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| **Grade Level** 9TH  **LESSON PLANS ARE SUBJECT TO CHANGE DAILY!** | | **Teacher/Room**: L.PAYNE / B.TIPPENS Week of: FEB 1-FEB 5  FOUNDATIONS OF ALGEBRA | | | |
| **Unit Vocabulary:** SEE ATTACHED | | | | | |
| **Instructional Strategies Used:** direct instruction, independent study, interactive instruction | | | | | |
| **Day 1** | **Day 2** | | **Day 3** | **Day 4** | **Day 5** |
| **GSE/GPS Standard(s)**:  MFANSQ1.a  MFANSQ4.b,d Multiplying and dividing in context problems through estimation, creating equal groups and building models. | **GSE/GPS Standard(s)**:  MFANSQ1.a  MFANSQ4.b,d Multiplying and dividing in context problems through estimation, creating equal groups and building models. | | **GSE/GPS Standard(s)**:  MFANSQ1.a  MFANSQ4.b,dMFANSQ2.Multiplying and dividing in context problems through estimation, creating equal groups and building models. | **GSE/GPS Standard(s)**:  MFANSQ3.a  MFANSQ4.b,d Multiplying and dividing in context problems through estimation, creating equal groups and building models. | **GSE/GPS Standard(s)**:  MFANSQ2.a  MFANSQ4.b,d  Students will conceptualize positive and negative numbers. Multiplying and dividing in context problems through estimation, creating equal groups and building models. |
| **EQ Question:**  How can you represent a decimal using base ten blocks?  2.) How can you multiply decimals by powers of ten?  3.) How does multiplying or dividing by a power of ten affect the product? | **EQ Question:**  How can you compare decimals? | | **EQ Question:**  How can you compare decimals and fractions?  How can you represent integers on the number line?   How can you find the opposite of a number?   How can you find the total distance between two locations on the number line? | **EQ Question:**  How can you use real number in real world context?  How do you use a number line to multiply rational numbers?   What patterns in multiplication can you relate to division?   How do multiplication and division of rational numbers relate to one another? | **EQ Question:**  Can I apply the things I learned in Module 1? |
| **Mini Lesson:**  How to use base ten blocks  **Activating Strategies:**  Youtube video “power of 10”  <https://www.youtube.com/watch?v=0fKBhvDjuy>0  **Lesson:** Multiplying by power of 10 task  <https://learnzillion.com/lesson_plans/5023>  Patterns-R-Us task  **Resource/Materials:**  Task, calculator, tiles, paper, pencil | **Mini Lesson:**  Number talk, adding decimals  **Activating Strategies:**  **Lesson:** comparing Decimals  **Resource/Materials:**  Comparing decimals recording sheet | | **Mini Lesson:**  **Number talks**  **Activating Strategies:**  [**https://www.youtube.com/watch?v=6EWq9EZmIKg**](https://www.youtube.com/watch?v=6EWq9EZmIKg)  Lesson: Are these equivalents? Ws  Integers on the number line task  Adding/subtracting positive and negative numbers  **Resource/Materials:**  Task, number line, red/yellow flags | **Mini Lesson:**  Number talks  **Activating Strategies:**  If everyone in class owes you$2, what is the total debt? Explain.  **Lesson:**  Rational/irrational numbers  Estimating the square root of a number  **Resource/Materials:** | **Mini Lesson:**  Review Module 1  **Activating Strategies:**  Check review  Lesson:  MODULE 1 TEST  **Resource/Materials:**  TEST, TILES, RULER, COUNTERS, GRID PAPER |
| **Differentiation:**  *Content/Process/Product:*  *Grouping Strategy: Individual/pairs*  *Assessment:* | **Differentiation:**  *Content/Process/Product:*  *Grouping Strategy: Individual/pairs* | | **Differentiation:**  *Content/Process/Product:tiles*  *Grouping Strategy: Individual/pairs* | **Differentiation:**  *Content/Process/Product:*  *Grouping Strategy: Individual/pairs* | **Differentiation:**  *Content/Process/Product:*  *Grouping Strategy: Individual/pairs/none* |
| **Assessment :**  *Pre-Test: Module 1 pre*  *Post-Test:*  *Formative: task*  *Summative: test*  *Performance Based:* | **Assessment:**  *Pre-Test:*  *Post-Test:*  *Formative:*  *Summative:*  *Performance Based****:*** | | **Assessment:**  *Pre-Test:*  *Post-Test:*  *Formative:*  *Summative:*  *Performance Based:* | **Assessment:**  *Pre-Test:*  *Post-Test:*  *Formative:*  *Summative:*  *Performance Based:* | **Assessment:**  *Pre-Test:*  *Post-Test:*  *Formative:*  *Summative: TEST MODULE 1*  *Performance Based:* |
| **Homework:**  Patterns-R-Us task Parts 1-4 | **Homework:**  Adding/subtracting decimals WS | | **Homework:**  **Equivalent WS**  **Numbers on a #line WS** | **Homework:**  Rational/irrational numbers  Estimating square roots of a number | **Homework:**  NONE |

Resources and Reflective Notes:

Monday: sample problems: ( make sure you can write powers of 10 as an exponent) ex. 100=102

|  |  |  |
| --- | --- | --- |
| 1. 5.3 x 10 | 1. 6.23 x 1000 | 1. 83.5 x 100 |
| 1. 2.05 x 10,000 | 1. 903.85 x 10 | 1. .3856 x 100 |

Monday: 



MODULE 1- VOCABULARY

Array

 Fact Family

 Inverse Operation

 Factors

 Product

 Quotient

 Divisor

 Dividend

 Compatible Numbers

 Fraction

 Numerator

 Denominator

 Area Model

 Power of Ten

 Place Value

 Benchmark Fraction

 Integer

 Zero

 Opposite of a Number

 Rational Number

 Irrational Number

 Approximation

 Decimal Expansion

 Sum

 Difference

 Place Value

 Line Diagram

Thursday: Multiplying Rational numbers

**DIFFERENTIATION**

**Extension:**

 Have students develop generalized conjectures about multiplying integers and explain them. For example, +a X –b = -c because a groups of –b added to 0 is –c.

**Intervention:**

 For students who struggle with the empty number line. Encourage them to continue modeling the problems using the two colored counters.

 For extra help with multiplication with signed numbers, please open the hyperlink Intervention Table.