**6th Grade Math – Resource**

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| **Teacher** | Tammy Gaffney  | **Subject:** | Math resource |
| **Date:** | **Beginning: 11/13/17 Ending: 11/17/17**   | **Grades:** | 6 |
| **Parent/Student WEEKLY AGENDA:** | \*\*PLEASE NOTE: lesson plans are subject to change based on student understanding of the concepts presented. Students receive various methodology of instruction based upon knowledge retained / mastered. Group activities, individual learning paths, technology support/remediation occurs long term and short term to assure progress while rigorously rehearsing the standards. \*Our class continues instruction on an individual learning path as well as grade level instruction. Groups will be flexible and interchange.Quizlet test on line at student readiness for Unit 1. Quizlet review or preview available on line for all Units. Unit 2 – Preteach Ratios/Percents Remediation at end of semester**Monday** –Mixed Numbers, Improper fractions review for quiz Word Problem review for testS.O.S. Fraction Strategy; JAMN Graphic Organizer – Application of S.O.S. guided practiceNotes: **Integers** : Complete as class/guided notes)Quizlet Quiz review and retestGroup B Quizlet VocabularyBrainpop.com or math-in-fast-lane vocabulary review; if available Dividing Fractions with Mixed Numbers – modeling, fraction bars**Tuesday –** Rational Numbers Guided practice and plotsStudy Guide (Intro Notes pg 1 -4)Rational Numbers Partner PracticeDividing Fractions with real world situations – word problems**Wednesday –** Group A Rational Numbers Integer Practice ; real world doe task / Independent Practice / Exit ticket Group B Dividing Fractions with real world situations – word problemsDividing Fractions with Mixed Numbers – Word ProblemsLong Division Review – may require extended time with individual students**Thursday -** **Review Study Guide Packet** Complete Integer Review Rational number practice packet in class Study Guide Review and Completion **Friday** – Test / Begin Unit 7 Pre-tests –<http://jms6thgrademath.weebly.com> *Groups or Individuals rotate between Centers , Groups, Direct Instruction, Independent Short / Long Term Remediation lessons expected to progress throughout the semester according to student learning paths.*  |
| **Learning Targets:** | **MGSE6.NS.1** ⎫I can **compute** quotients of fractions divided by fractions (including mixed numbers). I can **interpret** quotients of fractions. I can figure out how **to solve** division problems with fractions in a real-world situation. I can **solve** word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem. **MGSE6.NS.2** I can **divide** multi-digit numbers using the standard algorithm with speed and accuracy, without any math tools (i.e., calculator, multiplication chart).**MGSE6.NS.3** I can **fluently** add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation with speed and accuracy, without math tools (i.e., calculator). **MGSE6.NS.4** I can **identify** the factors of two whole numbers less than or equal to 100 and determine the Greatest Common Multiple.I can **identify** the multiples of two whole numbers less than or equal to 12 and determine the Least Common Multiple.I can **apply** the Distributive Property to rewrite addition problems by factoring out the Greatest Common Factor. **MGSE6.NS.5**I can **identif**y positive and negative numbers and use them to describe values having opposite values.**MGSE6.NS.6a**I can **recognize** opposite signs of numbers as indicating locations on opposite sides of 0 on the number line. I can recognize that the opposite of the opposite of a number is the number itself.**MGSE6.NS.6b**I can **understand** signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane.I can **recognize** that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.**MGSE6.NS.6c**I can **find** and position integers and other rational numbers on a horizontal or vertical number line diagram. I can find and position pairs of integers and other rational numbers on a coordinate plane. |
| **Vocabulary:** | Algorithm • Difference • Distributive Property • Dividend Divisor• Factor • Greatest Common Factor • Least Common Multiple • Measurement Model of Division• Minuend • Multiple • Quotient • Partitive Model of Division • Reciprocal • Sum • Subtrahend •Product |
| **Standard(s):** | **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. **MGSE6.NS.2** – Fluently divide multi-digit numbers using the standard algorithm. **MGSE6.NS.3** – Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. **MGSE6.NS.4a** - 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. **MGSE6.NS.4b** - Apply the least common multiple of two whole numbers less than or equal to 12 to solve real-world problems.**MGSE6.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.**MGSE6.NS.6a -**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.**MGSE6.NS.6b -** 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.**MGSE6.NS.6c -** 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 |
| **DOK Level** | **Activities / Assignments / Questions** | **Assessment** |
| Remediation | Warm-up based on mastery of standards • Small group based on scores • Weekly Homework – review various 5th grade standards / spiral review of 6th grade standards • Review steps to division • Multiplication chart as needed • Decimals Operations Foldable* JAMN Notebook with foldables.
 | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response[x] Verbal[ ] Rubric[x] Other  |
| **2** | * How do you determine if a number is rational or irrational?
* How do you represent whole numbers and fractions using visual diagrams?
* How do you utilize the distributive property to solve problems.
* How do you divide multi-digit whole numbers (skills and word problems) – Guided Practice 1 – 4 / Practice B

• How do you add and subtract decimals (skills and word problems) – Guided Practice 2 – 10 / Practice B • How do you multiply decimals (skills and word problems) – Guided Practice 2 – 10 / Practice B | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response[x] Verbal[ ] Rubric[x] Other –  |
| **3** | How do you determine fractions on a number line?How do you plot a whole number and a fraction on a number line?How do you plot a decimal on a number line? How do you order numbers from least to greatest on a number line or in simple form?How do I represent numbers below zero on a number line?How do positive and negative numbers differ from zero? How do you preform operations representing whole numbers and fractions using visual diagrams and number sentences?How do you use strategies with acronym S.O.S. to compute fraction problems with division? How do you divide whole numbers and fractions ; conversion, simplify and reduction of fractions to preform operations of quotient How do you divide multi-digit whole numbers – Independent Practice 5 – 8 / Practice B or C * How do you add, subtract, multiply and divide decimals (skills and word problems)
* How do you find the GCF – Methods 2 and 3
* Distributive Property – equivalent expressions to factor out GCF from two addends
* How do you find the LCM – Method 2 using prime factorization
* How do you divide fractions and mixed numbers / Indep. Practice & Problem Solving
 | [x]  Formative[ ]  Summative | [x] Selected Response[x] Constructed Response[ ] Essay[x] Verbal[ ] Rubric[x] Other –  |
| **4** | Operations and Properties Challenge (Holt online textbook) Compare and Contract Fraction Quantities and Models using computations and visual model drawing*• Distributive Property Task – Usa test prep* • Decimals Task ..\1-MATH\DECIMAL TASK.pdf  | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response[ ] Essay[x] Verbal[ ] Rubric[x] Other – |
| **Summarizing****Activity:** | Class Anchor Charts • Carnegie Lessons • DOE Tasks • Students demonstrate on whiteboards (individual and/or class board) • Ipad, personal devices and chromebooks to practice and check algorithms • Interactive Math Notebook |
| **Resources** | IXL (students will be given individual usernames / passwords) USA TestPrep (students will be given individual usernames / passwords) Holt online textbook http://myhrw.com (username – jmsduncan / password – exceed) Georgia Standards [www.Georgiastandards.org](http://www.Georgiastandards.org) Khan Academy Videos - <https://www.khanacademy.org/math> Study Jam Videos - http://studyjams.scholastic.com/studyjams/jams/math/index.htm BrainPop Videos - <https://www.brainpop.com/math/> MobyMax - <https://www.mobymax.com/signin> Virtual Nerd Videos - <http://www.virtualnerd.com/>\* tgtd ct 08 14 08 18  |

**6th Grade Math – Co-taught**

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| **Teacher:** | **Tammy Duncan/ Tammy Gaffney** | **Subject:** | **Co-taught** |
| **Date:** | **Beginning: 11/13/17 Ending: 11/17/17**   | **Grades:** | **6th** |
| **Parent/Student WEEKLY****AGENDA:** | **Weekly Agenda 11-13-2017****PLEASE NOTE: lesson plans are subject to change based on student understanding of the concepts presented.** **IXL Assignments due Friday, Nov. 17 (Smart Scores will be for a grade)**– P.1 / P.2 / M.3 / M.4 / M.6 / X.2 **Monday**– NS.6c Locating Rational Numbers on a Number Line **Tuesday** – **NS.6c QUIZ** / NS.6b Graphing Integers on the Coordinate Plane **Wednesday** – NS.6b Graphing Reflections on the Coordinate Plane **Thursday**– **NS.6b QUIZ /**Begin Unit 7A TESTS (NS.5, NS.6a, NS.6b, NS.6c) **Friday** – Unit 7A TESTS (NS.5, NS.6a, NS.6b, NS.6c) / Graphing Activity **JMS MATH website**[**http://jms6thgrademath.weebly.com**](http://jms6thgrademath.weebly.com/) |
| **Learning****Targets:** | **MGSE6.NS.1*** I can **compute** quotients of fractions divided by fractions (including mixed numbers).
* I can **interpret** quotients of fractions.
* I can figure out how to **solve** division problems with fractions in a real-world situation.
* I can **solve** word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.

**MGSE6.NS.2** * I can **divide** multi-digit numbers using the standard algorithm with speed and accuracy, without any math tools (i.e., calculator, multiplication chart).

**MGSE6.NS.3*** I can **fluently** add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation with speed and accuracy, without math tools (i.e., calculator).

**MGSE6.NS.4*** I can **identify** the factors of two whole numbers less than or equal to 100 and determine the Greatest Common Multiple.
* I can **identify** the multiples of two whole numbers less than or equal to 12 and determine the Least Common Multiple.
* I can **apply** the Distributive Property to rewrite addition problems by factoring out the Greatest Common Factor.

**MGSE6.NS.5**I can **identif**y positive and negative numbers and use them to describe values having opposite values.**MGSE6.NS.6b**I can understand signs of numbers in ordered pairs as indicating locations in quadrants of the coordinate plane. I can recognize that when two ordered pairs differ only by signs, the locations of the points are related by reflections across one or both axes.**Pretests: MGSE6.NS.7a**Interpret statements of inequality as statements about the relative position of two numbers on a number line diagram. **MGSE6.NS.7b**Write, interpret, and explain statements of order for rational numbers in real‐ world contexts. **MGSE6.NS.7c**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. **MGSE6.NS.7d**Distinguish comparisons of absolute value from statements about order.  |
| **Vocabulary:** | Algorithm • Difference • Distributive Property • Dividend Divisor• Factor • Greatest Common Factor • Least Common Multiple • Measurement Model of Division• Minuend • Multiple • Quotient • Partitive Model of Division • Reciprocal • Sum • Subtrahend •Product |
| **Standard(s):** | **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.**MGSE6.NS.2**Fluently divide multi-digit numbers using the standard algorithm.**MGSE6.NS.3**Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation.**MGSE6.NS.4a**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. **MGSE6.NS.4b**Apply the least common multiple of two whole numbers less than or equal to 12 to solve real-world problems.**MGSE6.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.**MGSE6.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); represent quantities in real‐world contexts**MGSE6.NS.6a**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.**MGSE6.NS.6b**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.**MGSE6.NS.6c**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.**MGSE6.NS.7a** 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.**MGSE6.NS.7b**Write, interpret, and explain statements of order for rational numbers in real‐ world contexts. **MGSE6.NS.7c**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. EX. an account balance of –30 dollars, write |–30| = 30 to describe the size of the debt..**MGSE6.NS.7d**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. |
| **DOK Level** | **Activities / Assignments / Questions** | **Assessment** |
| **­­****Remediation** | * Warm-up based on mastery of standards
* Small group based on scores
* Weekly Homework – review various 5th grade standards / spiral review of 6th grade standards
* Multiplication chart as needed
* Divisibility Rules / Factor Trees
 | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response[x] Verbal[ ] Rubric[x] Other – teacher observ. |
| **2** | * How do you add, subtract, multiply and divide decimals (skills and word problems)
* How do you find the GCF – Method 1 listing factors (rainbow / factor pairs)
* Distributive Property – use factor trees and Venn Diagram
* How do you find the LCM – Method 1 listing multiples
 | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response[x] Verbal[ ] Rubric[x] Other – teacher observ. |
| **3** | * How do you represent fraction operations using visual diagrams with number sentences.
* How do you add, subtract, multiply and divide decimals (skills and word problems)
* How do you find the GCF – Methods 2 and 3
* Distributive Property – equivalent expressions to factor out GCF from two addends
* How do you find the LCM – Method 2 using prime factorization
 | [x]  Formative[ ]  Summative | [x] Selected Response[x] Constructed Response[ ] Essay[x] Verbal[ ] Rubric[x] Other – teacher observ. |
| **4** | * GCF or LCM Tic-Tac-Know (word problems)
* Carnegie (Student Assignments) pg. 17 Using GCF and LCM to solve problems
* Distributive Property Using Area (using variables and integers)
* Decimals Scavenger Hunt
* Decimal Growth (Holt online textbook)
 | [x]  Formative[ ]  Summative | [x] Selected Response[ ] Constructed Response[ ] Essay[x] Verbal[ ] Rubric[x] Other – teacher observ. |
| **Summarizing****Activities:** | * Class Anchor Charts / white boards (individual and class)
* Carnegie Lessons / DOE Tasks
* Ipad, personal devices and chromebooks to practice and check algorithms
* Study Guides / Notes / Examples / Foldables / Handouts – **CHECK STUDENT MATH BINDER**
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| **Resources:** | IXL / USA TestPrep (students will be given individual usernames / passwords)Holt online textbook <http://myhrw.com> (username – jmsduncan / password – dragons)Georgia Standards [www.Georgiastandards.org](http://www.Georgiastandards.org)Khan Academy Videos - <https://www.khanacademy.org/math>Study Jam Videos - <http://studyjams.scholastic.com/studyjams/jams/math/index.htm>Virtual Nerd Videos - <http://www.virtualnerd.com/> |