

HOUSTON COUNTY SCHOOLS MATHEMATICS DEPARTMENT

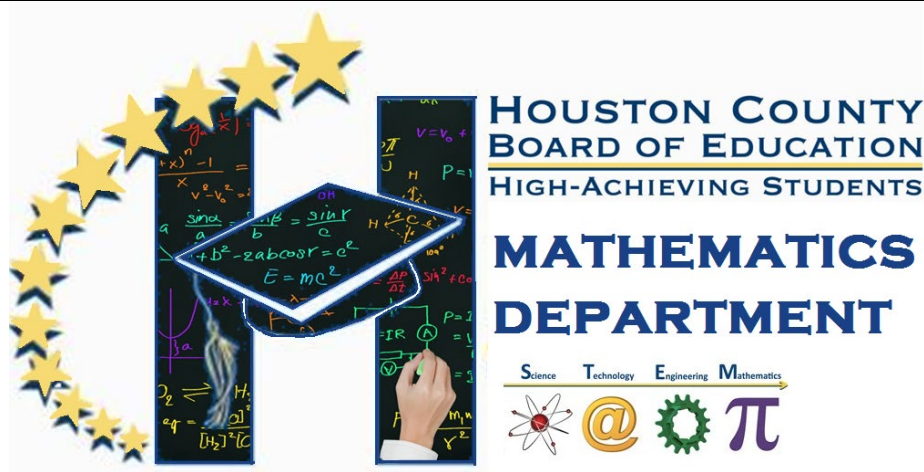
6TH GRADE MATHEMATICS 2020-2021

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.

■ Essential

■ Supporting

*Additional

SharePoint course materials (including lesson plans, study guides, assessments, and POD's) 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.

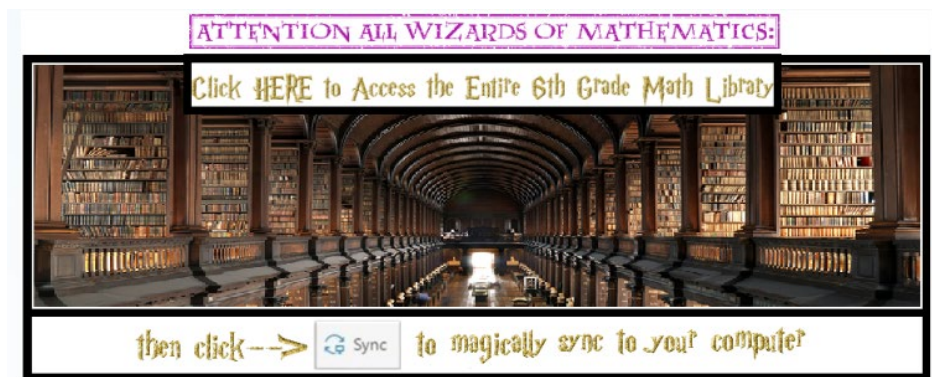
What resources are available?

<p>What's on my SharePoint Course page?</p> <p>From Office 365, navigate to > SharePoint > Departments > Teaching & Learning > Math > Grade Band > Course Home</p>	<ul style="list-style-type: none"> • Unit Plans • “I Can” Statements with Examples • Unit Assessments • Daily PODs • Lessons and Tasks • Assessment Banks <i>(instructions for ExamView banks after the calendars)</i> • Fluency Unit for RTI • Milestones Resources including Mock Assessments • HRW Teacher/Student Instructions • And much more
<p>Online Textbook</p>	<p>https://my.hrw.com/ Generic login: username: houstoncountyteacher password: Houston1!</p> <p>Each teacher also has a personal account Username: full email address If you don't know your password, use reset password link</p>
<p>Student Weeblys</p>	<p>http://hcbemath.weebly.com/</p>

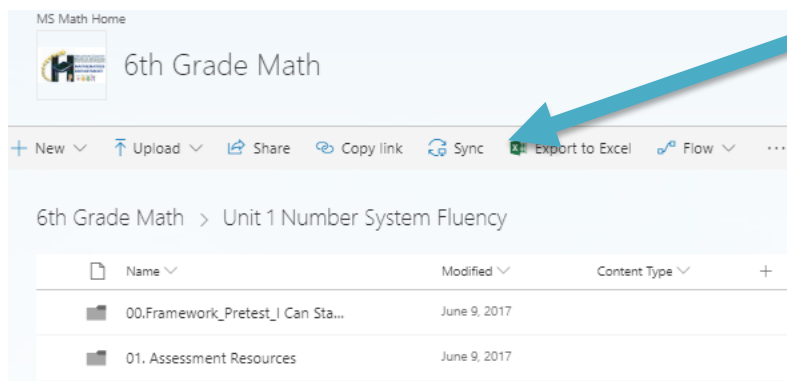
How do I sync the mathematics material to my file library on my desktop?

From Office 365, navigate to > SharePoint > Departments > Teaching & Learning > Math > Grade Band > Course Home.

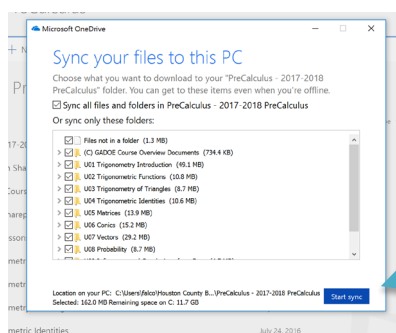
1. Navigate to your course home on SharePoint and click the icon below.



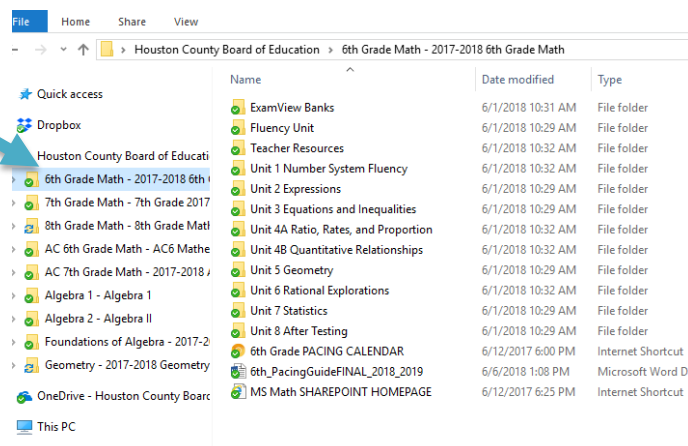
- You are now in your course's document library. Click the Sync Button.



- 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.



- 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 synced 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

Unit 1: Number System Fluency (≈5 weeks)

Embed Supplemental Fluency Unit throughout year in your Extended Learning Period or Regular Class Period

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

ΣMGSE6.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.

- 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: $36 + 8 = 4(9 + 2)$
- Apply the least common multiple of two whole numbers less than or equal to 12 to solve real-world problems.

ΣMGSE6.NS.2 Fluently divide multi-digit numbers using the standard algorithm.

ΣMGSE6.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.

Ⓜ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 $(2/3) \div (3/4) = 8/9$ because $3/4$ of $8/9$ is $2/3$. (In general, $(a/b) \div (c/d) = ad/bc$.)
- 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?

1st 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)*

6TH GRADE MATH - UNIT 1 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Aug 3	Aug 4	Aug 5	Aug 6	Aug 7
Pre-Planning	UNIT 1 <i>NS.4</i> GCF & LCM	UNIT 1 <i>NS.4</i> GCF & LCM	UNIT 1 <i>NS.4</i> GCF & LCM	UNIT 1 <i>NS.4</i> GCF & LCM
Aug 10	Aug 11	Aug 12	Aug 13	Aug 14
UNIT 1 <i>NS.4</i> GCF & LCM	UNIT 1 <i>NS.4</i> GCF & LCM	UNIT 1 <i>NS.2</i> Division Algorithm	UNIT 1 <i>NS.2</i> Division Algorithm	UNIT 1 <i>NS.2</i> Division Algorithm
Aug 17	Aug 18	Aug 19	Aug 20	Aug 21
UNIT 1 <i>NS.2</i> Division Algorithm	UNIT 1 <i>NS.2</i> Division Algorithm	UNIT 1 <i>NS.3</i> Operations with Decimals	UNIT 1 <i>NS.3</i> Operations with Decimals	UNIT 1 <i>NS.3</i> Operations with Decimals
Aug 24	Aug 25	Aug 26	Aug 27	Aug 28
UNIT 1 <i>NS.3</i> Operations with Decimals	UNIT 1 <i>NS.1</i> Dividing Fractions	UNIT 1 <i>NS.1</i> Dividing Fractions	UNIT 1 <i>NS.1</i> Dividing Fractions	UNIT 1 <i>NS.1</i> Dividing Fractions
Aug 31	Sept 1	Sept 2	Sept 3	Sept 4
UNIT 1 <i>NS.1</i> Dividing Fractions	MAP Testing <i>Exact testing date TBD</i>	MAP Testing <i>Exact testing date TBD</i>	UNIT 1 <i>REVIEW/TEST</i>	UNIT 1 <i>REVIEW/TEST</i>

Unit 2: Expressions (≈ 5 weeks)

Apply and extend previous understandings of arithmetic to algebraic expressions.

ⓂMGSE6EE.1 Write and evaluate numerical expressions involving whole-number exponents.

ⓂMGSE6EE.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 $5 - y$. 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 $3x + 2y$ as a sum of two terms; view $3x + 2y$ 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).

ⓂMGSE6EE.3 Apply the properties of operations to generate equivalent expressions. Simplify algebraic expressions, using commutative, associative, and distributive properties as appropriate.

Ⓜ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).

ⓈMGSE6.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.

- 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: $36 + 8 = 4(9 + 2)$
- Apply the least common multiple of two whole numbers less than or equal to 12 to solve real-world problems.

1st Semester

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November 23-27 (Thanksgiving Holiday)

6TH GRADE MATH - UNIT 2 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Sept 7	Sept 8	Sept 9	Sept 10	Sept 11
Labor Day	UNIT 2 <i>EE.1</i> Exponents	UNIT 2 <i>EE.1</i> Exponents	UNIT 2 <i>EE.1</i> Exponents	UNIT 2 <i>EE.2</i> Read, write, evaluate expressions
Sept 14	Sept 15	Sept 16	Sept 17	Sept 18
UNIT 2 <i>EE.2</i> Read, write, evaluate expressions	UNIT 2 <i>EE.2</i> Read, write, evaluate expressions	UNIT 2 <i>EE.2</i> Read, write, evaluate expressions	UNIT 2 <i>EE.2</i> Read, write, evaluate expressions	UNIT 2 <i>EE.2</i> Read, write, evaluate expressions
Sept 21	Sept 22	Sept 23	Sept 24	Sept 25
UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions
Sep 28	Sep 29	Sep 30	Oct 1	Oct 2
UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 <i>EE.3, EE.4, NS. 4</i> Generate equivalent expressions	UNIT 2 REVIEW/TEST	UNIT 2 REVIEW/TEST

1st Semester

August 4 - December 18

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6th Grade Georgia Standards of Excellence

2020-2021 Pacing Guide

^u Essential

^Σ Supporting

^{*} Additional

Unit 3: One-Step Equations and Inequalities (≈ 3 weeks)

Reason about and solve one-variable equations and inequalities.

^u**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.

^u**MGSE6.EE.6** 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. Given a problem, define a variable, write an equation.

^u**MGSE6.EE.7** Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p , q and x are all non-negative rational numbers.

^u**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 diagrams.

1st 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)

6TH GRADE MATH - UNIT 3 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Oct 5	Oct 6	Oct 7	Oct 8	Oct 9
UNIT 3 EE. 5 <i>Which value makes equation or inequality true?</i>	UNIT 3 EE. 5 <i>Which value makes equation or inequality true?</i>	UNIT 3 EE. 5 <i>Which value makes equation or inequality true?</i>	UNIT 3 EE. 6 <i>Write equation with variable</i>	<i>In Service</i>
Oct 12	Oct 13	Oct 14	Oct 15	Oct 16
Fall Break				
Oct 19	Oct 20	Oct 21	Oct 22	Oct 23
UNIT 3 EE. 7 <i>Solving equations and inequalities</i>	UNIT 3 EE. 7 <i>Solving equations and inequalities</i>	UNIT 3 EE. 7 <i>Solving equations and inequalities</i>	UNIT 3 EE. 8 <i>Write inequality</i>	UNIT 3 EE. 8 <i>Write inequality</i>
Oct 26	Oct 27	Oct 28	Oct 29	Oct 30
UNIT 3 EE. 8 <i>Write inequality</i>	UNIT 3 EE. 8 <i>Write inequality</i>	UNIT 3 EE. 8 <i>Write inequality</i>	UNIT 3 REVIEW/TEST	UNIT 3 REVIEW/TEST

Unit 4a: Rate, Ratio, & Proportional Reasoning (MODELS to Equations) (≈ 6 weeks)

Understand ratio concepts and use ratio reasoning to solve problems.

⌚MGSE6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.

⌚MGSE6.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 coordinate 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 in. = 2.54 cm, how many centimeters are in 6 inches?

1st 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)

6TH GRADE MATH - UNIT 4a CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Nov 2	Nov 3	Nov 4	Nov 5	Nov 6
UNIT 4a <i>RP.1</i> <i>Understand ratios</i>	UNIT 4a <i>RP.1</i> <i>Understand ratios</i>	UNIT 4a <i>RP.2</i> <i>Understand unit rate and use rate language</i>	UNIT 4a <i>RP.2</i> <i>Understand unit rate and use rate language</i>	UNIT 4a <i>RP.3</i> <i>Make equivalent tables and find missing values</i>
Nov 9	Nov 10	Nov 11	Nov 12	Nov 13
UNIT 4a <i>RP.3</i> <i>Make equivalent tables and find missing values. Use table to compare ratios</i>	UNIT 4a <i>RP.3</i> <i>Make equivalent tables and find missing values. Use table to compare ratios</i>	Veteran's Day	UNIT 4a <i>RP.3</i> <i>Make equivalent tables and find missing values. Use table to compare ratios</i>	UNIT 4a <i>RP.3</i> <i>Make equivalent tables and find missing values. Use table to compare ratios</i>
Nov 16	Nov 17	Nov 18	Nov 19	Nov 20
UNIT 4a <i>RP.3</i> <i>Solve unit rate problems involving unit pricing and constant speed</i>	UNIT 4a <i>RP.3</i> <i>Solve unit rate problems involving unit pricing and constant speed</i>	UNIT 4a <i>RP.3</i> <i>Solve unit rate problems involving unit pricing and constant speed</i>	UNIT 4a <i>RP.3</i> <i>Solve unit rate problems involving unit pricing and constant speed</i>	UNIT 4a <i>RP.3</i> <i>Solve unit rate problems involving unit pricing and constant speed</i>
Nov 23	Nov 24	Nov 25	Nov 26	Nov 27
THANKSGIVING	THANKSGIVING	THANKSGIVING	THANKSGIVING	THANKSGIVING

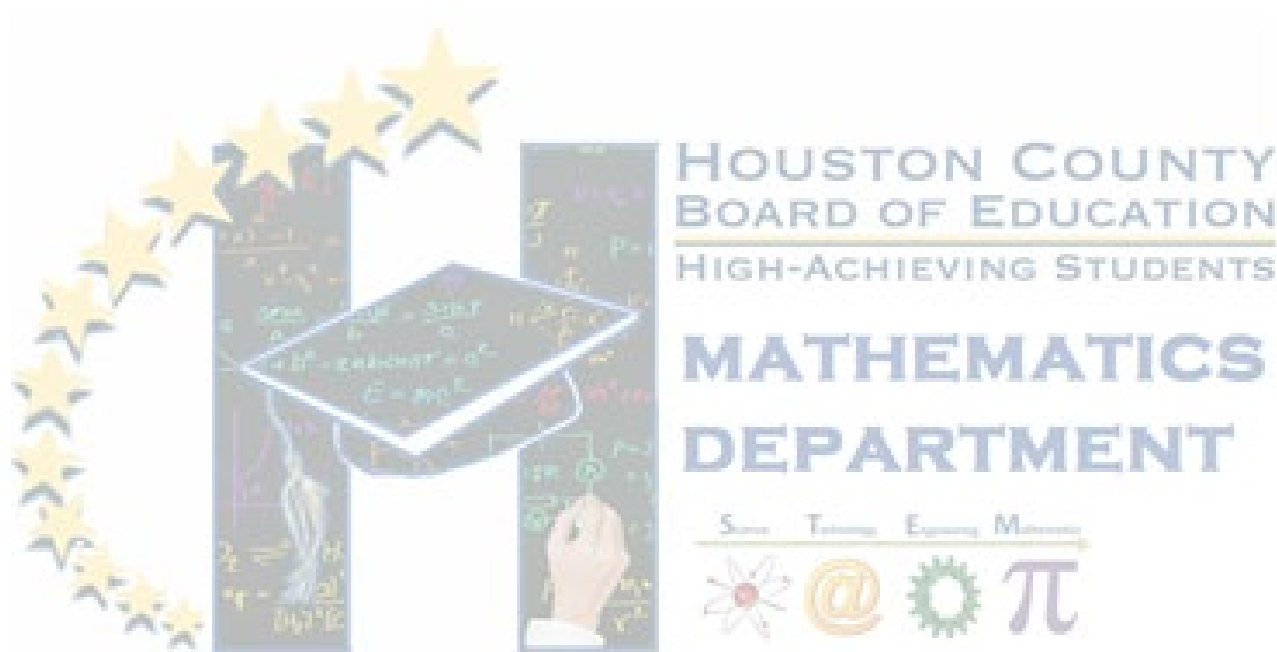
1st Semester

August 4 - December 18

*September 7 (Labor Day Holiday); October 13-16 (Fall Holiday); November 11 (Veteran's Day);
November 23-27 (Thanksgiving Holiday)*

6TH GRADE MATH - UNIT 4a CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Nov 30	Dec 1	Dec 2	Dec 3	Dec 4
UNIT 4a <i>RP.3</i> <i>Find a percent of a quantity</i>	UNIT 4a <i>RP.3</i> <i>Find a percent of a quantity</i>	UNIT 4a <i>RP.3</i> <i>Find a percent of a quantity</i>	UNIT 4a <i>RP.3</i> <i>Find a percent of a quantity</i>	UNIT 4a <i>RP.3</i> <i>Find a percent of a quantity</i>
Dec 7	Dec 8	Dec 9	Dec 10	Dec 11
UNIT 4a <i>RP.3</i> <i>Conversions using ratio reasoning</i>	UNIT 4a <i>RP.3</i> <i>Conversions using ratio reasoning</i>	UNIT 4a <i>RP.3</i> <i>Conversions using ratio reasoning</i>	UNIT 4a <i>RP.3</i> <i>Conversions using ratio reasoning</i>	UNIT 4a <i>RP.3</i> <i>Conversions using ratio reasoning</i>
Dec 14	Dec 15	Dec 16	Dec 17	Dec 18
UNIT 4a <i>RP.3</i> <i>Conversions using ratio reasoning</i>	MAP Testing	MAP Testing	UNIT 4a <i>REVIEW/TEST</i>	(1/2 day) UNIT 4a <i>REVIEW/TEST</i>
	<i>Exact testing date TBD</i>	<i>Exact testing date TBD</i>		



2nd 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)

6th Grade Georgia Standards of Excellence

2020-2021 Pacing Guide

¹ Essential

² Supporting

^{*} Additional

Unit 4b: Proportional Reasoning and Analyzing Quantitative Relationships (\approx 2 weeks)

¹MGSE6.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

²MGSE6.EE.9 Use variables to represent two quantities in a real-world problem that change in relationship to one another.

- Write an equation to express one quantity, the dependent variable, in terms of the other quantity, the independent variable.
- 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

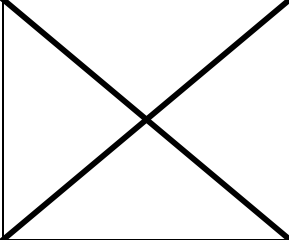
2nd Semester

January 5 - May 26

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

March 29-April 2 (Spring Break)

6TH GRADE MATH - UNIT 4b CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 4	Jan 5	Jan 6	Jan 7	Jan 8
IN SERVICE	UNIT 4b <i>RP.3</i> <i>Analyze and describe patterns from rules, tables, and graphs</i>	UNIT 4b <i>RP.3</i> <i>Analyze and describe patterns from rules, tables, and graphs</i>	UNIT 4b <i>RP.3</i> <i>Analyze and describe patterns from rules, tables, and graphs</i>	UNIT 4b <i>EE.9</i> <i>Write equation of dependent variable in terms of independent variable</i>
				
Jan 11	Jan 12	Jan 13	Jan 14	Jan 15
UNIT 4b <i>EE.9a</i> <i>Write equation of dependent variable in terms of independent variable</i>	UNIT 4b <i>EE.9b</i> <i>Analyze relationship between independent and dependent variables</i>	UNIT 4b <i>EE.9b</i> <i>Analyze relationship between independent and dependent variables</i>	UNIT 4b <i>REVIEW/TEST</i>	UNIT 4b <i>REVIEW/TEST</i>

2nd Semester

January 5 - May 26

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March 29-April 2 (Spring Break)

6th Grade Georgia Standards of Excellence

2020-2021 Pacing Guide

¹ Essential

² Supporting

* Additional

Unit 5: Area & Volume (\approx 5 weeks)

Solve real-world and mathematical problems involving area, surface area, and volume.

¹MGSE6.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.

²MGSE6.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 $V = lwh$ and $V = Bh$ to find volumes of right rectangular prisms with fractional edge lengths in the context of solving real-world and mathematical problems.

2nd 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)

6TH GRADE MATH - UNIT 5 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Jan 18	Jan 19	Jan 20	Jan 21	Jan 22
MLK HOLIDAY	UNIT 5 G.1 <i>Area of triangles and special quadrilaterals</i>	UNIT 5 G.1 <i>Area of triangles and special quadrilaterals</i>	UNIT 5 G.1 <i>Area of triangles and special quadrilaterals</i>	UNIT 5 G.1 <i>Find area of polygon by decomposing</i>
X				
Jan 25	Jan 26	Jan 27	Jan 28	Jan 29
UNIT 5 G.1 <i>Find area of polygon by decomposing</i>	UNIT 5 G.1 <i>Find area of polygon by decomposing</i>	UNIT 5 G.1 <i>Find area of polygon by decomposing</i>	UNIT 5 G.1 <i>Find area of polygon by decomposing</i>	UNIT 5 G.1 <i>Find area of polygon by decomposing</i>
Feb 1	Feb 2	Feb 3	Feb 4	Feb 5
UNIT 5 G.1 <i>Find area of polygon by decomposing</i>	UNIT 5 G.4 <i>Represent 3 dimensional figures using nets</i>	UNIT 5 G.4 <i>Represent 3 dimensional figures using nets</i>	UNIT 5 G.4 <i>Represent 3 dimensional figures using nets</i>	UNIT 5 G.4 <i>Surface area of three dimensional figures made up of rectangles and triangles</i>
Feb 8	Feb 9	Feb 10	Feb 11	Feb 12
UNIT 5 G.4 <i>Surface area of three dimensional figures made up of rectangles and triangles</i>	UNIT 5 G.4 <i>Surface area of three dimensional figures made up of rectangles and triangles</i>	UNIT 5 G.4 <i>Surface area of three dimensional figures made up of rectangles and triangles</i>	UNIT 5 G.4 <i>Surface area of three dimensional figures made up of rectangles and triangles</i>	UNIT 5 G.2 <i>Volume of rectangular prisms</i>

2nd 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)

6TH GRADE MATH - UNIT 5 CALENDAR

Feb 15	Feb 16	Feb 17	Feb 18	Feb 19
PRESIDENTS' DAY	INSERVICE	UNIT 5 G.2 Volume of rectangular prisms	UNIT 5 G.2 Volume of rectangular prisms	UNIT 5 G.2 Volume of rectangular prism with fractional lengths
Feb 22	Feb 23	Feb 24	Feb 25	Feb 26
UNIT 5 G.2 Volume of rectangular prism with fractional lengths	UNIT 5 G.2 Volume of rectangular prism with fractional lengths	UNIT 5 G.2 Volume of rectangular prism with fractional lengths	UNIT 6 REVIEW/TEST	UNIT 6 REVIEW/TEST

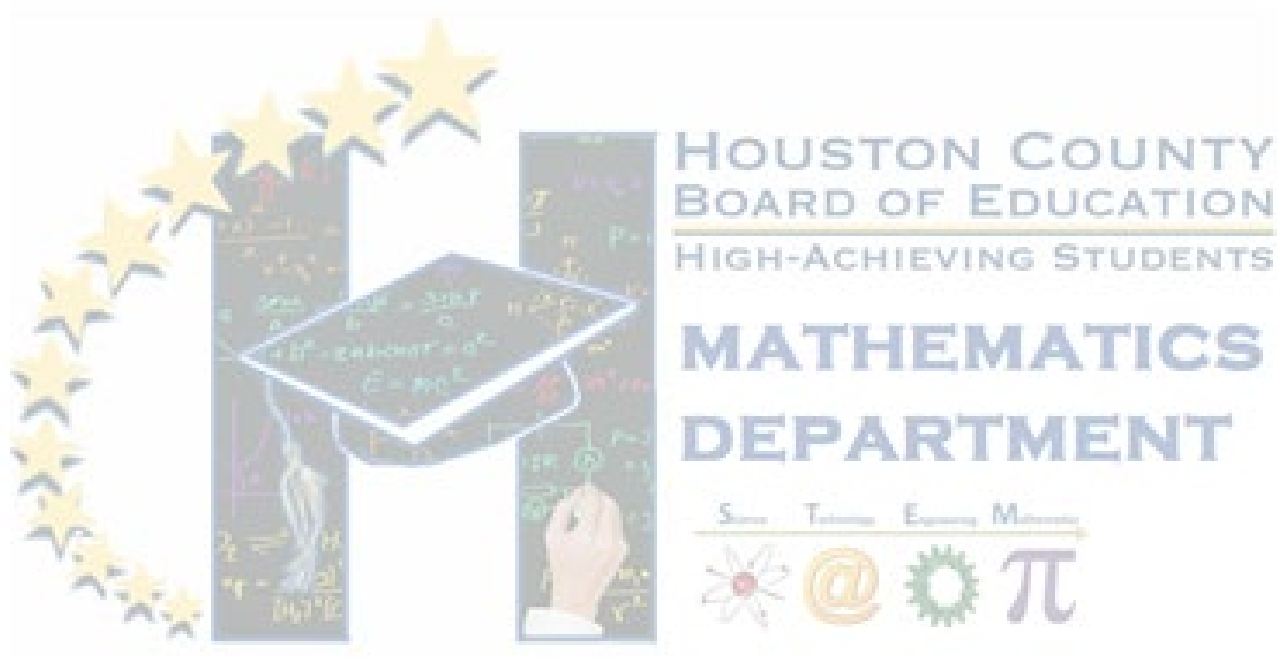
2nd Semester

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March 29-April 2 (Spring Break)

6TH GRADE MATH - UNIT 5 CALENDAR



2nd Semester

January 5 - May 26

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6th Grade Georgia Standards of Excellence

2019-2020 Pacing Guide

¹ Essential

² Supporting

³ Additional

Unit 6: Exploring Rational Numbers: Numbers & their Opposites (≈ 2 weeks)

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

¹MGSE6.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

²MGSE6.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.

²6a. 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.

¹6b. 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.

²6c. 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.

¹MGSE6.NS.7 Understand ordering and absolute value of rational numbers.

²7a. 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.

¹7b. 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°C is warmer than -7°C .

²7c. 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.

²7d. 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.

²MGSE6.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.

²MGSE6.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.

2nd 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)

6TH GRADE MATH - UNIT 6 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Mar 1	Mar 2	Mar 3	Mar 4	Mar 5
UNIT 6 <i>NS.5, NS.6a, NS.6b, NS.6c, NS.7</i> <i>Integers, opposites, absolute value, coordinate plane, integers in context.</i>	UNIT 6 <i>NS.5, NS.6a, NS.6b, NS.6c, NS.7</i> <i>Integers, opposites, absolute value, coordinate plane, integers in context</i>	UNIT 6 <i>NS.5, NS.6a, NS.6b, NS.6c, NS.7</i> <i>Integers, opposites, absolute value, coordinate plane, integers in context</i>	UNIT 6 <i>NS.5, NS.6a, NS.6b, NS.6c, NS.7</i> <i>Integers, opposites, absolute value, coordinate plane, integers in context</i>	UNIT 6 <i>NS.5, NS.6a, NS.6b, NS.6c, NS.7</i> <i>Integers, opposites, absolute value, coordinate plane, integers in context</i>
Mar 8	Mar 9	Mar 10	Mar 11	Mar 12
UNIT 6 <i>NS.8</i> <i>Graphing in all 4 quadrants</i>	UNIT 6 <i>NS.8</i> <i>Graphing in all 4 quadrants</i>	UNIT 6 <i>NS.8</i> <i>Distance between points on coordinate plane</i>	UNIT 6 <i>6.3</i> <i>Drawing polygons, find distance using coordinates</i>	UNIT 6 <i>6.3</i> <i>Drawing polygons, find distance using coordinates</i>
Mar 15	Mar 16	Mar 17	Mar 18	Mar 19
UNIT 6 <i>6.3</i> <i>Drawing polygons, find distance using coordinates</i>	UNIT 6 <i>REVIEW/TEST</i>	UNIT 6 <i>REVIEW/TEST</i>	MAP Testing	MAP Testing
			<i>Exact testing date TBD</i>	<i>Exact testing date TBD</i>

2nd 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)

6th Grade Georgia Standards of Excellence

2020-2021 Pacing Guide

¹ Essential

² Supporting

*Additional

Unit 7: Statistics (≈ 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.

***MGSE6.SP.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:

- Reporting the number of observations. Analyze categorical data using frequencies of categories or proportions of categories
- Describing the nature of the attribute under investigation, including how it was measure and its units of measurement.
- 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).
- 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.

2nd Semester

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6TH GRADE MATH - UNIT 7 CALENDAR

Monday	Tuesday	Wednesday	Thursday	Friday
Mar 22	Mar 23	Mar 24	Mar 25	Mar 26
UNIT 7 6SP.1-3 Understanding Statistical Variability	UNIT 7 6SP.1-3 Understanding Statistical Variability	UNIT 7 6SP.1-3 Understanding Statistical Variability	UNIT 7 6SP.1-3 Understanding Statistical Variability	UNIT 7 6SP.1-3 Understanding Statistical Variability
Mar 29	Mar 30	Mar 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.4-5 Display & Summarize Statistical Data	UNIT 7 6SP.4-5 Display & Summarize Statistical Data	UNIT 7 6SP.4-5 Display & Summarize Statistical Data	UNIT 7 6SP.4-5 Display & Summarize Statistical Data	UNIT 7 6SP.4-5 Display & Summarize Statistical Data
Apr 12	Apr 13	Apr 14	Apr 15	Apr 16
UNIT 7 6SP.4-5 Displaying and Summarizing Statistical Data	UNIT 7 <i>REVIEW/TEST</i>	UNIT 7 <i>REVIEW/TEST</i>	<i>REVIEW</i>	<i>REVIEW</i>
Apr 19	Apr 20	Apr 21	Apr 22	Apr 23
<i>REVIEW</i>	<i>REVIEW</i>	<i>REVIEW</i>	<i>REVIEW</i>	<i>REVIEW</i>
Apr 26	Apr 27	Apr 28	Apr 29	Apr 30
Possible Test Week (Test Dates TBA)				

2nd 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)

6th Grade Georgia Standards of Excellence

2020-2021 Pacing Guide

¹ Essential

² Supporting

^{*} Additional

Unit 8: Algebra Revisited (≈ 3 weeks)

¹MGSE6EE.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 $5 - y$. 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 $3x + 2y$ 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).

Reason about and solve one-variable equations and inequalities.

¹MGSE6.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.

¹MGSE6.EE.6 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. Given a problem, define a variable, write an equation.

¹MGSE6.EE.7 Solve real-world and mathematical problems by writing and solving equations of the form $x + p = q$ and $px = q$ for cases in which p, q and x are all non-negative rational numbers.

¹MGSE6.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 diagrams.

¹MGSE6.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.

2nd 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)

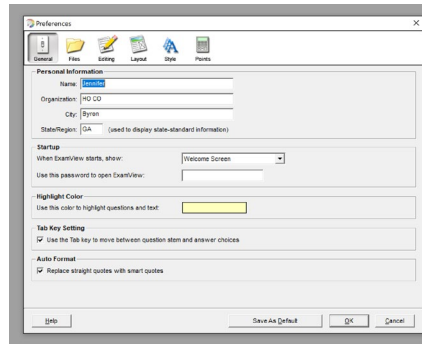
6TH GRADE MATH - UNIT 8 CALENDAR

May 3	May 4	May 5	May 6	May 7
UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED
May 10	May 11	May 12	May 13	May 14
MAP TESTING	MAP TESTING	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED
Not necessarily these exact dates, but the MAP window is TBD.	Not necessarily these exact dates, but the MAP window is TBD.			
May 17	May 18	May 19	May 20	May 21
UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED	UNIT 7 ALGEBRA REVISITED
May 24	May 25	May 26	May 28	May 29
UNIT 7 ALGEBRA REVISITED	REVIEW/TEST	REVIEW/TEST	Post Planning	Post Planning
		Last day of school (1/2 day)		

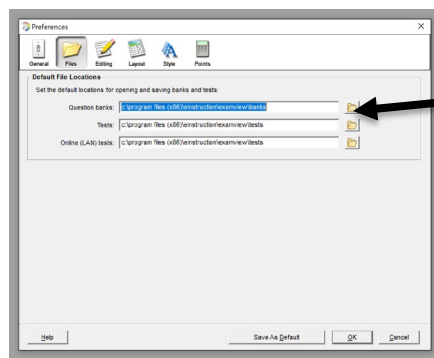
How to Make ExamView Banks Easily Accessible

Open ExamView Test Generator

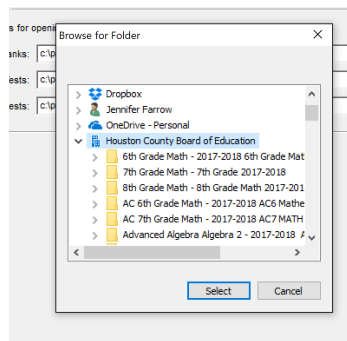
1. After closing the welcome menu, choose the EDIT tab. Select “Preferences”



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.

