

## Lesson Plan: Fractions

Lesson Segment Focus: Fractions

Lesson 1 of 5

Course &amp; topic addressed: Math (numbers and operations- fractions)

Date: 08/27/2019 Grade 3

### Student Outcomes

Specific learning objectives for this lesson.	Throughout this lesson, the students will learn how to write fractions using M&M candies.
Describe the connection to previous lessons. (Prior knowledge of students this builds upon)	The Student will do a KWL chart over fractions in a previous lesson. This will allow the students to think outside the box, so to speak, about what does they already know about fractions, what they want to know, and then after the lesson they will write what they have learned.
Knowledge of student's background (personal, cultural, or community assets)	Whether the students know it or not, they will probably at some point in their life have had some type of interactions with fractions. Some of the students might have actually done the activity without even knowing it, by dividing and organizing the candies by the color.

### State Academic Content Standards

List the state academic content standards with which this lesson is aligned. Include state abbreviation and number & text of the standard.	<p><b>AR. MATH.CONTENT.3.NF.A.1</b></p> <ul style="list-style-type: none"> <li>• understand a fraction <math>1/b</math> as the quantity formed by 1 part when a whole is a partition into <math>b</math> equal parts. For example: unit fractions are fractions with a numerator of 1 derived from a whole partitioned into equal parts and having 1 of those equal parts (<math>1/4</math> is one part of 4 equal parts.)</li> <li>• understand a fraction <math>a/b</math> as the quantity formed by <math>a</math> parts of size <math>1/b</math> For example: Unit fractions can be joined together to make non-unit fractions (<math>1/4 + 1/4 + 1/4 = 3/4</math>)</li> </ul> <p><b>AR. MATH.CONTENT. 3. NF.A. 3</b></p> <ul style="list-style-type: none"> <li>• Explain equivalence of fractions in special cases and compare fractions by reasoning about their size:             <ul style="list-style-type: none"> <li>○ Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line</li> <li>○ Recognize and generate simple equivalent fractions (i.e. <math>1/2=2/4</math>, <math>4/6= 2/3</math>)</li> <li>○ Explain why the fractions are equivalent (i.e. By using a visual fraction model)</li> <li>○ Express whole numbers as fractions and recognize fractions that are equivalent to the whole numbers.</li> </ul> </li> </ul>
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	<ul style="list-style-type: none"> <li>○ Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols (<math>&gt;</math>, <math>=</math>, <math>&lt;</math>) and justify the conclusions (e.g., by using a visual fraction model)</li> </ul>
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**Academic Language Support**

<p>What planned instructional supports might you use to assist students to understand key academic language to express and develop their content learning?          What will you do to provide varying supports for students at different levels of academic language development?</p>	<p>I might incorporate the key vocabulary words into a spelling lesson. This would be a way to better help students understand the vocabulary at hand. For the students that struggle more academically with spelling and learning, I will have the spelling and definition learning incorporated throughout the day in order to help them get as much practice as possible. (repetition is key)</p>
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**Key Vocabulary**

<p>What vocabulary terms/content specific terminology must be addressed for students to master the lesson?</p>	<p><b>Fraction:</b> a numerical quantity that is not a whole number.</p>
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**Materials**

<p>Materials needed by teacher for <b>this lesson.</b></p>	<p>The teacher will need a KWL chart printed out for all of the students, as well as M&amp;M candies, and the M&amp;M worksheet (See attachments)</p>
<p>Materials needed by students for <b>this lesson.</b></p>	<p>The students will need to be present as well as have a package of markers and a pencil.</p>

**Lesson Timeline with Instructional Strategies & Learning Tasks (This should be VERY DETAILED)**

Amount of Time	Teaching & Learning Activities	Describe what YOU (teacher) will be doing and/or what STUDENTS will be doing during this part of the lesson.
10-15 minutes	<b><u>Introduction:</u></b>	<ol style="list-style-type: none"> <li>1. <b>The teacher will do a KWL chart with the students.</b> (This activity will be done as a class, in table groups, and as individuals) (the K will be done as a class, the students will then break off into table groups and discuss the W, what they want to know, and after the lesson, the students will write down what they learned on their own) <b>this will be turned in for a grade.</b></li> </ol>
5 minutes lesson: 30 minutes	<b><u>Instruction:</u></b>	<ol style="list-style-type: none"> <li>2. The teacher will pass out the M&amp;M candy worksheet.</li> <li>3. The teacher will pass out the M&amp;Ms (<b>it is important to note that the teacher tells the students not to open their candy or eat their candy</b>)</li> <li>4. As a class, the teacher will instruct the students to open up their candy package, spread them out on the desk and count up the total. (<b>The totals will be different</b>)</li> <li>5. The teacher will then instruct the class to group their M&amp;M candies into colored groups.</li> <li>6. After the students have divided the candies into groups they will fill out the worksheets on their own. (<b>the students can use their markers to color code each box</b>)</li> <li>7. After the students have completed this worksheet, they will then as a table group figure out a new way to divide up their fractions into new M&amp;M groups.</li> </ol>
15 minutes	<b><u>Closure:</u></b>	<p>In conclusion, the teacher will tell the students that they can eat the M&amp;Ms on their desk as well as asking the students to finish their KWL chart. (<b>it is important to note that both of the worksheets completed in class will be turned in for a grade</b>)  <b>Discuss the KWL chart with the student completing a final one as a class to see what everyone learned.</b></p>

**Accommodations/Modifications**

How might I modify instruction for:  Remediation? Intervention? IEP/504? LEP/ESL?	I will take the lesson slower for them, and possibly have a group come to my desk (additional learning area) to make sure they are grasping the concept.
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**Differentiation:**

How might you provide a variety of instructional methods/tasks/instructional strategies to ensure all student needs are met?	I will have the students repeat instructions to me as a way to make sure they are grasping and understanding the instructions. By repeating the instructions and having the students repeat the m back to me, I can insure that there is no confusion, and if there is confusion I can fix the problem.
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**Assessments: Formative and/or Summative**

Describe the tools/procedures that will be used in this lesson to monitor students' learning of the lesson objective/s (include type of assessment & what is assessed).	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	
	<input type="checkbox"/> Formative / <input type="checkbox"/> Summative	

**Research/Theory**

Identify theories or research that supports the approach you used.	
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**Lesson Reflection/Evaluation**

What went well? What changes should be made? How will I use assessment data for next steps?	<i>TO BE FILLED IN AFTER TEACHING</i>
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Include supporting material such as slides, pictures, copy of textbook, and handouts for any activities students will be using as part of your lesson.

<iframe width="560" height="315" src="https://www.youtube.com/embed/fOogEd7JFAs" frameborder="0" allow="accelerometer; autoplay; encrypted-media; gyroscope; picture-in-picture" allowfullscreen></iframe>

Name \_\_\_\_\_ Date \_\_\_\_\_

## Fun Fractions With

**DO NOT EAT YOUR M&Ms UNTIL YOU COMPLETE THE LESSON!!!**

**Step 1:** Before you open your bag of M&M candies, guess the total number of M&Ms in the package.

Best Guess: \_\_\_\_\_

**Step 2:** Open your package and count the total number of M&Ms.

Total Number of M&Ms: \_\_\_\_\_

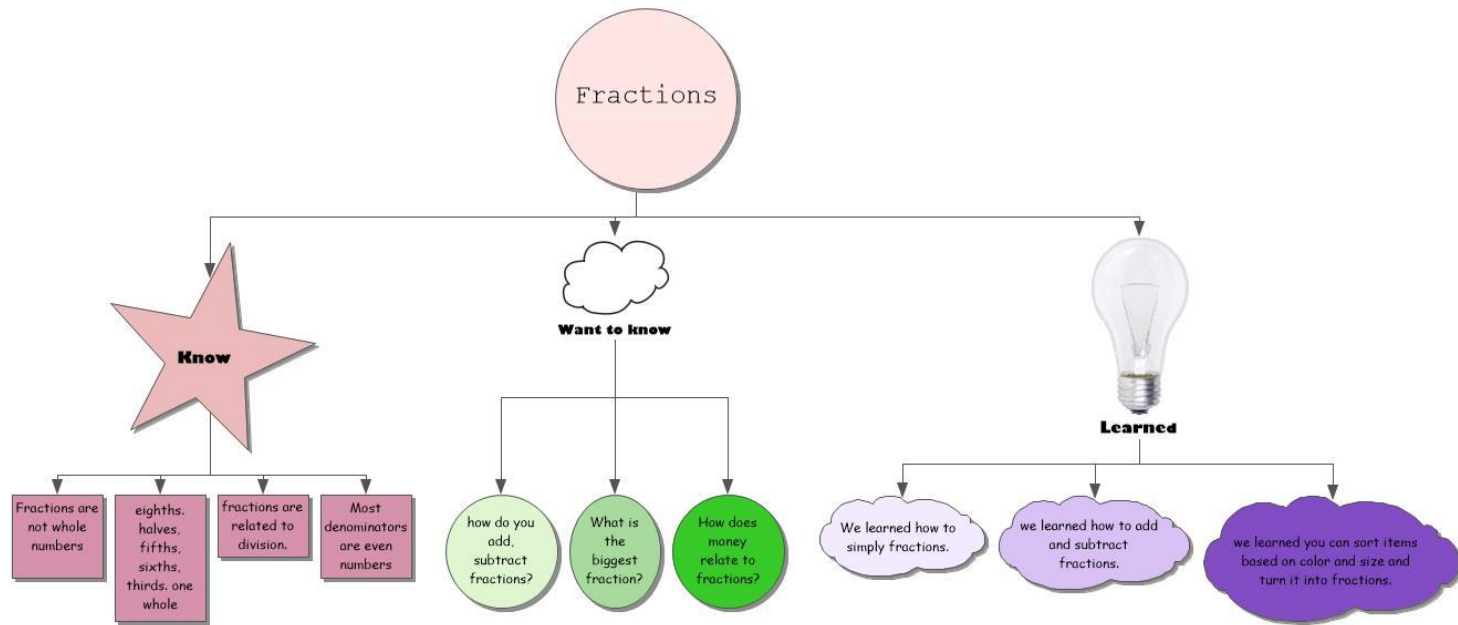
**Step 3:** What fraction represents the number of each color candy in your pack?

RED _____	BLUE _____
GREEN _____	ORANGE _____
YELLOW _____	BROWN _____
NON BLUE OR GREEN _____	NON BROWN OR RED _____
NON ORANGE OR YELLOW _____	

**Step 4:** Answer the following questions:

1. Which color M&M represents the largest fraction? \_\_\_\_\_
2. Which color M&M represents the smallest fraction? \_\_\_\_\_

**IT IS IMPORTANT TO NOTE THAT KWL CHART IS SUBJECT TO CHANGE BASED ON WHAT THE CLASS DISCUSSES AND KNOWS**



\*adapted from: <http://webcache.googleusercontent.com/search?q=cache:EsQcNWuG1ZoJ:web.mnstate.edu/harms/StudentTeachers/edTPA-LessonPlan.doc+&cd=2&hl=en&ct=clnk&gl=us>; <http://www.moreheadstate.edu/getmedia/cd3fd026-939f-4a47-a938-29c06d74ca01/Lesson-Plan-and-Reflections.aspx>; <http://www.mcneese.edu/f/c/9cb690d2/Lesson%20Plan%20Rubric%20Aligned%20with%20InTASC.docx>; <https://www.uwsp.edu/education/Documents/edTPA/Resource12.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/Resource11a.pdf>; <https://www.uwsp.edu/education/Documents/edTPA/LessonPlanTemplateSOE.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanGuide.docx>; <https://www.uwsp.edu/education/Documents/edTPA/SpecEdLessonPlanTemplate.docx>