## Mrs. Rayman's 6th Grade Math Weekly Lesson Plans

Unit 2 Common Core State Standards
6.NS. 1 Interpret and compute quotients of fractions, and solve word problems involving division of fractions by fractions, e.g., by using visual fraction models and equations to represent the problem.
6.NS. 3 Fluently add, subtract, multiply, and divide using the standard algorithm for each operation.
6.NS.3c Find a percent of a quantity as a rate per 100; solve problems involving finding the whole, given a part of a percent.
6.NS. 2 Fluently divide multi-digit numbers using the standard algorithm.
6.NS. 4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. 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 factor

## Unit 2 Essential Questions:

- How are Fractions, Decimals, and Percents Related?
- How can the quotients of fractions be modeled?
- How can knowledge of operations with fractions be applied to operations with decimals and percents?


## Number Sense:

- Ways to make a number
- Ways to solve a math problem mentally


## Monday Engage NY Lesson 2-8

Objective: Students divide fractions by mixed numbers by first converting the mixed numbers into a fraction with a value larger than one. Students use equations to find quotients.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-8
3. Exit Ticket:
4. Homework: Engage NY Lesson 2-8 Problem Set/Homework

## Tuesday Engage NY Lesson 2-9 (NOTE- SUPPLEMENT- OPTIONAL)

Objective: Students relate decimals to mixed numbers and round addends, minuends, and subtrahends, to whole numbers in order to predict reasonable answers. They use their knowledge of adding and subtracting multi-digit numbers to find the sums and differences of decimals. Students will understand the importance of place value and solve problems in real-world contexts.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=8Tv7WunDsLg
2. Classwork: Engage NY Lesson 2-9 Examples 1-2 and Exercises 1-5
3. Exit Ticket: Solve each problem. Show that placement of the decimal is correct through either estimation or fraction calculation. 1.) 382 3/10 - 191 87/100 2.) $5947 / 25+8937 / 100$
4. Homework: Engage NY Lesson 2-9 Problem Set/Homework

## Wednesday Engage NY Lesson 2-11

Objective: Students use estimation and place value to determine the placement of the decimal point in products and to determine that the size of the product is relative to each factor. Students will discover and use connections between fraction multiplication and decimal multiplication.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v= jcW-ZgpRbM
2. Classwork: Engage NY Lesson 2-11 Exploratory Challenge and Exercises 1-4
3. Exit Ticket: 1.) Calculate the product: $78.93 \times 32.45$ 2.) Paint costs $\$ 29.95$ per gallon. Nikki needs 12.25 gallons to complete a painting project. How much will Nikki spend on paint? Remember to round to the nearest penny.
4. Homework: Engage NY Lesson 2-11 Problem Set/Homework

## Wednesday Engage NY Lesson 2-10

Objective: Through the use of arrays and partial products, students use place value and apply the distributive property to find the product of decimals.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-10
3. Exit Ticket:
4. Homework: Engage NY Lesson 2-10 Problem Set/Homework

## Thursday Unit 2 Mid Unit Test

## Friday Engage NY Lesson 2-12

Objective: Students connect estimation with place value in order to determine the standard algorithm for division. Agenda:
5. Warm up: Fraction/Percent of the Day AND Video:
6. Classwork: Engage NY Lesson 2-12
7. Exit Ticket:
8. Homework: Engage NY Lesson 2-12 Problem Set/Homework

| Mrs. Rayman's Daily Instructional Plan- Grade 6 Math |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Monday | Tuesday | Wednesday | Thursday | Friday |
| Accessing Prior Knowledge Where are your students headed? Where have they been? How will you make sure the students know where they are going? | Warm Up: <br> Fraction/Percent of the Day AND Video: <br> http://www.youtube.com/w atch?v=GOucLIm vEc | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: <br> Fraction/Percent of the Day AND Video: https://www.youtub e.com/watch?v= ic W-ZgpRbM | Warm up: Fraction/Percent of the Day AND Video: |
| Guided Practice - What events will help students experience and explore the big idea and questions in the unit? How will you equip them with needed skills and knowledge? | Direct Instruction: Engage NY Lesson 2-8 | Direct Instruction: <br> Engage NY Lesson 2-9 Examples 1-2 and Exercises 1-5 | Direct Instruction: Engage NY Lesson 2-10 Examples 1-2 and Exercises 1-5 | Direct Instruction: Engage NY Lesson 2-11 Exploratory Challenge Examples 1-4 | Direct Instruction: Engage NY Lesson 2-12 Examples and Exercises |
| Independent Practice - How will you cause students to reflect and rethink? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all? | Student Notes and Homework: Engage NY Lesson 2-8 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 2-9 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 2-10 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 2-11 Problem Set/Homework | Student Notes and Homework: <br> Engage NY Lesson 2-12Problem Set/Homework |
| Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit? | Exit Tickets and Teacher Observations | Exit Tickets and Teacher Observations | Exit Tickets and Teacher Observations | Exit Tickets and <br> Teacher <br> Observations | Exit Tickets and Teacher Observations |
| Differentiation/Accommodatio <br> n - How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit? | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments |
| Learner Outcome - How will students demonstrate, as a result of lesson, their level of mastery? <br> - Understand <br> - Know <br> - Do | Students divide fractions by mixed numbers by first converting the mixed numbers into a fraction with a value larger than one.Students use equations to find quotients. | Students relate decimals to mixed numbers and round addends, minuends, and subtrahends, to whole numbers in order to predict reasonable answers. They use their knowledge of adding and subtracting multi-digit numbers to find sums and differences of decimals. Students will understand the importance of place value and solve problems in real-world contexts. | Through the use of arrays and partial products, students use place value and apply the distributive property to find the product of decimals. | Students use estimation and place value to determine the placement of the decimal point in products and to determine that the size of the product is relative to each factor. Students will discover and use connections between fraction multiplication and decimal multiplication. | Students connect estimation with place value in order to determine the standard algorithm for division. |

Mrs. Rayman's 6th Grade Advanced Math

## Weekly Lesson Plans

## Unit 2 Common Core State Standards

| 6.NS. 1 Interpret and compute |
| :--- | :--- | :--- | :--- | :--- |
| quotients of fractions, and |
| solve word problems involving |
| division of fractions by |
| fractions, e.g., by using visual |
| fraction models and equations |
| to represent the problem. |$\quad$| 6.NS. 2 Fluently |
| :--- |
| divide multi-digit |
| numbers using the |
| standard algorithm. |$\quad$| 6.NS.3 Fluently |
| :--- |
| add, subtract, |
| multiply, and |
| divide using the |
| standard algorithm |
| for each |
| operation. | | 6.NS.3c Find a |
| :--- |
| percent of a quantity |
| as a rate per 100; |
| solve problems |
| involving finding the |
| whole, given a part of |
| a percent. | | 6.NS.4 Find the greatest common |
| :--- |
| factor of two whole numbers less |
| than or equal to 100 and the least |
| common multiple of two whole |
| numbers less than or equal to 12. |
| 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 |
| factor |

## Unit 2 Essential Questions:

- How are Fractions, Decimals, and Percents Related?
- How can the quotients of fractions be modeled?
- How can knowledge of operations with fractions be applied to operations with decimals and percents?


## Number Sense:

- Ways to make a number
- Ways to solve a math problem mentally


## Monday Engage NY Lesson 2-17

Objective: Students apply divisibility rules, specifically for 33 and 99 , to understand factors and multiples. Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Engage NY Lesson 2-17
3. Exit Ticket:
4. Homework: Engage NY Lesson 2-17 Problem Set/Homework

## Tuesday Engage NY Lesson 2-18

Objective: Students find the least common multiple and greatest common factor and apply knowledge of factors to use the distributive property.
Agenda:

1. Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.com/watch?v=Xg9NgvO8g6Q AND
https://www.youtube.com/watch?v=31M99xiNam4
2. Classwork: Engage NY Lesson 2-18 Examples 1-2 Stations 1-4
3. Exit Ticket: 1.) Find the LCM and GCF of 12 and 15 2.) Write two numbers, neither of which are 8, whose GCF is 8 3.) Write two numbers, neither of which is 28 , whose LCM is 28. AND Complete the chart (located on the exit ticket print out)
4. Homework: Engage NY Lesson 2-18 Problem Set/Homework

## Wednesday Unit 2 Review and MARS Performance Task

Objective: Students will review and study all standards that were covered throughout Unit 2. Agenda:

1. Warm up: Fraction/Percent of the Day AND Video:
2. Classwork: Student Review and Lancer Notes
3. Exit Ticket: Review
4. Homework: Review Sheet/Study Guide- Study for Unit 2 TEST Tomorrow!

## Thursday \& Friday Unit 2 Final TEST

Objective: Students will take an assessment on Unit 2.
Agenda:
5. Warm up: Fraction/Percent of the Day AND Video:
6. Homework: Compass Learning

Mrs. Rayman's Daily Instructional Plan- Grade 6 Advanced Math

|  | Monday | Tuesday | Wednesday | Thursday | Friday |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accessing Prior Knowledge - <br> Where are your students headed? Where have they been? How will you make sure the students know where they are going? | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: https://www.youtube.co m/watch?v= icW-ZgpRb M | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: | Warm up: Fraction/Percent of the Day AND Video: |
| Guided Practice - What events will help students experience and explore the big idea and questions in the unit? How will you equip them with needed skills and knowledge? | Direct Instruction: Engage NY Lesson 2-17 | Direct Instruction: <br> Engage NY Lesson 2-18 Examples 1-2 Stations 1-4 | Direct Instruction: Lancer Notes/Review Sheet for Unit 2 | Unit 2 FINAL TEST and Make Corrections and Review Mid Unit 2 Test | Unit 2 FINAL TEST and Make Corrections and Review Mid Unit 2 Test |
| Independent Practice - How will you cause students to reflect and rethink? How will you guide them in rehearsing, revising, and refining their work? How will students work together to ensure mastery for all? | Student Notes and Homework: Engage NY Lesson 2-17 Problem Set/Homework | Student Notes and Homework: Engage NY Lesson 2-18 Problem Set/Homework | Student Notes and Homework: Student Review and Lancer Notes | Student Notes and Homework: Compass Odyssey | Student Notes and Homework: Compass Odyssey |
| Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit? | Exit Tickets and Teacher Observations | Exit Tickets and Teacher Observations | Exit Tickets and Teacher Observations | Exit Tickets and Teacher Observations | Exit Tickets and Teacher Observations |
| Differentiation/Accommodation - <br> How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, without compromising the goals of the unit? | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments | Pre written vocabulary \& notes, extended time, preferential seating, reduced assignments |
| Learner Outcome - How will students demonstrate, as a result of lesson, their level of mastery? <br> - Understand <br> - Know <br> - Do | Students apply divisibility rules, specifically for 33 and 99 , to understand factors and multiples. | Students find the least common multiple and greatest common factor and apply knowledge of factors to use the distributive property. | Students will review and study all standards that were covered throughout Unit 2. | Students will take the Unit 2 Assessment. | Students will take the Unit 2 Assessment. |

