## HOUSTON COUNTY SCHOOLS MATHEMATICS DEPARTMENT AC $6^{\text {th }}$ GRADE MATHEMATICS 2020-2021

Houston County's system-wide initiatives center around building fully functional, intensely focused professional learning communities in our schools.
This initiative includes a focus on learning which clarifies and monitors essential learning.
Not all content in a given grade or course is emphasized equally in the standards, nor should it be. Some clusters require greater emphasis than others based on the depth of the ideas, the time that they take to master, and/or their importance to future mathematics or the demands of college and career readiness. More time in these areas may also be necessary for students to meet the demands of the Georgia Milestones assessments.

To say that some standards have greater emphasis is not to say that anything in the standards can safely be neglected in instruction! Neglecting material will leave gaps in student skill and understanding and may leave students unprepared for the challenges of a later grade. This new guide not only gives calendar pacing at the unit level, but also pacing at the standard level and one of three levels of content, listed below.


## PACING GUIDE \& TEACHER PLANNER

Math teachers from every school in Houston County were invited to meet to identify "Essential Standards." Teachers considered the content expectations for future units within their grade, for future grades, on state assessments, and in other content areas to determine which standards were "Essential "Supporting," or "Additional." Their designations are color-coded within the list of standards as below and the included calendar shows approximate within-unit time allocations by standard or cluster.

MEssential

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*Additional
On SharePoint, we amended course materials (including lesson plans, study guides, assessments, and POD's) to reflect the content of greatest emphasis for this math course because of their prioritization of standards.

This document shows where students and teachers should spend the large majority of their time in order to meet the expectations of the standards. It includes a standard-by-standard calendar for teachers to use to plan and allocate teaching/learning time appropriately.

## What resources are available for me?

| What's on your SharePoint Course page? | - Unit Plans <br> - "I Can" Statements with Examples <br> - Unit Assessments <br> - Daily PODs <br> - Lessons and Tasks <br> - Assessment Banks (instructions for ExamView banks after the calendars) <br> - Fluency Unit for RTI <br> - Milestones Resources including Mock Assessments <br> - HRW Teacher/Student Instructions <br> - And much more |
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| Online Textbook | https://my.hrw.com/ <br> Generic login: <br> username: houstoncountyteacher <br> password: Houston1! <br> Each teacher also has a personal account <br> Username: full email address <br> If you don't know your password, use reset password link |
| Student Weeblys | http: / /hcbemath.weebly.com/ |

How do I sync the mathematics material to my file library on my desktop?
From Office 365, navigate to > SharePoint > Departments > Teaching \& Learning > Math > Grade Band > Course Home.

1. Navigate to your course home on SharePoint and click the icon below.

2. You are now in your course's document library. Click the Sync Button.

3. A window will open and all the folders in this library should be checked. Keep them checked and choose Start sync. ***Note, you may encounter two screens before this in which you choose ALLOW and then must SIGN IN with your HCBE email.

4. After a few seconds, you will get notified that the files are syncing to your Houston County BOE One Drive and the files will be located in your file library. These files work like Dropbox and are updated in real time as changes are made by Dr. Rape or Jennifer Farrow. BE SURE YOU SEE GREEN CHECK MARK. This means it is synced and your files are updated. If you open at a later date and do not see your checkmark, repeat this process.


NOTE*** These files are locked for editing and saving to these folders. You may open, edit, and save to your personal files in another file location.
NOTE**** ExamView Tests will NOT open directly from the Houston County Board of Education File Folders. To open, right-click copy and right-click save to a folder on your desktop or My Documents. Then, open the file from this location. A PDF of each test is available for you to preview

| AC6th Grade Georgia Standards of Excellence |  |
| :---: | :---: |
| ${ }_{\mu}$ Essential | 2020-2021 Pacing Guide |
| ${ }^{\text {* }}$ Additional |  |

## Unit 1: Number System Fluency ( $\approx 6.5$ weeks)

## Compute fluently with multi-digit numbers and find common factors and multiples.

${ }^{\text {™GSE6.NS. }} 4$ Find the common multiples of two whole numbers less than or equal to 12 and the common factors of two whole numbers less than or equal to 100.
a. Find the greatest common factor of 2 whole numbers and use the distributive property to express a sum of two whole numbers 1-100 with a common factor as a multiple of a sum of two whole numbers with no common factors. (GCF) Example: $36+8=4(9+2)$
b. Apply the least common multiple of two whole numbers less than or equal to 12 to solve real-world problems.
${ }^{\text {I MGSE6.NS. } 2}$ Fluently divide multi-digit numbers using the standard algorithm.
${ }^{\text {™GSE6.NS. } 3}$ Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.

Apply and extend previous understandings of multiplication and division to divide fractions by fractions.
${ }^{\mu}$ MGSE7.NS.2.d: Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0's or eventually repeats.
${ }^{\mu}$ MGSE6.NS. 1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, including reasoning strategies such as using visual fraction models and equations to represent the problem.
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) $\div(3 / 4)=8 / 9$ becaus3 3/4 of 8/9 is2/3. (In general, (a/b) $\div(c / d)=a d / b c$.)
- How much chocolate will each person get if 3 people share 1/2 lb of chocolate equally?
- How many 3/4-cup servings are in 2/3 of a cup of yogurt?
- How wide is a rectangular strip of land with length $3 / 4$ mi and area $1 / 2$ square mi?

MMGSE7.NS.3: Solve real-world and mathematical problems involving the four operations with (positive) rational numbers.

September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)
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| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Aug 3 | Aug 4 | Aug 5 | Aug 6 | Aug 7 |
| INSERVICE | UNIT 1 6NS. 4 LCM/GCF | UNIT 1 6NS. 4 LCM/GCF | UNIT 1 <br> 6NS. 2 Dividing using algorithm | UNIT 1 <br> 6NS. 2 Dividing using algorithm |
|  | First Day of School |  |  |  |
| Aug 10 | Aug 11 | Aug 12 | Aug 13 | Aug 14 |
| UNIT 1 <br> 6NS. 2 Dividing using algorithm | UNIT 1 <br> 6NS. 3 Computing with decimals | UNIT 1 <br> 6NS. 3 Computing with decimals | UNIT 1 <br> 6NS. 3 Computing with decimals | UNIT 1 <br> 6NS. 3 Computing with decimals |
| Aug 17 | Aug 18 | Aug 19 | Aug 20 | Aug 21 |
| UNIT 1 <br> 6NS. 3 Computing with decimals | UNIT 1 <br> 7NS.2d Fractions to decimals | UNIT 1 <br> 7NS.2d Fractions to decimals | UNIT 1 <br> 6NS. 1 Division of fractions | UNIT 1 <br> 6NS. 1 Division of fractions |
| Aug 24 | Aug 25 | Aug 26 | Aug 27 | Aug 28 |
| UNIT 1 <br> 6NS. 1 Division of fractions | UNIT 1 <br> 6NS. 1 Division of fractions | UNIT 1 <br> 6NS. 1 Division of fractions | UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers | UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers |
| Aug 31 | Sept 1 | Sept 2 | Sept 3 | Sept 4 |
| UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers | UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers | UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers | UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers | UNIT 1 <br> 6NS.1, 7NS. 3 <br> Computation with rational numbers |
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$1^{\text {st }}$ Semester

## August 4 - December 18

September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)
AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence 2020-2021 Pacing Guide
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| Sept 7 | Sept 8 | Sept 9 | Sept 10 | Sept | 11 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| LABOR DAY | UNIT 1 | UNIT 1 | UNIT 1 | UNIT 1 |  |
|  | 6NS.1, 7NS. 3 <br> Computation with rational numbers | 6NS.1, 7NS. 3 <br> Computation with rational numbers | REVIEW | TEST |  |
|  |  |  |  |  |  |

September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)
AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence 2020-2021 Pacing Guide
${ }^{\mu}$ Essential
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September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)

## AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence

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*Additional

## Unit 2a: Rational Explorations ( $\approx 3$ weeks)

## Apply and extend previous understandings of numbers to the system of rational numbers.

rMGSE6.NS. 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, debits/credits, positive/negative electric charge); use positive and negative numbers to represent quantities in real-world contexts, explaining the meaning of 0 in each situation.

## Students will understand the meaning of positive and negative rational numbers

${ }^{\Sigma}$ MGSE6.NS. 6 Understand a rational number as a point on the number line. Extend number line diagrams and coordinate axes familiar from previous grades to represent points on the line and in the plane with negative number coordinates.
${ }^{\Sigma} 6$ a. Recognize opposite signs of numbers as indicating locations on opposite sides of 0 on the number line; recognize that the opposite of the opposite of a number is the number itself, e.g., $(-3)=3$, and that 0 is its own opposite.
46b. Understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane; recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes. Given a point in the coordinate plane, determine the coordinates resulting from a reflection.
${ }^{\Sigma} 6$ 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.

HMGSE6.NS. 7 Understand ordering and absolute value of rational numbers.
${ }^{\text {² }} 7$ a. Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. For example, interpret -- as a statement that -3 is located to the right of -7 on a number line oriented from left to right.

47b. Write, interprets, and explains statements of order for rational numbers in real-world contexts. For example, write $-3^{\circ} \mathrm{C}>-7^{\circ} \mathrm{C}$ to express the fact that $-3^{\circ} \mathrm{C}$ is warmer than $-7^{\circ} \mathrm{C}$.
${ }^{\Sigma} 7 \mathrm{c}$. Understand the absolute value of a rational number as its distance from 0 on the number line; interpret absolute value as magnitude for a positive or negative quantity in a real-world situation. For example, for an account balance of -30 dollars, write $|-30|=30$ to describe the size of the debt in dollars.
${ }^{\text {² }} 7$ d. Distinguish comparisons of absolute value from statements about order. For example, recognize that an account balance less than -30 dollars represents a debt greater than 30 dollars.
${ }^{\Sigma}$ MGSE6.NS. 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.
${ }^{\text {™ }}$ MGSE6.G. 3 Draw polygons in the coordinate plane given coordinates for the vertices; use coordinates to find the length of a side joining points with the same first coordinate or the same second coordinate. Apply these techniques in the context of solving real-world and mathematical problems.
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## AC6th GRADE MATH - UNIT 2A CALENDAR

${ }^{\mu}$ Essential
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September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)
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## Unit 2b: Rational Operations( $\approx 4$ weeks)

${ }^{\mu}$ MGSE 7.NS. 1 Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

1a. Show that a number and its opposite have a sum of 0 (are additive inverses). Describe situations in which opposite quantities combine to make 0 . For example, your bank account balance is $-\$ 25.00$. You deposit $\$ 25.00$ into your account. The net balance is $\$ 0.00$.
1b. Understand $p+q$ as the number located a distance from $p$, in the positive or negative direction depending on whether $q$ is positive or negative. Interpret sums of rational numbers by describing real world contexts.
1c. Understand subtraction of rational numbers as adding the additive inverse, $p-q=p+(-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts.
1d. Apply properties of operations as strategies to add and subtract rational numbers.
HMGSE7.NS. 2 Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers.

2a. Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1)=1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.
2b. Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If $p$ and $q$ are integers then $-(p / q)=(-p) / q=p /(-q)$. Interpret quotients of rational numbers by describing real-world contexts.
2c. Apply properties of operations as strategies to multiply and divide rational numbers.
2d. Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0's or eventually repeats.
${ }^{4}$ MGSE7.NS. 3 Solve real-world and mathematical problems involving the four operations with rational numbers.

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AC6 ${ }^{\text {TH }}$ GRADE MATH - UNIT 2B CALENDAR
${ }^{\mu}$ Essential
${ }^{\text {}}$ Supporting
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September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)
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## Unit 3: Expressions ( $\approx 3$ weeks)

Apply and extend previous understandings of arithmetic to algebraic expressions.
MMGSE6EE. 1 Write and evaluate numerical expressions involving whole-number exponents.
HMGSE6EE. 2 Write, read, and evaluate expressions in which letters stand for numbers.
2a. Write expressions that record operations with numbers and with letters standing for numbers. For example, express the calculation "Subtract y from 5" as -. Translate verbal phrases to algebraic expressions Use variables, such as $x$ or $y$, for unknown quantities in algebraic expressions

2b. Identify parts of an expression using mathematical terms (sum, term, product, factor, quotient, and coefficient); view one or more parts of an expression as a single entity. For example, describe the expression as a product of two factors; view as both a single entity and a sum of two terms.

2c. Evaluate expressions at specific values for their variables. Include expressions that arise from formulas 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).

HMGSE6EE. 3 Apply the properties of operations to generate equivalent expressions. Simplify algebraic expressions, using commutative, associative, and distributive properties as appropriate.
rMGSE7.EE. 1 Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.
"MGSE6EE. 4 Identify when two expressions are equivalent (i.e., when the two expressions name the same number regardless of which value is substituted into them).
"MGSE7EE. 2 Understand that rewriting an expression in different forms in a problem context can clarify the problem and how the quantities in it are related. For example a $+0.05 \mathrm{a}=1.05 \mathrm{a}$ means that adding a $5 \%$ tax to a total is the same as multiplying the total by 1.05 .

## 1st Semester

August 4 - December 18
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$1^{\text {st }}$ Semester
August 4 - December 18
September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day); November 23-27 (Thanksgiving Holiday)
AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence ${ }^{\mu}$ Essential
${ }^{\text {ESupporting }}$
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*Additional

## Unit 4: One-Step Equations and Inequalities ( $\approx 2$ weeks)

## Reason about and solve one-variable equations and inequalities.

${ }^{\mu}$ MGSE6.EE. 5 Understand solving an equation or inequality as a process of answering a question: which values from a specified set, if any, make the equation or inequality true? Use substitution to determine whether a given number in a specified set makes an equation or inequality true.
${ }^{\text {M MGSE6.EE. } 6 ~ U s e ~ v a r i a b l e s ~ t o ~ r e p r e s e n t ~ n u m b e r s ~ a n d ~ w r i t e ~ e x p r e s s i o n s ~ w h e n ~ s o l v i n g ~ a ~ r e a l-~}$ 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. Given a problem, define a variable, write an equation.
${ }^{\text {MMGSE6.EE. }} 7$ Solve real-world and mathematical problems by writing and solving equations of the form $\quad x+p=q$ and $p x=q$ for cases in which $p, q$ and $x$ are all non-negative rational numbers.
${ }^{\mu}$ MGSE6.EE. 8 Write an inequality of the form $x>c$ or $x<c$ to represent a constraint or condition in a real-world or mathematical problem. Recognize that inequalities of the form $x>c$ or $x<c$ have infinitely many solutions; represent solutions of such inequalities on number line diagram

| $1^{\text {st }}$ Semester |  |
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| August 4-December 18 |  |
| September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's |  |
| Day); November 23-27 (Thanksgiving Holiday) |  |
| AC6 ${ }^{\text {TH }}$ GRADE MATH - UNIT 4 CALENDAR |  |
| ESupporting | *Additional |



# January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student 

 Holiday)March 29-April 2 (Spring Break)$\begin{array}{cc}\text { AC6 }{ }^{\text {th }} \text { Grade Georgia Standards of Excellence } & \text { 2020-2021 Pacing Guide } \\ \text { HEssential } & { }^{*} \text { Additional }\end{array}$

## Unit 5A: Rate, Ratio, \& Proportional Reasoning (MODELS to Equations) ( $\approx 3$ weeks)

## Understand ratio concepts and use ratio reasoning to solve problems.

HMGSE6.RP. 1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

HMGSE7.RP. 1 Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units.

HMGSE6.RP. 2 Understand the concept of a unit rate associated with a ratio with (b not equal to zero), and use rate language in the context of a ratio relationship.
"MGSE6.RP. 3 Use ratio and rate reasoning to solve real-world and mathematical problems utilizing strategies such as tables of equivalent ratios, tape diagrams (bar models), double number line diagrams, and/or equations.

3a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the eoordinate plane. Use tables to compare ratios

3b. Solve unit rate problems including those involving unit pricing and constant speed. (MODELS)

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

3d. Given a conversion factor, use ratio reasoning to convert measurement units within one system of measurement and between two systems of measurements (customary and metric); manipulate and transform units appropriately when multiplying or dividing quantities. For example, given $1 \mathrm{in} .=2.54 \mathrm{~cm}$, how many centimeters are in 6 inches?

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$\begin{array}{cc}\text { AC6 }{ }^{\text {th }} \text { Grade Georgia Standards of Excellence } & \text { ESupporting }\end{array}$

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Jan 4 | Jan 5 | Jan 6 | Jan 7 | Jan 8 |
| Teacher Workday | UNIT 5A 6RP.1, 6RP.3a Ratios and Tables | UNIT 5A 6RP.1, 6RP.3a Ratios and Tables | UNIT 5A 6RP.2, 6RP3b, 7RP. 1 Unit Rates | UNIT 5A 6RP.2, 6RP3b, 7RP. 1 Unit Rates |
|  |  |  |  |  |
| Jan 11 | Jan 12 | Jan 13 | Jan 14 | Jan 15 |
| UNIT 5A <br> 6RP.2, 6RP3b, 7RP. 1 <br> Unit Rates | UNIT 5A 6RP.2, 6RP3b, 7RP. 1 <br> Unit Rates | UNIT 5A <br> 6RP.3d <br> Converting measurements | UNIT 5A <br> 6RP.3d <br> Converting measurements | $\begin{gathered} \hline \text { UNIT 5A } \\ \text { 6RP.3c } \\ \text { Percent Ratios } \end{gathered}$ |
|  |  |  |  |  |
| Jan 18 | Jan 19 | Jan 20 | Jan 21 | Jan 22 |
| Veteran's Day | UNIT 5A | UNIT 5A | UNIT 5A | UNIT 5A |
|  | 6RP.3c <br> Percent Ratios | $\begin{gathered} \text { 6RP.3d } \\ \text { Percent Ratios } \end{gathered}$ | Review | Test |
|  |  |  |  |  |

$2^{\text {nd }}$ Semester
January 5 - May 26
January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student Holiday) March 29-April 2 (Spring Break)
$\begin{array}{cc}\text { AC6 }{ }^{\text {th }} \text { Grade Georgia Standards of Excellence } & \text { 2020-2021 Pacing Guide } \\ \text { }{ }^{\mu} \text { Essential } & \text { *Additional }\end{array}$

## Unit 5b: Applying Proportional Relationships ( $\approx 4$ weeks)

Understand ratio concepts and use ratio reasoning to solve problems.
${ }^{4}$ MGSE6.RP. 3 Use ratio and rate reasoning to solve real-world and mathematical problems, e.g., by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.

3a. Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios. Analyze and describe patterns arising from mathematical rules, tables, and graphs
${ }^{\text {H}}$ MGSE6.EE. 9 Use variables to represent two quantities in a real-world problem that change in relationship to one another.
a. Write an equation to express one quantity, the dependent variable, in terms of the other quantity, the independent variable.
b. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. For example, in a problem involving motion at constant speed, list and graph ordered pairs of distances and times, and write the equation d=65t to represent the relationship between distance and time

Analyze proportional relationships and use them to solve real-world and mathematical problems.
${ }^{4}$ MGSE7.RP. 2 Recognize and represent proportional relationships between quantities.
2a. Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin.
2b. Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships.
2c. Represent proportional relationships by equations. For example, if total cost is proportional to the number of items purchased at a constant price $(p)$, the relationship between the total cost $(t)$ and the number of items ( $n$ ) can be expressed as $t=p n$.
2d. Explain what a point $(x, y)$ on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0,0)$ and $(1, r)$ where $r$ is the unit rate.

## $2^{\text {nd }}$ Semester

January 5 - May 26
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2020-2021 Pacing Guide *Additional

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Jan 25 | Jan 26 | Jan 27 | Jan 28 | Jan 29 |
| UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs | UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs | UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs | UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs | UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs |
| Feb 1 | Feb 2 | Feb 3 | Feb 4 | Feb 5 |
| UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs | UNIT 5B <br> 6RP.3a <br> Analyze and describe patterns from rules, tables, and graphs | UNIT 5B <br> 6EE. 9 <br> Writing and Analyzing Equations for relationships between two variables | UNIT 5B <br> 6EE. 9 <br> Writing and Analyzing Equations for relationships between two variables | UNIT 5B <br> 6EE. 9 <br> Writing and Analyzing Equations for relationships between two variables |
| Feb 8 | Feb 9 | Feb 10 | Feb 11 | Feb 12 |
| UNIT 5B <br> 7RP. 2 <br> Proportional Relationships | UNIT 5B <br> 7RP. 2 <br> Proportional Relationships | UNIT 5B <br> 7RP. 2 <br> Proportional Relationships | UNIT 5B <br> 7RP. 2 <br> Proportional Relationships | UNIT 5B <br> 7RP. 2 <br> Proportional Relationships |
| Feb 15 | Feb 16 | Feb 17 | Feb 18 | Feb 19 |
| President's Day | Inservice | UNIT 5B <br> 7RP. 2 <br> Proportional Relationships | Review | Test |
|  |  |  |  |  |

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*Additional

## Unit 6: Area and Volume ( $\sim 3$ weeks)

Solve real-world and mathematical problems involving area, surface area, and volume.
"MGSE6.G. 1 Find area of right triangles, other triangles, special quadrilaterals, and polygons by composing into rectangles or decomposing into triangles and other shapes; apply these techniques in the context of solving real-world and mathematical problems. Find the area of a polygon (regular and irregular) by dividing it into squares, rectangles, and/or triangles and find the sum of the areas of those shapes.
${ }^{\text {™GSE6.G. }} 4$ Represent three-dimensional figures using nets made up of rectangles and triangles, and use the nets to find the surface area of these figures. Apply these techniques in the context of solving real-world and mathematical problems.
*MGSE6.G. 2 Find the volume of a right rectangular prism with fractional edge lengths by packing it with unit cubes of the appropriate unit fraction edge lengths, and show that the volume is the same as would be found by multiplying the edge lengths of the prism. Apply the formulas $\mathrm{V}=1 \mathrm{wh}$ and $\mathrm{V}=$ Bh to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

## $2^{\text {nd }}$ Semester

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January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student Holiday) March 29-April 2 (Spring Break)

## AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence <br> ${ }^{\mu}$ Essential <br> ${ }^{\text {ESupporting }}$ <br> 2020-2021 Pacing Guide <br> *Additional

AC6 ${ }^{\text {TH }}$ GRADE MATH - UNIT 6 CALENDAR

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Feb 22 | Feb 23 | Feb 24 | Feb 25 | Feb 26 |
| UNIT 6 $6 . \mathrm{G1}$ <br> Area of Polygons | UNIT 6 $6 . \mathrm{G1}$ <br> Area of Polygons | UNIT 6 $6 . \mathrm{G1}$ <br> Area of Polygons | UNIT 6 $6 . \mathrm{G1}$ <br> Area of Polygons | UNIT 6 $6 . \mathrm{G1}$ <br> Area of Polygons |
|  |  |  |  |  |



## $2^{\text {nd }}$ Semester

## January 5 - May 26

January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student Holiday) March 29-April 2 (Spring Break)
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${ }^{\mu}$ Essential
¿Supporting
*Additional

## Unit 7: Statistics ( $\sim 3$ weeks)

## Develop understanding of statistical variability.

*MGSE6.SP. 1 Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers.
*MGSESP. 2 Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape.
*MGSE6.SP. 3 Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number.

## Summarize and describe distributions.

*MGSE6.SP. 4 Display numerical data in plots on a number line, including dot plots, histograms, and box plots.
*MGSE6.SP. 5 Summarize numerical data sets in relation to their context, such as by:
a. Reporting the number of observations. Analyze categorical data using frequencies of categories or proportions of categories
b. Describing the nature of the attribute under investigation, including how it was measure and its units of measurement.
c. Giving quantitative measures of center (median and/or mean) and variability (interquartile range), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data was gathered. Analyze numerical data using the appropriate measure of central tendency (mean and/or median). Analyze data with respect to the appropriate measures of variation (range, interquartile range).
d. Relating the choice of measures of center and variability to the shape of the data distribution and the context in which the data was gathered.

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AC6 ${ }^{\text {TH }}$ GRADE MATH - UNIT 7 CALENDAR

| Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: |
| Mar 15 | Mar 16 | Mar 17 | Mar 18 | Mar 19 |
| UNIT 7 6SP.1-3 Understanding Statistical Variability | UNIT 7 6SP.1-3 <br> Understanding Statistical Variability | UNIT 7 6SP.1-3 Understanding Statistical Variability | UNIT 7 6SP. 4 Displaying Statistical data | UNIT 7 6SP. 4 Displaying Statistical data |
| Mar 22 | Mar 23 | Mar 24 | Mar 25 | Mar 26 |
| UNIT 7 $\text { 6SP. } 4$ <br> Displaying Statistical data | UNIT 7 $\text { 6SP. } 4$ <br> Displaying Statistical data | UNIT 7 $\text { 6SP. } 4$ <br> Displaying Statistical data | UNIT 7 $\text { 6SP. } 4$ <br> Displaying Statistical data | UNIT 7 <br> 6SP. 5 <br> Summarizing Statistical Data |
| Mar 29 | Mar 30 | Marr 31 | Apr 1 | Apr 2 |
| Spring Break | Spring Break | Spring Break | Spring Break | Spring Break |
| Apr 5 | Apr 6 | Apr 7 | Apr 8 | Apr 9 |
| UNIT 7 6SP. 5 Summarizing Statistical Data | UNIT 7 $\text { 6SP. } 5$ <br> Summarizing Statistical Data | UNIT 7 $\text { 6SP. } 5$ <br> Summarizing Statistical Data | UNIT 7 REVIEW | UNIT 7 <br> TEST |
|  |  |  |  |  |

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AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence 2020-2021 Pacing Guide ${ }^{\mu}$ Essential

*Note: There is pending legislation to require testing only during the last 25 days of school, so these testing windows could change. These dates are left blank for you to fill in later when you know the actual GMAS dates for Spring 2021.

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¿Supporting
*Additional


# $2^{\text {nd }}$ Semester <br> January 5 - May 26 <br> January 18 (MLK Holiday); February 15 (President's Day Holiday); February 16 (Student Holiday) March 29-April 2 (Spring Break) <br> AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence <br> ${ }^{\mu}$ Essential <br> ${ }^{\text {ESupporting }}$ <br> 2020-2021 Pacing Guide <br> *Additional <br> AC6 ${ }^{\text {th }}$ Grade Georgia Standards of Excellence <br> ${ }^{\mu}$ Essential ${ }^{\text {Supporting }}$ *Additional 

## Unit 8: Equations and Proportional Relationships ( $\approx 4$ weeks)

MMGSE7.EE. 4 Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.
4a. Solve word problems leading to equations of the form $p x+q=r$ and $p(x+q)=r$, where $p, q$, and $r$ are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach.
4b. Solve word problems leading to inequalities of the form $\mathrm{px}+\mathrm{q}>\mathrm{r}$ or $\mathrm{px}+\mathrm{q}<\mathrm{r}$, where $\mathrm{p}, \mathrm{q}$ and $r$ are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem.
4c. Solve real-world and mathematical problems by writing and solving equations of the form $\mathrm{x}+\mathrm{p}=\mathrm{q}$ and $\mathrm{px}=\mathrm{q}$ in which p and q are rational numbers.

MMGSE7.EE. 3 Solve multistep real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals) by applying properties of operations as strategies to calculate with numbers, converting between forms as appropriate, and assessing the reasonableness of answers using mental computation and estimation strategies.
For example:

- If a woman making $\$ 25$ an hour gets a $10 \%$ raise, she will make an additional $1 / 10$ of her salary an hour, or $\$ 2.50$, for a new salary of $\$ 27.50$.
- If you want to place a towel bar $93 / 4$ inches long in the center of a door that is $271 / 2$ inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.

HMGSE7.RP. 3 Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, and fees.
${ }^{\text {E }}$ MGSE7.G. 1 Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale

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AC6 ${ }^{\text {TH }}$ GRADE MATH - UNIT 8 CALENDAR


# How to Make ExamView Banks Easily Accessible 

 Open ExamView Test Generator1. After closing the welcome menu, choose the EDIT tab. Select "Preferences"

2. In this window, choose "Files" and then the file folder icons next to Question banks.

3. Navigate to the location of the course materials on your computer -Houston County Board of Education Synced Files. Highlight and select. Click OK.

4. Now when you go to create a test and select questions, ExamView will default to this location. ExamView Banks are located in the ExamView folder and in each Unit's Assessment folder.

