## PLEASE RETURN THE LAST PAGE BY

 THE END OF WEEK 1$6^{\text {th }}$ Grade Math 2019-2020 Syllabus [HONORS EDITION]
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I. The $6^{\text {th }}$ grade math curriculum is the Standards for the NC Department of Instruction. It can be found under the NC State DPI.

- The End of Grade test will be around the end of May
- This is a yearlong course
- Students should know the entire $3^{\text {rd }}, 4^{\text {th }}$ and $5^{\text {th }}$ grade math curriculum including multiplication tables, adding and subtracting fractions, multiplying multiple digit numbers and long division.
II. Course Goals and Objective

Timeline subject to change

| Unit | time | Big Idea | Standards |
| :---: | :---: | :---: | :---: |
| Unit 1 - <br> Area and <br> Surface Area | $\begin{array}{\|l\|} \hline 10 \\ \text { days } \end{array}$ | Students will explore the areas of triangles and parallelograms, discovering the formulas and rationales and using them to decompose figures. Students will also explore surface area of right prisms and pyramids and find surface area by creating nets. | 6.G.1, 6.G. 4 |
| Unit 2 - Factors and Multiples | $\begin{aligned} & 5 \\ & \text { days } \end{aligned}$ | Students will explore relationships between factors and multiples of numbers, including prime factorization, LCM, and GCF, and apply them to add and subtract fractions and solve problems. | 6.NS. 4 |
| Unit 3 - Ratios | $\begin{aligned} & 20 \\ & \text { days } \end{aligned}$ | Students will be introduced to rates and ratios, the multiplicative relationships between numbers. They will explore these rates and ratios using multiple representations, including graphs, tables, and ratio notation, and will explore the concept of a unit ratio. Students will also be introduced to the concept of a percent as a ratio per 100 and use them to solve problems. | $\begin{aligned} & \text { 6.RP.1, 6.RP.2, 6.RP.3, } \\ & \text { 6.RP. } 4 \end{aligned}$ |
| Unit 4 - Integers and Number Lines | $\begin{array}{\|l\|l} 10 \\ \text { days } \end{array}$ | Students will first learn the definition of negative numbers, their positioning on the number line, and realworld scenarios in which negative numbers could exist. Students will also learn about absolute value as the distance from zero and apply this understanding to find the distance between integers on a number line. Students will further apply this understanding to add and subtract integers, using models to develop algorithms. | 6.NS.5, 6.NS.6a, 6.NS.7, 6.NS.9, 7.NS. 2 |
| Unit 5-Rational Numbers | $\begin{aligned} & 20 \\ & \text { days } \end{aligned}$ | Students will further explore the concept of division and operations with all rational numbers, using models and concepts to develop algorithms. Students will divide fractions using models and common denominators to develop the concept, ultimately leading to an algorithm. Similar processes will be used for long division and decimal computation. Students will be expected to perform these calculations in mathematical and real-world contexts. | 6.NS.1, 6.NS.2, 6.NS.3, 7.NS.1, 7.NS. 2 |
| Unit 6 Coordinate Plane | $\begin{array}{\|l\|l} 10 \\ \text { days } \end{array}$ | Students will extend their understanding of negative numbers to graph them on a four quadrant coordinate plane and find the distance between two points with the same x or <br> https://docs.google.com/document/d/19XUxPRiWTd13zhg83XShWNei8KpN37DbjAZ89FONpLA/edit?usp=s haringy coordinate. They will use the coordinate plane to solve problems, including those involving the area and perimeter of polygons. | 6.NS.6b, 6.Ns.8, 6.6.3 |
| Unit 7 Algebraic Expressions | $\begin{aligned} & 15 \\ & \text { days } \end{aligned}$ | Students will continue their work with evaluating numerical expressions to expand to algebraic expressions, where variables can represent different numbers. They will further explore vocabulary around expressions, the distributive property, like terms, and equivalent expressions. Using these properties, students will add, subtract, expand, and factor linear expressions. They will see how algebraic expressions can be used to define real-world situations and solve problems involving expressions with rational numbers in any form. All expressions and coefficients can include any rational numbers in any form, and students should be able to convert between them. | 6.EE.1, 6.EE.2, 6.EE.3, 6.E.4, 6.EE.6, 7.EE.1, 7.E. .2, 7.EE. 3 |
| Unit 8 Algebraic Equations | $\begin{aligned} & 20 \\ & \text { days } \end{aligned}$ | Students will explore the concept of equations, showing how to determine an unknown value by substitution and extending that to determine rules about inverse operations for one-step equations. They will extend these concepts to solve multi-step equations with variables on one side, including those using the distributive property, like terms, and rational coefficients. They will also explore inequality statements, graphing inequalities, and solving one-step and multi-step inequalities, and they will use equations and inequalities to represent real-world contexts. | 6.EE.5, 6.EE.7, 6.EE.8, 7.EE. 4 |


| Unit 9 - <br> Constant of Proportionality | $\begin{aligned} & 15 \\ & \text { days } \end{aligned}$ | Students will extend their understanding of ratios to include proportional relationships represented in graphs, equations, tables, and written context. They will recognize and analyze unit rates, proportional relationships, and scale factor, and they will use each to solve problems in mathematical and real-world contexts. Students will also extend their understanding of percent to solve problems using the percent as a ratio per 100, including problems with circle graphs. | $\begin{aligned} & \text { 6.EE.9, 7.RP.1, 7.RP.2, } \\ & \text { 7.RP. } 3 \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| Unit 10 - Circles | $\begin{aligned} & 5 \\ & \text { days } \end{aligned}$ | Students will explore the relationships of measurements in circles, including radius, diameter, area, and circumference. They will discover the concept of pi and explain it as the ratio of circumference to diameter, and they will use all of the relationships to solve problems in a real-world and mathematical context. | 7.6.4 |
| Unit 11 Volume | $\begin{aligned} & 5 \\ & \text { days } \end{aligned}$ | Students will explore the concept of volume, through models of unit cubes and ultimately developing a formula for right prisms. They will differentiate between volume and surface area and use both to solve problems. | 6.6. 2 |
| Unit 12 Statistics | $\begin{array}{\|l\|l} 10 \\ \text { days } \end{array}$ | Students will lay a foundation for their future learning about statistics, learning about statistics questions, data collection, measures of center and variability, and representations of data. Students will learn to calculate mean, median, and quartile values, and they will represent data with dot plots, histograms, and box plots. | $\begin{aligned} & \text { 6.SP.1, 6.SP.2, 6.SP.3, } \\ & \text { 6.SP.4, 6.SP.5 } \end{aligned}$ |

III. Course Materials

Students should follow one of these two supply lists:
Loose Paper
PENCILS
PENCILS
3 Ring Binder with 3 dividers OR 1 notebook per quarter
4 Pocket folders OR accordion folder (binders dividers will not be enough)
Plenty of graph paper (the pads/packs work better than the notebooks)
1 Ruler (6 inch is
TI-30 Calculator Any variation is fine, but preferably TI-30 XS Multiview. This is the version that is made available for students during state testing
IV. Curriculum Calendar ( approximate pacing)

- For pacing, see curriculum on page 1 \& 2
- Assessments
- There will be a test for each of the units
- CMS midterm test

Regular coordinate pictures count as a project grade
Quizzes are given weekly with few exceptions

- Daily Assignments
- Core Bites Warm-up
$\circ$ Notes
- By doing ones warm-up and studying the questions that were missed, the students can make a $100 \%$ on the warm-up test. All questions and answers are given during the warm-ups
- By taking good notes, the students have samples to follow when doing their homework.
- Honors students will be given more rigorous versions of assignments to allow for more focused understanding of the main principles behind mathematical operations
- Homework
- Homework is assigned nearly every class and is due the next class unless another due date is given.

Homework will consist of investigations from the workbook, worksheets, online assignments, etc.

- Homework is a major necessity for passing $\mathbf{6}^{\text {th }}$ grade math. It is imperative for students to tak their responsibility seriously. Practicing the concepts is a very important way to learn the material.
- Homework policy

Students are to have the homework on the day that it is due. We go over each answer. Once the answers are given, students will not be able to receive full credit for that assignment. The penalty for late assignments will be applied at this point at the teachers' discretion. When a student is absent and misses the homework assignment, it is their responsibility to get the assignment before the next class.

- Make-up Work
- Makeup work is for those students who are absent from lass/school. Students who lose their work choose not to turn in work, or have any other excuse will not receive full credit turned in late (see late work policy above). Students will be responsible for initiating contact for getting their make-up work from the teache or other students (class work and homework) within 5 days of returning to school. If a student is out for a long period of time, we will make special arrangements. Please contact me via email if your child wil be out for more than 2 days. It is important that parents and guardians help teach children that they must be responsible and turn in their work when it is due.
V. CMS Grading policies

Grades are weighted as specified by CMS warm-ups, quizzes, group work, in-class tasks, clas participation 35\%
Formal: Test and Quizzes 65\%
. Grading Scale
A-100-90; B-89-80; C-79-70; D-69-60; F-59 and below
Vll. Classroom grading policy
The grading of all work will be as follows in Powerschool:

- Completed work on time: full credit
- Late work (must be fully complete showing all work to be accepted as late): no more than a grade of 50
- Missing or incomplete work; zero (Parents, please do not email to ask why your child has a zero, the answer is; Missing or incomplete work; zero (Parents, please do no
VII. Class Policies
- Attendance: the best policy is to come to school. The work from any absence should be made up before or after school. Students should not expect their class to wait while they are getting missed work. This should be taken care of on their own time before or after school.
- Promptness: Students have 5 minutes to change classes. Anyone coming in after the bell will be marked late in Powerschool even if the student has a late pass from another teacher.
- Behavior expectations: This is middle school, not elementary school. We do not have time to teach students how to sit in class. There is no tolerance for constant classroom disruptions.
- Food/drink in classroom: It is a school wide rule that food is not in the classroom. I do allow water bottles.
- Dress code/electronic device usage: Both are addressed in the handbook. Cell phones are OFF and out of site. I do not allow the use of calculators on the cell phones.
VIII. Academic Support.

Chromebooks: Students will receive their $\log$ in information the first month of school.
IX. Classroom needs: Kleenex; hand sanitizer, paper towels, lined notebook paper, disinfecting wipes, copy paper pencils
X. Student needs: several sharpened pencils every class, calculator TI-30XS, ruler, scissors, 1.5 " 3 ring binder notebook paper, 1 pad of graph paper, 5 dividers

1. Remain in your seat at all times
2. Respect others, their property, and school property
3. Raise hand and wait for acknowledgment from teacher prior to speaking.
4. Begin working as soon as you are seated. Don't wait for the bell or the teacher.
5. Sharpen pencils and get materials ready prior to the bell. This should be done at home.

## Procedures

Students start their warm up as soon as they enter the classroom. They do not wait for the bell or for the teache to tell them to start. The class goes over the warmup within 10 minutes after the tardy bell rings.

## Consequences

Consequences for inappropriate behavior will include, but is not limited to, the following:

## 1st offense Warning <br> 2nd offense "Dragon Card" signed 3rd offense Seat moved, 1-2 days of Modified SPA, phone call home

4th offense Removed to another classroom, 1-3 days of Silent Lunch, phone call home

## 5th offense Referral to Administration and phone call home

A copy of the NWSA Discipline Documentation form is included in this syllabus for your convenience.
Team conferences to address any academic or behavior concerns will occur on Tuesdays only during $2^{\text {nd }}$ block planning (10:50-12:00). Please contact Mrs. Washington at latonya.washington@cms.k12.nc.us or ( $980-343-5500$ o schedule or modify these appointments. Please be patient when scheduling these appointments as we have a lot of parents/students with various needs to address with the team. We want EVERY parent to have our full attention meetings at 15 minute intervals. Please make Mrs. Washington aware it you feel you will need longer than 15 minutes to address your student/ parent concerns with us. The team suggests that you reach out to the individual teache via email for immediate needs prior to our team meeting with you to communicate assignments and deadlines to you as we provide these in class to be written in the agenda for the day. Notes for the teacher can also be written in the agenda and presented to the teacher by your child. It is your child's responsibility to write down the homework from the board each day

## $\mathbf{6}^{\text {th }}$ grade team request: When emailing any teacher please put your child's name in the subject heading Many parents/guardians do not share the same last name as the student

## Expectations for all visitors:

It is CMS policy that no visitor (including parents, grandparents, siblings, etc.) is in the building at any time or for any reason without first going to the main office and registering and get a badge. PLEASE do not show-up at any teacher's classroom without first making arrangements in advance with that teacher. The same applies to the cafeteria during lunch and bringing food from outside for students. It is unfair to you as well as the teache if we cannot afford you the proper time and respect you deserve. PLEASE do not put us in an embarrassin child is in a $100 \%$ safe learning environment.

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## Teacher section:

Student:
Parent \& contact info: $\qquad$
Parent \& contact info: $\qquad$
Parent \& contact info: $\qquad$
Actions/Consequences/ Contact Log
Step 1: Verbal Warning

Step 2: Warning2/Parent contact/Dragon Card

Step 3: Time out in room/parent contact/Silent Lunch 5 days

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| Step 4: Time out in other teacher's room/Modified SPA 5 days |
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| Step 5: Referral to administration/parent contact |
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| Additional Notes: |
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[^0]:    ules of the Classroom Policies and Procedures
    The following rules are posted and should be followed by all students in order to create an orderly and safe environment for learning Math:

