

PERFORMANCE TASK: Day Out

Adapted from Bowland Maths

STANDARDS FOR MATHEMATICAL CONTENT

MCC5.NBT.4 Use place value understanding to round decimals to any place. Perform operations with multi-digit whole numbers and with decimals to hundredths.

MCC5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.



STANDARDS FOR MATHEMATICAL PRACTICE

- 1. Make sense of problems and persevere in solving them.**
- 2. Reason abstractly and quantitatively.**
- 3. Construct viable arguments and critique the reasoning of others.**
- 4. Model with mathematics.**
- 5. Use appropriate tools strategically.**
- 6. Attend to precision.**
- 7. Look for and make use of structure.**
- 8. Look for and express regularity in repeated reasoning.**

BACKGROUND KNOWLEDGE

Students should have had many opportunities to identify, read, and illustrate decimal numbers. Students' work will represent some uniqueness based on how they approach the problem. Students will need to reflect on their own understanding of place value and adding decimals.

ESSENTIAL QUESTIONS

- How are fractions represented?
- How does placement affect value?
- How do you put decimals in order?
- How do you add decimals?
- How do you subtract decimals?

MATERIALS

- “Day Out” task sheet.
- markers, crayons, and/or colored pencils

GROUPING

Individual/Partner Task

TASK DESCRIPTION, DEVELOPMENT, AND DISCUSSION

This culminating task represents the level of depth, rigor, and complexity expected of all fifth grade students to demonstrate evidence of learning.

For the Culminating Task, students will plan the most cost effective trip based on the given data. In order to do this, students will need to: summarize the data; represent data mathematically; calculate and compare costs; and explain their thinking.

Comments

Students should be given opportunities to revise their work based on teacher feedback, peer feedback, and metacognition which includes self-assessment and reflection.

Suggestions for Classroom Use

While this task may serve as a summative assessment, it also may be used for formative assessment and/or as a project. It is important that all elements of the task be addressed throughout the learning process so that students understand what is expected of them.

Task Directions

Students will follow the directions below from the “Day Out” students recording sheet.

Mr. Richards, a teacher at Crosstown Elementary School, plans to take 30 students on a school trip. The class voted on which place to visit. Answer the questions that follow. Rewrite the difference as a decimal number. Be sure to explain your thinking.

FORMATIVE ASSESSMENT QUESTIONS

- Which place has the cheapest entrance fee?
- Which place is nearest?
- What are Lucy’s first and second choices?
- How much do teachers have to pay?
- How much will the school pay towards the total cost of the trip?

DIFFERENTIATION

Extension

If the price of gas goes up by 0.40 per gallon, how will this affect your decision?

Intervention

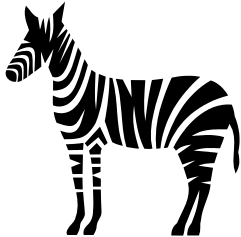


- Some students may benefit by being given support in summarizing the data.

- Students who have difficulty organizing their work may benefit by working with a partner whose strength is organization, or may need a teacher's assistance in organizing their work before/during the task.

Name _____ Date _____

Day Out

Mr. Richards, a teacher at Crosstown Elementary School, plans to take 30 students on a school trip. Here are the places they could visit.

Big City Zoo	Prison Museum	Space Science Show
		
36 miles from Crosstown Elementary School Entrance Fee: \$2.50 per person	30 miles from Crosstown Elementary School Entrance Fee: \$6.00 per person	10 miles from Crosstown Elementary School Entrance Fee: \$10.00 per person

The class voted on which place to visit. Here are the results.

Name	First Choice	Second Choice	Name	First Choice	Second Choice
Olivia	Zoo	Space Show	Jack	Prison Museum	Zoo
LaMonica	Space Show	Prison Museum	Thomas	Zoo	Prison Museum
Jessica	Prison Museum	Zoo	Joshua	Zoo	Prison Museum
Ruby	Zoo	Space Show	Raquan	Space Show	Prison Museum
Maria	Space Show	Prison Museum	Quintavious	Prison Museum	Zoo
Emily	Prison Museum	Zoo	James	Zoo	Space Show
Chloe	Prison Museum	Space Show	William	Space Show	Space Show
Shacourtney	Prison Museum	Space Show	Sam	Zoo	Prison Museum
Sophie	Space Show	Prison Museum	Daniel	Zoo	Space Show
Lily	Space Show	Prison Museum	Charles	Prison Museum	Prison Museum
Ellie	Zoo	Space Show	Ben	Space Show	Zoo
Charlotte	Space Show	Prison Museum	Joe	Zoo	Prison Museum
Katie	Space Show	Prison Museum	Cedric	Zoo	Prison Museum
Mia	Zoo	Space Show	Lawrence	Prison Museum	Space Show
Hannah	Zoo	Space Show	Jake	Space Show	Prison Museum

- a. Taking first and second choices into account, where do you think Mr. Richards should take his class? Explain how you decided.

Here are some more facts about the trip.

- The bus company charges \$6 per mile.
- The school will pay the first \$200 of the trip.
- Teachers go free.
- Each student pays the same amount.

- b. How much will each student need to pay to go on the trip you have chosen? Explain your thinking.