## Reading and Writing with Fractions

## Lesson Summary

Students will create their own fraction books.

Major Topic and SOL
Math SOL (2009)
3.5.b

Length of Unit
2 hours

## Student Objectives

## In Mathematics the student will be able to:

- Name and write fractions and mixed numbers

In Language the student will be able to:

- Read a book about fractions
- Write a book about fractions


## $21{ }^{\text {st }}$ Century Skills

- Communication
- Creativity and Innovation
- Collaboration
- Information and Media Literacy


## Assessment Evidence

| Score | Collaboration | Neatness | Content (counts double) |
| :---: | :---: | :---: | :---: |
| 4 | Students worked well <br> together, stayed on task, <br> and completed their work <br> in a timely manner. | Final product was neat, <br> well-organized, and <br> showed maximum effort. <br> Spelling was correct for <br> all fraction labels. Pages <br> were numbered. | Product had all unit <br> fractions labeled in words <br> and numerical format, <br> and represented with <br> more than one picture. <br> Representations were <br> varied throughout the <br> book. |
| 3 | Students had few <br> problems, mostly stayed <br> on task, and completed <br> their work. | Final product was <br> relatively neat, well- <br> organized, and showed <br> effort. Spelling was <br> correct for most fraction <br> labels. Most pages were <br> numbered. | Product had all unit <br> fractions labeled in words <br> and/or numerical format, <br> and represented with at <br> least one picture. <br> Representations had <br> some variations |
| 2 | Students had several |  |  |
| problems working |  |  |  |

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|  | together, had to be <br> reminded several times <br> to remain on task, and <br> completed their work <br> late. | and minimal effort. Many <br> spelling errors in fraction <br> labels. Page numbers <br> missing. | representations, and/or <br> pages. All representations <br> were the same <br> throughout the book if <br> they had them. |
| :---: | :---: | :---: | :---: |
| 1 | Students refused to work, <br> were playing, and/or did <br> not complete their work. | No final product. | No final product. |

## Supplies/Materials/Technology

- Hershey's Fractions book
- Colored Paper, colored pencils, crayons or markers
- Word cards showing spellings of key vocabulary
- Rulers
- Stapler
- Rubric


## Lesson Plan

## Motivation \& Building Background:

- Background:
- Students have worked with fractions at an introductory level, reviewing how to represent, name and read fractions
- Motivation:
- Engage students by reading the book, and then tell them they will be the author and illustrator of their own fraction books. Include that these books will be "published" and put in the class library for other students to use.
- Brainstorm all the many ways fractions can be represented by pictures, graphs, sets, measurements, etc. Display all these on the class whiteboard.
- Discuss the objectives of the assignment and any criteria for grading that will be used (see rubric).


## Presentation

- While reading the book, stop and ask questions about other ways to represent those same fractions.
- Discuss why a Hershey bar was an easy choice for representing some fractions, but not others. You may also ask reading skill questions that relate to the math vocabulary used in the book, such as beginning/ending sounds, vowel sounds, number of syllables, etc. Students may also make predictions as you read, and then summarize at the end of the story.
- Discuss how fractions are all around us in the real world, and that we use them every day to make comparisons between values and measurements. Have students look around the room and find fraction values.
- Briefly review how to name, read and write fraction values.
- Explain that they will work with partner to create a book of fractions, again emphasizing the criteria that will be used for grading.


## Practice/Application

- Considering level of proficiency in fraction concepts, group students in pairs where one student will be able to help another who has less understanding.
- Give each group of students sufficient paper to complete their book, a ruler, and color pencils, crayons or markers.
- Explain that both students are to work cooperatively on the story, both in the writing and illustrating. They should include each unit fraction up to $1 / 10$. They should write on the fronts and backs of each page except the front and back covers. Pages should be numbered. Refer to rubric which should either be posted at the front of the room as a poster, or copied and given to each group for reference.
- Final product: Students will turn in their final product on the due date. After checking each project, the teacher may laminate the pages and either staple or bind the book together for durability.


[^0]:    Lesson Contributed by: Heather R. Bolling

