Slides 9 and 10**)
- **Drag and Drop Activities 1 and 2** (**Slides 11 and 12**)

Supplemental (10 minutes): - The teacher will show the video to use for review or support of the lesson. If time permits. From Safari, Watch the following supplemental video: **Coordinated Geometry**.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 13) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- The distance between any two points on the same horizontal line is the difference between their x -coordinates.
- Distance between the points $A(x_1, y)$ and $B(x_2, y)$ is $|x_2 - x_1|$.
- The distance between any two points on the same vertical line is the difference between their y -coordinates.
- Distance between the points $C(x, y_1)$ and $D(x, y_2)$ is $|y_2 - y_1|$.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 12

Topic/Lesson Title & Grade Results #: Lesson #12: Variables and Expressions

Objective(s): Students will be able to:

Lesson A

- Translate algebraic expressions to verbal sentences.
- Translate verbal sentences to algebraic expressions.

Guiding Question(s):

How can you apply and extend previous understandings of arithmetic to reading, writing, and evaluating algebraic expressions?

How can you write and evaluate numerical expressions involving whole number exponents?

Why are operations important in evaluating expressions?

How can you interpret and translate expressions given algebraic or written forms, including real world contexts?

TN Curriculum Standard(s):

6.EE.A.2. a, 6. EE.B.6 Write, read, and evaluate expressions in which letters stand for numbers.

a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation “Subtract y from 5” as $5 - y$.

* Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Algebraic expression: An expression containing numbers and variables along with arithmetic operators like $+$, $-$, $*$, $/$.

Operator: A symbol that represents an operation (addition, subtraction, multiplication, division, ...).

Variable: A letter or symbol that represents an unknown quantity.

Verbal expression: An expression expressed in words.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (5 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Variables (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (25 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- **Drag and Drop Activity (Slide 3)**

- Evaluating Expressions (**Slides 4 and 5**)
- Evaluating Expressions **Activity (Slides 6)**
- Algebraic Expressions to Verbal Expressions (**including video Slide 7**)
- Translating the Verbal Expressions into Algebraic Expressions (**Slide 8 and Slide 9 includes additional content/activities**)
- **Drag and Drop Activities (Slides 10 and 11)**

If time permits, go to page **45** for an anchor chart to support the lesson.

Supplemental (10 minutes): - **The teacher will show the videos to use for review or support of the lesson. If time permits. From Flocabulary,** Watch the following supplemental video: **Math Terms & Word Problems** and from **Safari,** Watch the following supplemental videos: **1. Variables and Variables Expressions** and **2. H3Variables Expressions and Equations,** and **3. Introduction to the Unknown.**

Teacher Lesson Review: (10 minutes) (Slide 12) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- A variable is a letter or symbol that represents an unknown quantity.
- Algebraic expressions contain numbers and variables along with arithmetic operators like +, -, *, and /.

BREAK – 10 MINUTES

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 13

Topic/Lesson Title & Grade Results #: Lesson #13: Equivalent Expressions

Objective(s): Students will be able to:

- Apply the properties of operations to generate equivalent expressions.
- Identify the corresponding equivalent expression.

Guiding Question(s):

- How can order of operations be applied to a mathematical expression?

TN Curriculum Standard(s):

6.EE.A.3 Apply the properties of operations (including, but not limited to, commutative, associative, and distributive properties) to generate equivalent expressions. The distributive property is prominent here. For example, apply the distributive property to the expression $3(2 + x)$ to produce the equivalent expression $6 + 3x$; apply the distributive property to the expression $24x + 18y$ to produce the equivalent expression $6(4x + 3y)$; apply properties of operations to $y + y + y$ to produce the equivalent expression $3y$.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Variable: A letter or alphanumeric character representing an unknown quantity.

Algebraic expression: An algebraic expression consists of one or more variables and numbers along with arithmetic operators like +, -, *, and /.

Equivalent expressions: Two algebraic expressions are said to be equivalent if the values obtained by plugging-in values for the variables are the same.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (20 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Equivalent Expressions (Slide 3)
- Equivalent Expressions Activity (Slide 4)
- Properties of Operations (Slide 5)
- Commutative Property - Addition (including video Slide 6)
- Commutative Property – Multiplication (including video Slide 7)
- Associative Property - Addition (including video Slide 8)

- Associative Property - Multiplication (including video Slide 9)
- Identity Property - Addition (including video Slide 10)
- Identity Property - Multiplication (including video Slide 11)
- Multiplication Property of Zero (including Activity Slides 12)
- Distributive Property (including video Slide 13)
- Applying Properties of Operations (including video Slide 14)
- Identify the Property of Operations Activity Quick Check (Slides 15 and 16)
- Identify the Property of Operations (including video – Slide 17)
- Applying Properties of Operations (Slide 18)
- Applying Properties of Operations Activity (Slide 19)
- Drag and Drop Activity (Slide 20)

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Safari, Watch the following supplemental videos: 1. Associative and distributive properties of multiplication, 2. Commutative and Associative properties of addition, 3. Combining like terms, and 4. Distributive property.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 21) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- **Commutative Properties**

The commutative property of addition states that the order in which two numbers or variables are added does not change their sum.

$$a + b = b + a$$

- **Associative Properties**

While adding or multiplying three or more numbers, the grouped numbers make no difference.

Using variables, the associative properties of addition and multiplication are represented as shown below:

a) Associative Property of Addition

$$a + (b + c) = (a + b) + c$$

b) Associative Property of Multiplication

$$a(bc) = (ab)c$$

- **Identity Properties**

a) Identity Property of Addition

The sum of any number and zero is the same number.

b) Identity Property of Multiplication.

The product of any number and one is the same number.

- **Multiplication Property of Zero**

The product of any number and zero is zero.

- **Distributive Property**

Distributive property of multiplication over addition or subtraction means just distributing the multiplication over addends.

$$a \times (x + y) = a \times x + a \times y \qquad b \times (p - q) = b \times p - b \times q$$

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you

learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 14

Topic/Lesson Title & Grade Results #: Lesson #14: Write and Evaluate Numerical Expressions

Objective(s): Students will be able to:

- Identify the base and the exponent in exponential notation.
- Explain the meaning of a number raised to a power.
- Convert from exponential form to expanded form.
- Convert from expanded form to exponential form.
- Evaluate numerical expressions involving exponents.

Guiding Question(s):

- How do arithmetic properties contribute to algebraic understanding?
- How do the order of operations and properties help simplify and evaluate algebraic expressions?

TN Curriculum Standard(s):

6.EE.A.1 Write and evaluate numerical expressions involving whole-number exponents.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMs meeting (if applicable)

KEY VOCABULARY/TERMS:

Base: The number that's being multiplied.

Evaluate: Find the value of a numerical expression.

Even Integer: Any integer that can be divided exactly by 2.

Exponent: The number of times to use the number in a multiplication.

Exponential form: A number written using exponents.

Factor(s): Divisor.

Integer: A positive integer or a negative integer or zero.

Multiplication: A repeated addition.

Odd Integer: Any integer that cannot be divided exactly by 2.

Parentheses: The symbol () used in pairs to group things together.

Whole Number: A counting number including zero.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Numerical Expressions (**Slide 3**)
- Numerical Expressions **Activity (Slide 4)**
- Order of Operations (**including video - Slide 5**)
- Evaluating Numerical Expressions (**including video Slides 6 through 8**)
- Evaluating Numerical Expressions **Activity (Slide 9)**
- Evaluating Numerical Expressions (**including video Slide 10**)
- Numerical Expressions **Quick Check Activity (Slide 11)**
- Evaluating Numerical Expressions (**including video Slide 12**)
- Evaluating Numerical Expressions **Quick Check Activity (Slide 13)**
- Evaluating Numerical Expressions (**including video Slides 14 through 17**)
- Evaluating Numerical Expressions **Quick Check Activity (Slide 18)**
- **Drag and Drop Activity 1 and 2 (Slides 19 and 20)**

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From **Flocabulary**, Watch the following supplemental videos: **1. Exponents- An Introduction**, **2. Exponents- Advanced Properties**, and **3. Order of Operations** and from **Safari**, Watch the following supplemental videos: **1. Whole number exponents** and **2. Evaluating a sum of integers raised to a power**, and **3. Exponents**.

BREAK – 10 MINUTES

Teacher Lesson Review: (Slide 21) -(10 minutes) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- Whole numbers can be expressed in standard form, factor form, and exponential form.
- Exponential notations make it easier to write a number as a factor repeatedly.
- The exponent tells us how many times the base is used as a factor.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 15

Topic/Lesson Title & Grade Results #: Lesson #15: Evaluating Expressions

Objective(s): Students will be able to:

- Evaluate expressions at specific values of their variables.
- Evaluate expressions that arise in real-world situations.

Guiding Question(s):

- How do the order of operations and properties help simplify and evaluate algebraic expressions?
- In what ways can you reason and solve one-variable equations and inequalities?

TN Curriculum Standard(s):

6.EE.A.2.c Evaluate expressions at specific values of their variables. Include expressions that arise from formulas used in real-world problems. Perform arithmetic operations, including those involving whole number exponents, in the conventional order when there are no parentheses to specify a particular order (Order of Operations).

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Numerical expression: A combination of numbers and operations.

Variable: A symbol, usually a letter, used to represent a number.

Algebraic expression: A combination of variables, numbers, and at least one operation.

Evaluate: To find the value of an algebraic expression by replacing variables with numbers.

Order of operations: The rules that tell which operation to perform first when more than one operation is used.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Overview of Variables and Expressions (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Expressions (Slide 3)
- Expressions Activity (Slide 4)
- Evaluating Expressions (including Quick Check Activity – Slide 5)
- Order of Operations (including Quick Check Activity – Slide 6)
- Steps in Order of Operations (including video – Slide 7)
- Evaluating Expressions (including videos – Slides 8 and 9)

- Evaluating Expressions (including video and Quick Check Activity – Slide 10)
- Evaluating Expressions (including videos – Slides 11 through 13)
- Evaluating Expressions (including videos – Slides 11 through 13)
- Evaluating Expressions (including video and including additional content/activity – Slide 14)
- Evaluating Expressions (Activities – Slides 15 and 16)
- Drag and Drop Activity (Slide 17)

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Flocabulary, Watch the following supplemental video: **Order of Operations**, and from Safari, Watch the following supplemental videos: **1. Evaluating a polynomial at a given value** and **2. Evaluating Algebraic Expressions**.

BREAK – 10 MINUTES

Teacher Lesson Review: (10 minutes) (Slide 18) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- A mathematical expression is made up of numbers, variables, and arithmetic operators.
- Replacing variables with values in an algebraic expression is called evaluating expressions.
- When you evaluate an expression, the order of operations ensures that the expression always has only one value
- **Order of Operations**
 - 1) Simplify the expressions inside group symbols, like parentheses.
 - 2) Find the value of all powers.
 - 3) Multiply and divide in order from left to right.
 - 4) Add and subtract in order from left to right.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 16

Topic/Lesson Title & Grade Results #: Lesson #16: Solving One Step Equations

Objective(s): Students will be able to:

- Solve problems by writing and solving equations of the form $x + p = q$.
- Solve problems by writing and solving equations of the form $px = q$.

Guiding Question(s):

- How can you determine if values from a specified set, if any, make an equation or inequality true?

TN Curriculum Standard(s):

6.EE.B.7 Solve real-world and mathematical problems by writing and solving one-step equations of the form $x + p = q$ and $px = q$ for cases in which p , q , and x are all nonnegative rational numbers.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Equation: A mathematical statement that shows the equality of two expressions.

Rational number: Any real number written as a fraction p/q of two integers with the denominator q not equal to zero.

Solving an equation: Finding what values fulfill a condition stated in the form of an equation.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review virtual school expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Solving Equations of the Form $x + p = q$ (Slide 3, 4 and 5 (include videos))
- Solving Equations of the Form $x + p = q$ Activity (Slide 6)
- Solving Equations of the Form $px = q$ (including videos Slides 7 through 10)
- Solving Equations of the Form $px = q$ Activity (Slide 11)
- Drag and Drop Activity (Slide 12)

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Flocabulary, Watch the following supplemental video: **Math Terms & Word Problems**, and from Safari, Watch the following supplemental videos: **1. Solving two step equations with fractions** and **2. Solving two step equations with equations.**

BREAK – 10 MINUTES

Teacher Lesson Review: (10 minutes) (Slide 13) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- To solve the equations of the form $x + p = q$, subtract p from both sides of the equation.
- To solve the equations of the form $px = q$, divide both sides of the equation by p .

BREAK – 10 MINUTES

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 17

Topic/Lesson Title & Grade Results #: Lesson #17: Solving Linear Equations

Objective(s): Students will be able to:

Guiding Question(s):

- How can you determine if values from a specified set, if any, make an equation or inequality true?

TN Curriculum Standard(s):

6.EE.B.5 Understand solving an equation or inequality using substitution to determine whether a given number in a specified set makes an equation or inequality true.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Inverse Operation: The operation that reverses the effect of another operation.

Equation: Two mathematical expressions equated to each other by equal to sign.

Expression: Combination of constants, variables, and arithmetic operators.

Solution of an Equation: Value or number which makes the equation true.

Variable: A letter or symbol that represents an unknown value.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- **VOCABULARY:** Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Equations (Slide 3)
- Equations and Expressions (Slide 4)
- Solving an Equation (Slide 5)
- Inverse Operations (Slide 6)
- Solutions to Equations (Slide 7)
- Properties of Equality (Slide 8)
- Solving Equations (Slide 9, 10)
- Solving Equations (Slide 11)

- Solving Equations **(Slide 12)**
- Solving Equations **Activity (Slide 13)**
- Solving Multi-Step Equations **(Slide 14)**
- Solving Multi-Step Equations **Activity (Slide 15)**
- Verbal Problems on Solving Equations **(Slide 16, 17)**
- Verbal Problems on Solving Equations **Activity (Slide 18)**

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From **Flocabulary**, Watch the following supplemental video: **Equations**, and from **Safari**, Watch the following supplemental videos: **1. Solving Equations by Inspections** and **2. Solving One Step Equations**, and **3. Solving Linear Equations – Worksheet**.

BREAK – 10 MINUTES

Teacher Lesson Review: (10 minutes) (Slide 19) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

- Algebraic expression is a combination of variables, constants, and arithmetic operators.
- Two mathematical expressions that are equated to each other by equal to symbol is called an equation.
- Addition and subtraction are inverse operations.
- Multiplication and division are inverse operations.
- Operations which are opposite to each other are called as inverse operations.
- The value or number which satisfies the given equation is known as solution of an equation.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 18

Topic/Lesson Title & Grade Results #: Lesson #18: Solving Linear Inequalities

Objective(s): Students will be able to:

- Define equations.
- Understand the method of solving an equation.
- Determine whether the given number makes an equation true.

Guiding Question(s):

- How can you determine if values from a specified set, if any, make an equation or inequality true?

TN Curriculum Standard(s):

6.EE.B.5 Understand solving an equation or inequality using substitution to determine whether a given number in a specified set makes an equation or inequality true.

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

KEY VOCABULARY/TERMS:

Inequalities: The condition in which two values are not equal.

Solution of an inequality: A value or range of values which, when plugged in for the variable, makes the inequality a true statement.

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do): (15 minutes)

Review classroom expectations, provide students with information on what the daily agenda will consist of. Proceed with the objective of the lesson and introduction. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Objectives (Slide 1)
- Introduction (Slide 2)
- VOCABULARY: Define and discuss the meaning of the vocabulary words listed above.

Lesson Activities (We Do): (45 minutes)

As a whole group, complete the Practice Activities. Discuss. The teacher will play the slide video and provide clarification and additional explanations, as necessary.

- Inequality Symbols Activity (Slide 3)
- Properties of Inequality (Slide 4)
- Strategy in Solving Inequalities (Slide 5)
- Important Step in Solving Inequality (Slide 6)
- Solving Inequalities Video (Slide 7)
- Solving Inequalities with Rational Coefficients (Slide 8)
- Solving Inequalities with Variables on Both Sides (Slide 9)
- Inequalities with Variables on Both Sides (Slide 10)
- Verbal Problems on Solving Inequalities (Slide 11)
- Verbal Problems on Solving Inequalities with Rational Coefficients (Slide 12)
- Drag and Drop Activity (Slide 13)

Teacher Lesson Review: (10 minutes) (Slide 14) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

To solve inequalities

Combine the like terms and simplify.

Isolate the variable terms.

Isolate the variable.

To graph inequalities

- If the variable is greater than a number, locate the number on the number line using an open dot, and shade the part of the number line to the right of the number.
- If the variable is greater than or equal to a number, locate the number on the number line using a closed dot, and shade the part of the number line to the right of the number.
- If the variable is less than a number, locate the number on the number line using an open dot, and shade the part of the number line to the left of the number.
- If the variable is less than or equal to a number, locate the number on the number line using a closed dot, and shade the part of the number line to the left of the number.

Supplemental (10 minutes): - The teacher will show the videos to use for review or support of the lesson. If time permits. From Others, Watch the following supplemental video: **1. Solving Inequalities, 2. Solving Inequalities, and 3. Inequalities.**

BREAK – 10 MINUTES

Teacher Lesson Review: (10 minutes) (Slide 14) Summarize the lesson via bullet points below, review terms and concepts and address student misconceptions.

To solve inequalities,

Combine the like terms and simplify.

Isolate the variable terms.

Isolate the variable.

To graph inequalities

- If the variable is greater than a number, locate the number on the number line using an open dot, and shade the part of the number line to the right of the number.
- If the variable is greater than or equal to a number, locate the number on the number line using a closed dot, and shade the part of the number line to the right of the number.
- If the variable is less than a number, locate the number on the number line using an open dot, and shade the part of the number line to the left of the number.
- If the variable is less than or equal to a number, locate the number on the number line using a closed dot, and shade the part of the number line to the left of the number.

Independent Work – Student Lesson Review/Post-Test (They Do) -(30 minutes)

Explain that students will work independently to complete the post-test. Encourage them to think critically and do their very best on the Posttest. The Posttest will count as the grade for the daily lesson.

Closing/Wrap Up: (5 minutes) Take a moment to reflect on the lesson of the day and pick one of the following closure activities as time permits. Examples: (1) Repeat the Lesson Review, (2) Use an exit ticket: Ask students: What did you learn? What surprised you? What is unclear? (3) Ask: I Care Why? Students explain relevancy of the concept to their life or how they might use it.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 19

Topic/Lesson Title & Grade Results #: Final Post-Test Review & Post-Test

Objective(s):

- Students will review lessons to prepare for final Post-Test.
- Final Post-test will open. All students must complete the final Post-Test

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do):

Identify the purpose of the course

Connect the course to missing or future coursework and Post-test

Lesson Activities/Supplemental (We Do) – 30-60 minutes

Lesson Activities and Review (We Do):

Check Grade Results and have students to review activities/lesson that they have not completed or need assistance with. Hold an open Q&A for students to ask questions regarding the activities/lessons they are reviewing.

Independent Work – Posttest (They Do):

Students will review and complete any incomplete/missed/failed coursework.

Closing/Wrap Up: For those students that have met the requirements, they are finished with Grade Results. Tell the students that you enjoyed working with them, and to have a great summer. If not, students will come back for another opportunity to take the Post Test.

Summer School Lesson Plan

Subject/Grade: 6th Math

Day: 20

Topic/Lesson Title & Grade Results #: Review Lessons & Quizzes

Objective(s):

- Students will review and complete all incomplete/missed/failed coursework.
- Students can retake daily post-tests up to three (3) times before tests lock. Teachers can unlock test so student can retake the test.
- Students can retake final post-test

Materials/Resources Needed: Grade Results Online Platform, Grade Results video, paper, pencil or notes in Grade Results

Technology: Computer, Whiteboard, TEAMS meeting (if applicable)

Attendance: It must be recorded in PowerSchool daily. (5 minutes)

Lesson Introduction (I Do):

Identify the purpose of the course

Connect the course to missing or future coursework and Post-test

Lesson Activities/Supplemental (We Do) – 30-60 minutes

Lesson Activities and Review (We Do):

Check Grade Results and have students to review activities/lesson that they have not completed or need assistance with. Hold an open Q&A for students to ask questions regarding the activities/lessons they are reviewing.

Independent Work – Posttest (They Do):

Students will review and complete any incomplete/missed/failed coursework.

Closing/Wrap Up: Encourage the students to do their best and enjoy the rest of their summer.

Algebraic Expression Anchor Chart

	Word Phrases	Expression
+	<ul style="list-style-type: none">• a number plus 5• add 5 to a number• sum of a number and 5• 5 more than a number• a number increased by 5	$n + 5$
-	<ul style="list-style-type: none">• a number minus 11• subtract 11 from a number• difference of a number and 11• 11 less than a number• a number decreased by 11	$x - 11$
x	<ul style="list-style-type: none">• 3 times a number• 3 multiplied by a number• product of 3 and a number	$3m$
÷	<ul style="list-style-type: none">• a number divided by 7• 7 divided into a number• quotient of a number and 7	$\frac{a}{7}$ or $a \div 7$