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| **Grade Level:** | | | 9th | | **Teacher/Room**: | | | | PAYNE/TIPPENS | | | / | | 181 | **Course(s)/ Period(s):** | | | FOUNDATIONS OF ALGEBRA | | | / | 181 | **Week of:** | | JAN 11-JAN 15 | | |
| **Unit Vocabulary:** | | | | MODULE 1- NUMBER SENSE AND QUANTITY -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 | | | | | | | | | | | | | | | | | | | | | | | |
| **Instructional Strategies Used:** | | | | | | |  | | | | | | | | | | | | | | | | | | | | |
| **Day 1** | | | | | | **Day 2** | | | | | | | **Day 3** | | | | | **Day 4** | | | | | | **Day 5** | | | |
| **GSE/GPS Standard(s)**: | | | | | | **GSE/GPS Standard(s)**: | | | | | | | **GSE/GPS Standard(s)**: | | | | | **GSE/GPS Standard(s)**: | | | | | | **GSE/GPS Standard(s)**: | | | |
| MFANSQ4. Students will apply and extend previous understanding of addition, subtraction, multiplication, and division.  b. Find sums, differences, products, and quotients of all forms of rational numbers, stressing the conceptual understanding of these operations. (MGSE7.NS.1,2) | | | | | | MFANSQ4. Students will apply and extend previous understanding of addition, subtraction, multiplication, and division.  b. Find sums, differences, products, and quotients of all forms of rational numbers, stressing the conceptual understanding of these operations. (MGSE7.NS.1,2) | | | | | | | MFANSQ4. Students will apply and extend previous understanding of addition, subtraction, multiplication, and division.  b. Find sums, differences, products, and quotients of all forms of rational numbers, stressing the conceptual understanding of these operations. (MGSE7.NS.1,2) | | | | | MFANSQ4. Students will apply and extend previous understanding of addition, subtraction, multiplication, and division.  b. Find sums, differences, products, and quotients of all forms of rational numbers, stressing the conceptual understanding of these operations. (MGSE7.NS.1,2) | | | | | | MFANSQ4. Students will apply and extend previous understanding of addition, subtraction, multiplication, and division.  b. Find sums, differences, products, and quotients of all forms of rational numbers, stressing the conceptual understanding of these operations. (MGSE7.NS.1,2) | | | |
| **Essential Question:** | | | | | | **Essential Question:** | | | | | | | **Essential Question:** | | | | | **Essential Question:** | | | | | | **Essential Question:** | | | |
| How can you mentally compute mathematical operations?  How can you model addtion and subtraction? | | | | | | How can you mentally compute mathematical operations?  How can you model addtion and subtraction? | | | | | | | How can you mentally compute mathematical operations?  How can you model addtion, subtraction, mulitplication, and division? | | | | | How can you solve real world problems? | | | | | | How can you solve real world problems?  What does it mean to take a fraction portion of a whole number? | | | |
| **Mini Lesson:** | | | | | | **Mini Lesson:** | | | | | | | **Mini Lesson:** | | | | | **Mini Lesson:** | | | | | | **Mini Lesson:** | | | |
| * number talks- addition/subtraction | | | | | | * Number talks- Multiplication | | | | | | | * number talks- division | | | | | * Introduction to Fractions adding and subtracting | | | | | | * Fractions (multiplying and dividing) | | | |
| **Activating Strategies:** | | | | | | **Activating Strategies:** | | | | | | | **Activating Strategies:** | | | | | **Activating Strategies:** | | | | | | **Activating Strategies:** | | | |
| * Take away bar | | | | | | * Multiplication square game | | | | | | | * Relating mulitplication and division | | | | | * Act one - Yummy…Chocolate-3 Act task | | | | | | * part/whole conversation | | | |
| **Lesson:** | | | | | | **Lesson:** | | | | | | | **Lesson:** | | | | | **Lesson:** | | | | | | **Lesson:** | | | |
| * Module 1 Pre-test * Subtraction practice WS * Review Activity - Bowl -a-fact game | | | | | | * Array-nging Our Fact Families | | | | | | | * Is it reasonable? task | | | | | * Act two and Act three- Yummy … Chocolate task * Problem Solving Assessments | | | | | | * Birthday Cake task * Review card games - addition, subtraction, mulitplication, and division | | | |
| **Resource/Materials:** | | | | | | **Resource/Materials:** | | | | | | | **Resource/Materials:** | | | | | **Resource/Materials:** | | | | | | **Resource/Materials:** | | | |
| * dice/white boards/markers | | | | | | * times table sheet and white board games ,additional practice problems pg. 39 | | | | | | | * compatible numbers * impoppable app * sushi moster app | | | | | * Pictures of Ferrero Rocher Chocolates * assessment questions pg. 57 | | | | | | * Birthday cake student recording sheet * paper plates * two sided counters, base ten units, or some other small counter | | | |
| **Differentiation:**  ***Content/Process/Product:*** | | | | | | **Differentiation:**  ***Content/Process/Product:*** | | | | | | | **Differentiation:**  ***Content/Process/Product:*** | | | | | **Differentiation:**  ***Content/Process/Product:*** | | | | | | **Differentiation:**  ***Content/Process/Product:*** | | | |
| * different levels of subtraction problems | | | | | | * different levels of mulitplication problems | | | | | | | * see reflective notes | | | | | * assigning different level questions | | | | | | * See reflective notes | | | |
| ***Grouping Strategy:*** | | | | | | ***Grouping Strategy:*** | | | | | | | ***Grouping Strategy:*** | | | | | ***Grouping Strategy:*** | | | | | | ***Grouping Strategy:*** | | | |
| * pairs/individual | | | | | | * pairs/individual | | | | | | | * pairs/individual | | | | | * pairs/individual/whole group | | | | | | * pairs/indvidual | | | |
| ***Assessment:*** | | | | | | ***Assessment:*** | | | | | | | ***Assessment:*** | | | | | ***Assessment:*** | | | | | | ***Assessment:*** | | | |
| * TOD | | | | | | * TOD | | | | | | | * TOD- explain how campatible numbers are used to solve problems efficiently. | | | | | * TOD | | | | | | * TOD | | | |
| **Assessment :** | | | | | | **Assessment :** | | | | | | | **Assessment :** | | | | | **Assessment :** | | | | | | **Assessment :** | | | |
| ***Pre-Test:*** | Module 1 | | | | | ***Pre-Test:*** | | | |  | | | ***Pre-Test:*** | | |  | | ***Pre-Test:*** |  | | | | | ***Pre-Test:*** | |  | |
| ***Post-Test:*** |  | | | | | ***Post-Test:*** | | | |  | | | ***Post-Test:*** | | |  | | ***Post-Test:*** |  | | | | | ***Post-Test:*** | |  | |
| ***Formative:*** | | White boards | | | | ***Formative:*** | | | | | White boards | | ***Formative:*** | | | | white baords | ***Formative:*** | | assessment questions | | | | ***Formative:*** | | | activity sheets |
| ***Summative:*** | |  | | | | ***Summative:*** | | | | |  | | ***Summative:*** | | | |  | ***Summative:*** | |  | | | | ***Summative:*** | | |  |
| ***Performance Based:*** | | | | | | ***Performance Based:*** | | | | | | | ***Performance Based:*** | | | | | ***Performance Based:*** | | | | | | ***Performance Based:*** | | | |
|  | | | | | |  | | | | | | |  | | | | |  | | | | | |  | | | |
| **Homework:** | | | | | | **Homework:** | | | | | | | **Homework:** | | | | | **Homework:** | | | | | | **Homework:** | | | |
| subtraction worksheet | | | | | | Fact Families Worksheet | | | | | | | additional practice problems pg. 47 | | | | | one assessment question not given in class. | | | | | | none | | | |
| **Resources and Reflective Notes:** | | | | | | | | Wednesday's intervention: Students willo link basic dividsion facts to idneifying compatible numbers. i will begin with 35/7. I will make explicit the connection of he compatibility between 35 and 7 and how it can be applied to 350 and 7.  Wednesday extension: Have students solve the following problem with an estimate which fits the context. Mr. Wong has between 300 and 1,000 small prizes to divide evenly among his 9 students over the course of the school year. He will give away as many prizes as possible. What is the greatest number of prizes that could be left over? Is it possible for each student to get 200 prizes?  Friday intervention:  ● Students may use repeated addition to solve these problems.  ● Students may be given cakes already “cut” or drawn in parts to help them realize what the denominator will be.  ● Initially students can start with a smaller task such as 4 candles on a cake cut into ¼ then move up gradually to 8 candles on a cake cut into ¼ and eventually 12 candles on a cake.  ● For extra help with multiplying who numbers and fractions please open the hyperlink Intervention Table.  Friday's extension: Extension  ● Once students have completed the lesson above, this lesson could be extended to use larger numbers of candles and larger fractions.  ● Students could solve problems where the numerator is a number other than 1. For example, ⁵⁄₆ of 30.  ● Students could also extend this lesson by exploring how the lesson would change if you had 2 or 3 cakes rather than just one whole cake. | | | | | | | | | | | | | | | | | | | |