

1. Provide the url and a description of the online assessment activity. Include the grade/content area/topic it's appropriate for.

- <http://www.mangahigh.com>
- Grade:
  - 2<sup>nd</sup> – 8<sup>th</sup>.–
  - High School:
    - Number and Quantitate
    - Algebra, Function
    - Geometry
    - Statistics and probability.
  - For my purposes I used the tool for **7<sup>th</sup> Grade Math**
- The program is connected to Common Core – therefore provides skills and games based off the Common Core standards. Although they are labeled slightly different from our Missouri GLE's, the concepts remain relatively the same.
- You are able to sort and filter based off of games or Prodigy™ (quizzes)
- I selected **Number Systems** to work on with my students.
- Description:
  - The site allows for a variety of skills. It is based off of Common Core, and then allows you to select the standards you would like your students to achieve. With this program, you can set students goals and challenges. The students work under their own username (30 licenses for students are free with a free teacher account. It does take a school email to enroll. In the program, students work to complete against their own goals/challenges as well as their peers to demonstrate proficiency on a skill. The skill is broken down to a very simple skill (changing percent's to decimals). The skills are then quizzed and/or the students can play a game that assesses the skill. The skills continue to be progressively harder as the student proves mastery (answering 3 questions in a row correctly). They earn points, which you could use as a reward system in you classroom (10,000 point club ect.)

2. List the learning objectives/outcomes you want students to meet. What is the Essential Question?

- **Common Core Standards:**
  - i. **7.NS – Number Systems:** Apply and extend previous understandings of operations with fractions to add, subtract, multiply and divide rational numbers
- **State Standards:**
  - i. **NO.1.B.7:** Recognize and generate equivalent forms of fractions, decimals, and percent's.
  - ii. **NO.2.C.7:** Apply properties of operations (including order of operations) to positive rational numbers and integers.
- **Learning Objectives:**
  - i. The students will be able to apply all operations to fractions, decimals and percent
  - ii. The students will be able to convert fractions to decimals to percent
- **Language Objectives:**
  - i. The students will read problems involving multiple operations involving fractions, decimals and percent's.
- **Essential Questions:**
  - i. Why is it important to know common fractions?
  - ii. How does estimation assist in applying operations to problems involving fractions, decimals and percent's?

3. *Describe how this resource engages students in activities that require the cognitive processes, social skills, etc., which you have stated as learning objectives/outcomes.*

- Manga high™ is able to engage students by allowing for games and challenges to encourage correct answers. Through the use of games, students find it fun to answer questions and gain greater points. I use several online games in my classroom. In the classroom, we set goals (so many points) by a certain amount of time, usually a class period. If the students meet their goal, they earn tickets that we use for bi-weekly drawings. In the case of Manga high™, I used the goal of around 5,000 points. The goal was based off of each student's abilities. They were able to play games, as well as take the quizzes. The harder the questions became, the more points the students can learn. The questions became harder and harder, therefore making it more difficult for the students and their cognitive process. The activity allowed for my learning outcomes to take place because the students were required to perform the math tasks. Following the activity, their exit ticket asked the two essential questions, taking the skill beyond basic math fact knowledge to a higher order thinking skill because it requires the students to ask themselves why and how. It allowed the students to recognize the importance of the essential skills taught, and they were then asked to think beyond those essential skills.

4. *Discuss why this was (or was not) an effective assessment resource. Did it align with the activity and learning outcomes? If it did not fully meet your needs/expectations, what would you change?*

- The activity was an effective resource for assessment, because I am able to monitor how the students answer questions and their common errors. I was also able to monitor correct questions and able to easily determine proficiency for each skill. The assessment did not take the students to high order thinking skills, and in Mathematics, that is a difficult concept to obtain. So often, we require the students to gain the basic math knowledge (facts, problem solving, etc.) which does not allow for the higher order thinking skills. One way I have managed to increase the number of lessons that have higher order thinking skills integrated is to ask why or how in my exit tickets. Before using the program Manga high™ I reviewed it and recognized that this program was made for basic Math knowledge. Because of this, my essential questions were distributed at the end of the class period using my exit tickets. Through this, the students evaluate if they obtained the learning and language objectives as well as demonstrate a knowledge of the skill taught for the day. Some days, instead of requiring a skill review, I will ask a higher order thinking question. On this day, my objective was to review skills heavily tested on the MAP assessment. For this purpose, I had already assessed my students formally and informally on these skills so I asked the higher order thinking questions. The purpose of this was to remind my students of tools they could use when presented with problems they may not know how to perform on the MAP assessment. Because of my preparation, the activity was an effective assessment resource and met my needs. If I had not prepared my lesson ahead of time I would have worked to ensure higher order thinking skills were integrated into the lesson.
- One thing I would change is a way in which to encourage more conversation and language into my lesson. I may have allowed for partner working to allow for peer assistance for those students who struggled with the skill. Although this would reduce the assessment's effectiveness for demonstrating individual student's proficiency of the skill, it would allow for some students to go beyond the proficient knowledge to the advanced knowledge because they may have to reteach skills to their peers.