

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

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

Monday: NWEA MATH TESTING

Objective: Students will determine their current levels in math by taking the Fall NWEA math test. Students will record their current RIT scores in the areas of Operations and Algebraic Thinking, Numbers and Operations, Measurement and Data, and Geometry.

Agenda:

1. Warm up: Begin thinking about Math Goals for the 2017/18 school year.
2. Classwork: n/a (Take NWEA Math Test) COMPLETE 6th GRADE VOCAB PRETEST WHEN FINISHED TESTING (continued from Friday for some students...)
3. Homework: Fill out Fall Math Goals based on results from their personal Math NWEA scores.

Tuesday: NWEA MATH TESTING

Objective: Students will determine their current levels in math by taking the Fall NWEA math test. Students will record their current RIT scores in the areas of Operations and Algebraic Thinking, Numbers and Operations, Measurement and Data, and Geometry.

Agenda:

1. Warm up: Continue to think about Math Goals for the 2017/18 school year.
2. Classwork: n/a (Complete the NWEA Math Test) IF ALL STUDENTS COMPLETE TESTING (VOCAB & NWEA), PASS OUT MATH BINDERS
3. Homework: Complete Individual Fall Math Goals based on results from Math NWEA scores.

Wednesday: INTRODUCTION TO RATIOS & ENGAGE NEW YORK LESSON 1-1

Objective: Students will understand that a ratio is an ordered pair of numbers which are not both zero. The students will understand that the order of the pair of numbers in a ratio matters and will be able to come up with real-world contextual situations to match a given ratio.

Agenda:

1. Warm up: (5-10 min) Introduction to Ratios Warm Up (½ page, 2 sided), Math Antics: Introduction to Ratios <https://www.youtube.com/watch?v=RQ2nYUBVvgI>
2. Activity/Classwork: (10 min) Ratios with Skittles, (10 min) Use Engage NY example questions to guide Ratio discussions, (5 min) Fill out Vocabulary (Ratio and Tape Diagram), (10 min) Fill in Introduction to Ratios Notes
3. Exit Ticket: Introduction to Ratios Exit Ticket (½ page, 2 sided)
4. Homework: Introduction to Ratios Worksheet (write each ratio in each of the three ways (fraction, “to”, and colon) and 6.RP.1 Daily Quiz (2 Sided Homework Page)

Thursday: Engage New York Lesson 1-2 RATIOS

Objective: Students will reinforce their understanding that a ratio is an ordered pair of nonnegative numbers, which are not both zero. Students will create multiple ratios from a context in which more than two quantities are given and be able to come up with real world contextual situations to match a given ratio.

Agenda:

1. Warm up: (10 min) Ratio of the Day Worksheet and Math Playground: What is a Ratio? http://www.mathplayground.com/howto_ratios.html (Reteach ratios)
2. Classwork: (10 min) Engage NY Exercise 1, (20 Min) Exploratory Challenge, (10 min) Vocabulary (Ratio Table)
3. Exit Ticket: Give three different ratios with a description of the ratio relationship using male teachers to female teachers at MMS (preprinted exit ticket)
4. Homework: Daily Ratio Quizzes 6.RP.3 (2 Sided)

Friday: Engage New York Lesson 1-3 Equivalent Ratios

Objective: Students will develop and intuitive understanding of equivalent ratios by using tape diagrams to explore possible quantities of each part when given the part to part ratio.

Agenda:

1. Warm up: (10 min) Equivalent Ratio Warm Up (½ sheet, 2 sided) and Math Playground: Equivalent Ratios Video http://www.mathplayground.com/howto_equalratios.html
2. Classwork: (30 min) Engage NY Exercises 1-4, (15 min) Vocabulary (Equivalent Ratios) and Fill out Equivalent Ratio Notes
3. Exit Ticket: Equivalent Ratio Exit Ticket
4. Homework: Equivalent Ratio Practice Sheet and Daily Quiz Equivalent Ratio

Mrs. Rayman's Daily Instructional Plan

	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: Ways to Make a Number (Communicators)	Warm Up: Ways to Make a Number (Communicators)	Warm Up: Introduction to Ratios Warm Up (½ page, 2 sided)	Warm Up: Ratio of the Day and Math Tutor: What is a Ratio?	Warm Up: Equivalent Ratios Warm Up (½ sheet)
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?	NWEA Math Testing	NWEA Math Testing	Math Antics: Ratios Introduce Ratios: Skittles Ratio Activity	Math Playground: What is a Ratio? Engage NY Exercise 1	Math Playground: Equivalent Ratios
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?	NWEA Math Testing	NWEA Math Testing	Engage NY Example 1: Coed Soccer Team Compare and explore ratios of boys to girls	Engage NY: Exploratory Challenge and Vocabulary	Engage NY Exercises 1-4
Assessing Knowledge - How will you help students to exhibit and self-evaluate their growing skills, knowledge, and understanding throughout the unit?	NWEA Math Testing	NWEA Math Testing	Engage NY: Discussion Find the Ratio of... (give examples) then release and have students create their own ratios.	Vocabulary and Daily Quiz	Equivalent Ratios Vocabulary and Notes Daily Quiz and Equivalent Ratio Practice Sheet
Differentiation/Accommodation - 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?	I will read to any/all students who need the test read to them for accommodations per their 504 or IEP, Extended Time	I will read to any/all students who need the test read to them for accommodations per their 504 or IEP, Extended Time	Pre written Vocabulary and Notes for those students who cannot copy quickly or need extra time; Extended Time	Pre written Vocabulary and Notes for those students who cannot copy quickly or need extra time; Extended Time	Pre written Vocabulary and Notes for those students who cannot copy quickly or need extra time; Extended Time
Learner Outcome - How will students demonstrate , as a result of lesson, their level of mastery? <ul style="list-style-type: none"> • Understand • Know • Do 	Exit Ticket: Complete Math NWEA Goals for Fall 2017	Exit Ticket: Complete Math NWEA Goals for Fall 2017	Exit Ticket: Introduction to Ratios Exit Ticket (½ page, 2 sided)	Exit Ticket: Give three different ratios with a description of the ratio relationship between male teacher to female teachers at MMS.	Exit Ticket: Equivalent Ratio Exit Ticket (½ page, 2 Sided)

Notes: