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

Date: Week of October 9, 2017

Common Core State Standards

6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	**6.RP.2** Understand the concept of a unit rate a/b associated with a ratio a:b with b not equal to 0, and use rate language in the context of a ratio relationship.	**6.RP.3** Use ratio and rate reasoning to solve real-world and mathematical problems, e.g. by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	**6.RP.3a** Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.

Essential Question: ***How do you use ratio concepts and ratio reasoning to solve problems?***

<u>Monday Engage NY Lesson 1-16</u>

Objective: Students associate a description of a ratio relationship, such as "5 miles for every 2 hours" to a new quantity, "2.5miles/hour" called a *rate*. Students will be able to identify the unit rate and the rate unit.

Agenda:

1. Warm up: Ratio of the Day AND "Unit Rates" Video: https://www.youtube.com/watch?v=lIW_ALj4Qj8 OR https://www.youtube.com/watch?annotation_id=2563e028-aff3-4a3f-bd3d-7bf8dcc45840&feature=cards&src_vid=IBP1TmBXlkY&v=ZejizwRUqgc
2. Classwork: Engage NY Lesson 16 Exploratory Challenge
3. Exit Ticket: *Angela enjoys swimming and often swims at a steady pace to burn calories. At this pace, Angela can swim 1,700 meters in 40 minutes. What is Angela's unit rate? What is the rate unit?*
4. Homework: Lesson 16 Problem Set/Homework

<u>Tuesday: Engage NY Lesson 1-17</u>

Objective: Given a rate, students will find ratios associated with the rate, including a ratio where the second term is one and a ratio where both terms are whole numbers. Students recognize that all ratios associated to a given rate are equivalent because they have the same value.

Agenda:

1. Warm up: Ratio/Rate of the Day AND "Ratios and Unit Rate" Videos: https://www.youtube.com/watch?v=Dv_NVDjG1Rk or https://www.youtube.com/watch?v=RQ2nYUBVvqI (Note- this is a repeat from 2 weeks ago to teach UNIT RATES and Associating rates with ratios... or RAP https://www.youtube.com/watch?v=I1JY3p-1BIQ
2. Classwork: Engage NY Lesson 17 Examples 1-6
3. Exit Ticket: *Tiffany is filling her daughter's pool with water from a hose. She can fill the pool at a rate of 1/10 gallons/second. Create at least three equivalent ratios that are associated with the rate. Use a double number line to show your work.*
4. Homework: Engage NY Lesson 17 Problem Set/Homework

Wednesday Engage NY Lesson 1-18

Objective: Students make use of the structure of division and ratios to model as a quantity. Students interpret a rate as a division of two quantities, or better yet, as a fraction which is the first step toward converting measurement units using rates later on.

Agenda:

5. Warm up: Ratio/Rate of the Day AND "Engage NY Lesson 18" Videos: https://www.youtube.com/watch?v=bWdg4BSAo-Q
6. Classwork: Engage NY Lesson 18 Exercise 1
7. Exit Ticket: *Alexandra drove from Michigan to Colorado to visit her friend. The speed limit on the highway is 70 miles/hour. If Alexandra's combined driving time for the trip was 14 hours, how many miles did Alexandra drive?*
8. Homework: Engage NY Lesson 18 Problem Set/Homework

Thursday Engage NY Lesson 1-19

Objective: Students solve problems by analyzing different unit rates given in tables, equations, and graphs.

Agenda:

9. Warm up: Ratio/Rate of the Day AND "Unit Price Video" https://www.youtube.com/watch?v=aJ3Dr4pmyPw or https://www.youtube.com/watch?v=InQHvGr9Ybc
10. Classwork: Engage NY Lesson 19 Examples 1-3
11. Exit Ticket: *Kiara, Giovanni, and Ebony are triplets and always argue over who can answer basic math facts the fastest. After completing a few different math fact activities, Kiara, Giovanni, and Ebony record their data… (problem on students exit slips)*
12. Homework: Engage NY Lesson 19 Problem Set/Homework

Friday Engage NY Lesson 1-20

Objective: Students solve problems by analyzing different rates given in words, tables, equations, and graphs.

Agenda:

13. Warm up: Ratio/Rate of the Day AND Video: https://www.youtube.com/watch?v=InQHvGr9Ybc
14. Classwork: Engage NY Lesson 20 Example 1 and Exploratory Challenge
15. Exit Ticket: *Value Grocery Mart and Market City are both having a sale on the same popular crackers. McKayla is trying to determine which sale is the better deal. Using the given table and equation, determine which store has the better deal on crackers? (Equation and Table written on Exit Ticket)*
16. Homework: Engage NY Lesson 20 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 y make sure the students know wher they are going?	Warm Up: Ratio of the Day AND "Unit Rates" Video: https://www.youtube.com/watch?v=liW_ALj4Qj8 OR https://www.youtube.com/watch?annotation_id=2563e028-aff3-4a3f-bd3d-7bf8dcc45840&feature=cards&src_vid=IBP1TmBXlkY&v=ZejizwRUqgc	**Warm Up:** Ratio of the Day AND "Ratios and Unit Rate" Videos: https://www.youtube.com/watch?v=RQ2nYUBVvql (Note- this is a repeat video from 2 weeks ago to teach UNIT RATES and Associating rates with ratios...	**Warm Up:** Ratio of the Day AND "Engage NY Lesson 18" Videos: https://www.youtube.com/watch?v=bWdg4BSAo-Q	**Warm Up:** Ratio/Rate of the Day AND "Unit Price Video" https://www.youtube.com/watch?v=aJ3Dr4pmyPw or https://www.youtube.com/watch?v=InQHvGr9Ybc	**Warm Up:** Ratio/Rate of the Day AND Video: https://www.youtube.com/watch?v=InQHvGr9Ybc
Guided Practice - What events will help students experience and explo the big idea and questions in the ur How will you equip them with need skills and knowledge?	**Direct Instruction:** Engage NY Lesson 1-16 Exploratory Challenge	**Direct Instruction** Engage NY Lesson 1-17 Exercises 1-6	**Direct Instruction** Engage NY Lesson 18 Exercise 1	**Direct Instruction:** Engage NY Lesson 1-19 Exercises 1-3	**Direct Instruction:** Engage NY Lesson 20 Exercise 1 and Exploratory Challenge
Independent Practice - How will you cause students to reflect and rethink? How will you guide them i rehearsing, revising, and refining th work? How will students work together to ensure mastery for all?	**Student Ratio Notes and Homework:** Lesson 16 Problem Set/Homework	**Student Ratio/Rate Notes and Homework:** Engage NY Lesson 17 Problem Set/Homework	**Student Ratio Note and Homework:** Engage NY Lesson 18 Problem Set/Homework	**Student Ratio Notes and Homework:** Engage NY Lesson 19 Problem Set/Homework	**Student Ratio Notes and Homework:** Engage NY Lesson 20 Problem Set/Homework
Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit?	**Exit Ticket and Teache Observations**	**Exit Ticket and Teacher Observations**	**Exit Tickets and Teacher Observations**	**Exit Ticket and Teacher Observation**	**Exit Tickets and Teacher Observations**
Differentiation/Accommodation - How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, withc compromising the goals of the unit'	**Pre written vocabulary notes, extended time, preferential seating, reduced assignments**	**Pre written vocabula & notes, extended time, preferential seating, reduced assignments**	**Pre written vocabula & notes, extended time, preferential seating, reduced assignments**	**Pre written vocabulary notes, extended time, preferential seating, reduced assignments**	**Pre written vocabulary & not extended time, preferential seating, reduced assignment**
Learner Outcome - How will students demonstrate, as a result of lesson, thei level of mastery? • **Understand** • **Know** • **Do**	Students associate a description of a ratio relationship, such as "5 miles for every 2 hours" to a new quantity, "2.5miles/hour" called a *rate*. Students will be able to identify the unit rate and the rate unit.	Given a rate, students will find ratios associated with the rate, including a ratio where the second term is one and a ratio where both terms are whole numbers. Students recognize that all ratios associated to a given rate are equivalent because they have the same value.	Students make use of the structure of division and ratios to model as a quantity. Students interpret a rate as a division of two quantities, or better yet, as a fraction which is the first step toward converting measurement units using rates later on.	Students solve problems by analyzing different unit rates given in tables, equations, and graphs.	Students solve problems by analyzing different rates given in words, tables, equations, and graphs.

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

Date: Week of October 9, 2017

Common Core State Standards

6.RP.1 Understand the concept of a ratio and use ratio language to describe a ratio relationship between two quantities.	**6.RP.3** Use ratio and rate reasoning to solve real-world and mathematical problems, e.g. by reasoning about tables of equivalent ratios, tape diagrams, double number line diagrams, or equations.	**6.RP.3a** Make tables of equivalent ratios relating quantities with whole-number measurements, find missing values in the tables, and plot the pairs of values on the coordinate plane. Use tables to compare ratios.

Essential Question: ***How do you use ratio concepts and ratio reasoning to solve problems?***

Monday Engage NY Lesson 1-18

Objective: Students make use of the structure of division and ratios to model as a quantity. Students interpret a rate as a division of two quantities, or better yet, as a fraction which is the first step toward converting measurement units using rates later on.

Agenda:

17. Warm up: Ratio of the Day AND "Engage NY Lesson 18" Videos: https://www.youtube.com/watch?v=bWdg4BSAo-Q
18. Classwork: Engage NY Lesson 18 Exercise 1
19. Exit Ticket: *Alexandra drove from Michigan to Colorado to visit her friend. The speed limit on the highway is 70 miles/hour. If Alexandra's combined driving time for the trip was 14 hours, how many miles did Alexandra drive?*
20. Homework: Engage NY Lesson 18 Problem Set/Homework

Tuesday Review Unit Rates (Substitute- Full Plans Left in Classroom for Tuesday)

Objective: Students will review rates and unit rates and work through a packet in which they will focus on what a rate and unit rate is as well as find unit rates.

Agenda:

1. Warm up: Ratio/Rate of the Day AND Unit Rates Video by Schmoop https://www.youtube.com/watch?v=iFh2VvM9iyM
2. Classwork: Unit Rates Packet
3. Exit Ticket: Unit Rates Exit Ticket
4. Homework: Students will finish any part(s) of the student packet that was not completed in class (today's lesson should be a review for all students)

Wednesday Engage NY Lesson 1-19 AND Unit 1 MID-Unit Test (on illuminate)

Objective: Students solve problems by analyzing different unit rates given in tables, equations, and graphs.

Agenda:

21. Warm up: Ratio/Rate of the Day AND "Unit Price Video" https://www.youtube.com/watch?v=aJ3Dr4pmyPw
22. Classwork: Engage NY Lesson 19 Examples 1-3
23. Exit Ticket: *Kiara, Giovanni, and Ebony are triplets and always argue over who can answer basic math facts the fastest. After completing a few different math fact activities, Kiara, Giovanni, and Ebony record their data… (problem on students exit slips)*
24. Homework: Engage NY Lesson 19 Problem Set/Homework

Thursday Review Comparing Unit Rates (Substitute- Full Plans left in Classroom)

Objective: Students will be able to identify the unit rate and the rate unit, compare unit rates, and be able to identify if a pair or rates are equivalent.

Agenda:

1. Warm up: Ratio/Rate of the Day AND (Optional Video: Math Antics Ratios and Rates)
2. Classwork: Comparing Unit Rates Packet
3. Exit Ticket: Comparing Unit Rates Exit Ticket
4. Homework: Students will finish any part(s) of the student packet that was not completed in class (today's lesson should be a review for all students)

Friday Engage NY Lesson 1-20

Objective: Students solve problems by analyzing different rates given in words, tables, equations, and graphs.

Agenda:

25. Warm up: Ratio/Rate of the Day AND Video: https://www.youtube.com/watch?v=InQHvGr9Ybc
26. Classwork: Engage NY Lesson 20 Example 1 and Exploratory Challenge
27. Exit Ticket: *Value Grocery Mart and Market City are both having a sale on the same popular crackers. McKayla is trying to determine which sale is the better deal. Using the given table and equation, determine which store has the better deal on crackers? (Equation and Table written on Exit Ticket)*
28. Homework: Engage NY Lesson 20 Problem Set/Homework

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	Monday	Tuesday	Wednesday	Thursday	Friday
Accessing Prior Knowledge - Where are your students headed? Where have they been? How will y make sure the students know wher they are going?	Warm Up: Ratio of the Day AND "Unit Rates" Video: https://www.youtube.com/watch?v=liW_ALj4Qj8 OR https://www.youtube.com/watch?annotation_id=2563e028-aff3-4a3f-bd3d-7bf8dcc45840&feature=cards&src_vid=lBP1TmBXlkY&v=ZejizwRUqgc	**Warm Up:** Ratio of the Day AND "Ratios and Unit Rate" Videos: https://www.youtube.com/watch?v=RQ2nYUBVvql (Note- this is a repeat video from 2 weeks ago to teach UNIT RATES and Associating rates with ratios...	**Warm Up:** Ratio of the Day AND "Engage NY Lesson 18" Videos: https://www.youtube.com/watch?v=bWdg4BSAo-Q	**Warm Up:** Ratio/Rate of the Day AND "Unit Price Video" https://www.youtube.com/watch?v=aJ3Dr4pmyPw or https://www.youtube.com/watch?v=lnQHvGr9Ybc	**Warm Up:** Ratio/Rate of the Day AND Video: https://www.youtube.com/watch?v=lnQHvGr9Ybc
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Differentiation/Accommodation - How will you tailor and otherwise personalize the learning plan to optimize the engagement and effectiveness of ALL students, withc compromising the goals of the unit'	**Pre written vocabular & notes, extended tim preferential seating, reduced assignments**	**Pre written vocabular & notes, extended tim preferential seating, reduced assignments**	**Pre written vocabulary & notes extended time, preferential seating, reduced assignments**	**Pre written vocabular & notes, extended time, preferential seating, reduced assignments**	**Pre written vocabula & notes, extended time, preferential seating, reduced assignments**
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