Grade Five

Tale of a Tadpole

Lesson Summary Students will use the book Tale of a Tadpole by Karen Wallace to learn about fractions and decimals.

Major Topic and SOL

Math SOL (2009)	5.2
Science SOL (2009)	4.5.e
Reading SOL (2009)	5.6

Length of Unit 1 hour and 30 minutes

Student Objectives

In Mathematics the student will be able to:

- recognize and name fractions in their equivalent decimal form and vice versa

In Language the students will be able to:

- will read and demonstrate comprehension of nonfiction
    - Use text organizers, such as type, headings, and graphics, to predict and categorize information.
    - Identify structural patterns found in nonfiction.
    - Locate information to support opinions, predictions, and conclusions.
    - Identify cause-and-effect relationships.
    - Identify compare-and-contrast relationships.
    - Skim materials to develop a general overview of content and to locate specific information.
    - Identify new information gained from reading.

21st Century Skills

- Critical-thinking and Problem Solving
- Communication
- Collaboration
- Contextual Learning

Assessment Evidence

- Spreadsheet to be completed
- Pond collection sheet
- Math Journal
- Oral explanation

Lesson Contributed by: Christina Wade
Funded through a 2010 Mathematics and Science Partnership Grant, Collaborative Math Professional Development (CoMPD).

Supplies/Materials/Technology

- Tale of a Tadpole by Karen Wallace
- Promethean Board
- picture of a tadpole
- tadpole cut outs for students
- string

Lesson Plan

Motivation & Building Background:

- Before reading the story, ask students what they know already about frogs and tadpoles.
    - Review the stages of a frog's life cycle.
    - Ask students about what they think life might be like for a tadpole. Are there any dangers?
    - Have the students listen for dangers that might face the tadpoles in the story as you read.
- As you read have the students make a list on their papers of the dangers they hear.
- After reading, discuss the lists of dangers that were generated by the students.
    - Record dangers on the Promethean Board for later use.
- Also use this time to review the tadpole's location in the food web of a pond and how the tadpole's niche will change as it grows into a frog.
    - Have the students give feedback on creating a class pond ecosystem showing the tadpole's niche.

Presentation

- You will need to give each student a pond (collection) of tadpoles handout.
- Then present this problem to the students:
    - *A mother frog laid these tadpoles and swam away to find food. A shiny goldfish comes along and eats 1/3 of the tadpoles. A stickleback fish swoops in and eats ¼ and the diving beetle eats 1/8 of the tadpoles. How many tadpoles did each living thing eat? How many tadpoles survived to become frogs?*
- Allow the students to work with a partner to determine how many tadpoles make up 1/3, ¼, and 1/8 of the pond of tadpoles.
    - They can use the string to separate or isolate a section of the pond to make thirds, fourths, or eights if they wish.
    - Students may want to draw in lines or color the tadpoles to show their final results before filling in the final spreadsheet.
- Take 3 to 5 volunteer partnerships to share their answers strategies, and pond pictures with the class.

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  - While their answers will be the same, the strategies and pictures will differ somewhat.
- Finally, in their math journals, the students should write the answers to the problem and explain the strategies they used to find the answers.
  - They should draw a picture of their pond to show their answers as well.
  - Students can use simple figures like squares or stars instead of trying to draw tadpoles.

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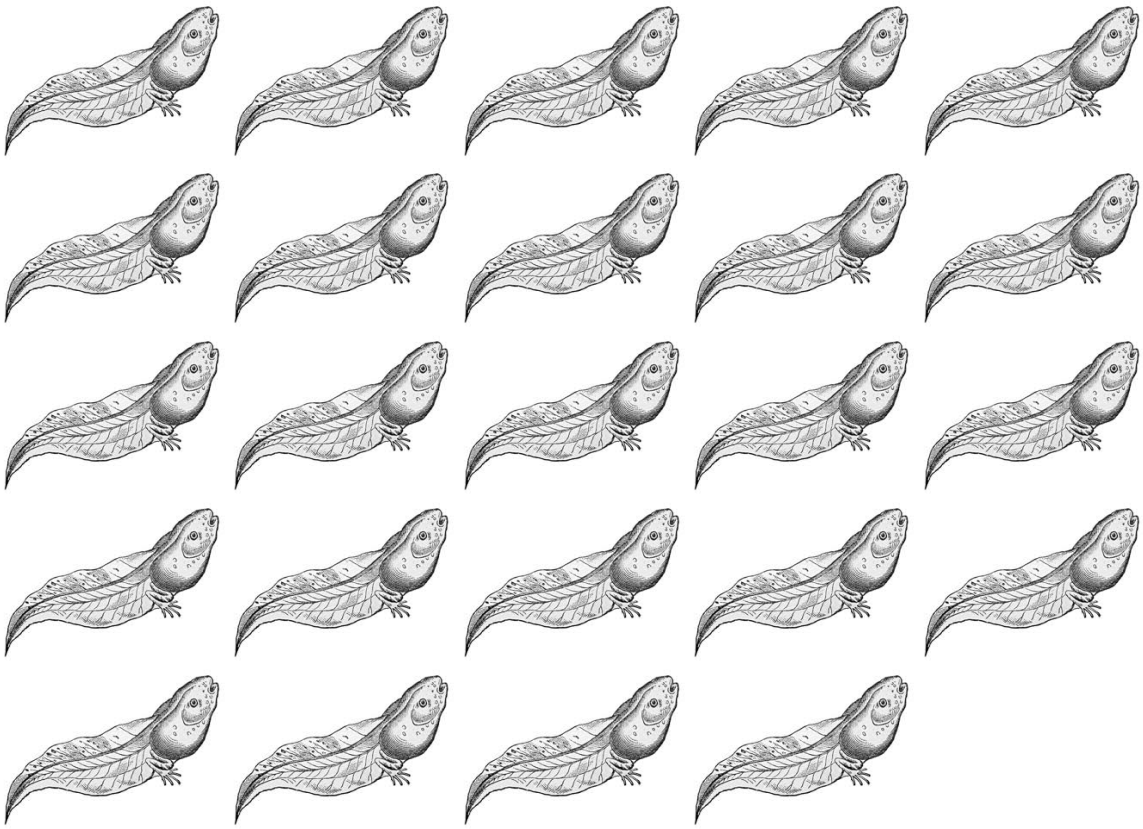

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Tadpoles in the Pond

Name: _____

Animal	Fraction	Decimal	# of tadpoles eaten
Goldfish			
Stickleback Fish			
Beetle			

How many tadpoles did each living things eat? How many tadpoles survived to become adults?

Goldfish:_____

Stickleback Fish: _____

Beetle: _____

# of tadpoles that survived: _____

Fraction of tadpoles that survived: _____

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