# 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

# 21st Century Skills

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

#### **Assessment Evidence**

Score	Collaboration	Neatness	Content (counts double)
4	Students worked well	Final product was neat,	Product had all unit
	together, stayed on task,	well-organized, and	fractions labeled in words
	and completed their work	showed maximum effort.	and numerical format,
	in a timely manner.	Spelling was correct for	and represented with
		all fraction labels. Pages	more than one picture.
		were numbered.	Representations were
			varied throughout the
			book.
3	Students had few	Final product was	Product had all unit
	problems, mostly stayed	relatively neat, well-	fractions labeled in words
	on task, and completed	organized, and showed	and/or numerical format,
	their work.	effort. Spelling was	and represented with at
		correct for most fraction	least one picture.
		labels. Most pages were	Representations had
		numbered.	some variations
			throughout the book.
2	Students had several	Final product showed no	Product was missing
	problems working	neatness, organization,	fraction labels,

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

## **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.
- O 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.