

INTRODUCTION

Math Riddles

Writing Purpose: Writing to entertain

Writing Format: Jokes and riddles

Topic: Multiplication and division (numbers and computation)

Overview

Students write one joke and one riddle that each contain a multiplication and division problem that the reader has to solve.

Prior Skills/Knowledge

- Students multiply and divide whole numbers.

Objectives

- Students use creative writing strategies appropriate to format.
- Students use pronouns addressing the reader in written compositions.
- Students use conventions in punctuation (dialogue tags) in written compositions.
- Students solve real-world problems involving number operations.

Materials for Each Student

- Copy of Situation page (page 45) to post at center
- One copy of Planning page (page 46) per student
- Copy of Student Model (page 47) to post at center
- Joke and riddle books
- Note cards, or an electronic word-processing program
- Evaluation rubric (page 44)

Teacher Preparation

- This project is intended to be completed independently.
- Copy, mount, and laminate (if preferred) the Situation page. If laminated, use an erasable marker to write an additional revision or editing skill for students to complete in step 10 of the Situation page. Post the Situation page at the literacy station.
- Make the needed number of copies of the Planning page for each student.
- Place writing materials at the literacy station.
- Include a copy of the Student Model at the literacy station.
- Place a copy of the evaluation rubric at the literacy station.

LESSON PLAN

Review Content-Area Knowledge

1. Review multiplication and division. Give each team of two or three students a set of cards numbered 0-9. Have students work collaboratively to create and solve multiplication and division problems by randomly selecting number cards. (This activity may be modified depending on the skill acquisition of the students.)

Whole-Class Activity (Introduction): How can the pronoun “you” and dialogue be used to tell jokes and riddles?

2. Read several jokes and riddles suitable for students. (Define a joke as something said or done to make people laugh; define a riddle as a question which poses a problem to solve.) Ask students to identify which jokes spoke to the reader by using the pronoun “you,” and which jokes included dialogue. Review how punctuation was used to show dialogue. Explain that both jokes and riddles are meant to tease a person’s brain.

Whole-Class Activity (Prewriting)

3. Explain that the students will write or rewrite a joke and riddle to include a multiplication and division problem. Review the Situation page (page 45) with the class.
4. Use a document camera or overhead projector to share the Student Model (page 47) with the class. Have students identify the use of the pronoun “you” in the riddle, and dialogue in the joke. As a class, solve the multiplication and division problems.
5. Review the use of the Planning page as a place where students can organize their thoughts and ideas. The added element of math may be tricky for some students. As a class, choose one joke or riddle from step 2 above. Ask students how this joke or riddle could be rewritten to include a multiplication or division problem. Model how math can be added to jokes and riddles. (The Student Model may help.)

Literacy Station (Drafting, Revising, and Editing the Project)

6. Allow time for students to plan, draft, revise, and edit their project. As their final draft, have students rewrite each one of their jokes and riddles on its own note card, or type them in an electronic word-processing program (allow extra time). Show students how to use the Shift key to type quotation marks.

Publish the Project

7. Begin each math class with a joke and a riddle and have the class solve the math problems. Or, place the students’ note cards at a math center and have each student choose five to seven cards. Students then write the math problems on a sheet of paper and solve them. Discuss the how the pronoun “you” involves the reader in a riddle. Then ask the students how the shift in “person” (from “you” to “they”) changed the level of involvement between the reader and the joke. Have students share which kind of funny message they preferred: being spoken to (riddle), or reading about (joke).

EXTENSIONS AND EVALUATIONS

More Computation Writing Tasks!

- Have students write a story that includes three or more distances. However, instead of providing the distances to the reader, have the students write multiplication or division problems that the reader will have to solve to get the exact distances.
- Have students write a fictional summary or article about the (e.g., tallest, shortest, heaviest, lightest, thickest, thinnest) something (e.g., tree, rock, cake, bike). Their summary should include at least three different measurements (e.g., height, width, length, circumference, perimeter, weight). Instead of stating the measurements in the summary, students write multiplication or division problems that the reader will have to solve to get the exact measurements.

Project Evaluation

Use this evaluation rubric to assess student writing skills and content-area knowledge. Provide a copy of this rubric to students before they begin writing, or post it at the literacy station.

| Project Title: Math Riddles Student: | 1 Not there | 2 Attempted | 3 Good | 4 Strong | 5 Outstanding | TOTAL |
|---|-----------------------|-----------------------|------------------|--------------------|-------------------------|--------------|
| Project completed following directions | | | | | | |
| Includes: <ul style="list-style-type: none"> • A joke and riddle containing math problems • Pronouns to address the reader • Correctly punctuated dialogue tags • | | | | | | |
| Writing is appropriate to format | | | | | | |
| Grammar, spelling, and punctuation are correct | | | | | | |
| Project demonstrates understanding of multiplication and division | | | | | | |
| Overall impression | | | | | | |
| TOTAL | | | | | | |
| What was right: | | | | | | |
| One area to improve: | | | | | | |

SITUATION

Student Name _____

Math Riddles

Situation: A joke book company wants to help children learn to multiply and divide.

Task: Write one joke and one riddle, each containing one multiplication and one division problem that the reader has to solve to understand the joke or solve the riddle.

Required: Your riddle must include:

- A multiplication problem
- A pronoun to address the reader

Your joke must include:

- A division problem
- Dialogue tags

Directions

Prewriting

1. Review some joke and riddle books.

Drafting

2. Write a riddle. It should address the reader.
3. Rewrite the riddle to include a multiplication problem.
4. Write a joke that includes two people talking.
5. Rewrite the joke to include a division problem.
6. Add dialogue to the joke. Show the people talking by using dialogue tags.

Revise and Edit

7. Be sure your joke and riddle include math problems.
8. Be sure your riddle addresses the reader.
9. Be sure your joke includes proper punctuation.
10. Also _____.

Publish your joke and riddle

11. Use one note card for the joke, and a different note card for the riddle. Write the joke and riddle in your neatest handwriting.

PLANNING

Student Name _____

Math Riddles

Directions: Read some jokes and riddles. Rewrite or come up with a joke and riddle of your own. The riddle should speak to the reader and include a multiplication problem. The joke should show two people talking, and include a division problem.

The Riddle

Write your favorite riddle here. It should use the pronoun "you."

Now think about how you can rewrite this riddle to include a multiplication problem. Rewrite the riddle here so that it has a multiplication problem to solve.

This is the multiplication problem and solution. _____

The Joke

This part is a little trickier. Write a joke which shows two people talking. Use quotation marks and punctuation marks correctly.

Now think about how you can rewrite this joke to include a division problem. Rewrite the joke here so that it has a multiplication problem to solve.

This is the division problem and solution. _____

STUDENT MODEL

Math Riddles

Riddle

What do you get when you cross 26 vampires
with 348 worms?

_____ bloodsuckers!

Joke

“Hey, Benny,” greeted Jake. “I have a question for you.”

“What is it?” asked Benny.

“Let’s say you were the usher in a movie theater. You need to divide 272 people into four groups, one for each section of the theater.”

“That would be _____ people per section!”

Benny was excited he had solved the problem.

“That’s not my question,” explained Jake. “I want to know, what color were the usher’s eyes?”

“How should I know?” Benny was confused. He didn’t see how the usher’s eye color had anything to do with seating 272 people in a theater.

“Oh, Benny,” sighed Jake. “They’re your eye color! You are the usher!”