FINAL PERFORMANCE TASK: My Special Day! 2 Days to complete



STANDARDS FOR MATHEMATCIAL CONTENT

MCC.3.OA.5. Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$, then $15 \times 2 = 30$, or by $5 \times 2 = 10$, then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) Use arrays, area models, and manipulatives to develop understanding of properties.

MCC.3.OA.6. Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8. Conversations should also include connections between division and subtraction.

MCC.3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.

STANDARDS FOR MATHEMATCIAL 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.

*** Mathematical Practices 1 and 6 should be evident in EVERY lesson. ***

BACKGROUND KNOWLEDGE

(Information quoted from Van de Walle and Lovin, Teaching Student-Centered Mathematics: Grades 3-5, page 30)

"Assessment need not look different from instruction. The typical approach of an end-of-chapter test of skills may have some value but it is not appropriate as the main method of assessment. Assessment can and should happen every day as an integral part of instruction. If you restrict your view of assessment to tests and quizzes, you will miss seeing how assessment can help

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students grow and inform instruction. "Assessment should focus on what students do know instead of what they do not know" (NCTM, 1989)."

ESSENTIAL QUESTIONS

- How is multiplication and division used to solve a problem?
- When can you use multiplication or division in real life?

MATERIALS

Planning Information sheet

GROUPING

Partner or Independent

TASK DESCRIPTION, DEVELOPMENT AND DISCUSSION

Students will plan a special day, just for them! They have to keep the cost of their day under \$100. Each student will use the Planning recording sheet to decide how many guests will be invited to enjoy their special day with them. Students will figure out the cost of how much food, drinks and items they will need per guest. They have the choice of planning a small group with a lot of items or a large group with not as many items. The goal is to see which students use multiplication and division to determine the cost of the day and which students are using repeated addition or subtraction.

FORMATIVE ASSESSMENT QUESTIONS

How did you use multiplication or division to determine your guest list?

DIFFERENTIATION

Extension: Students could be challenged to create their own list of supplies. Increase the amount of the budget for the day.

Intervention: Provide the amount of guests that are coming for the day and then challenge the students to figure out what they could use on their day.

Common Core Georgia Performance Standards Framework

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Name	
------	--

Date _____

Planning Sheet Student Recording Sheet

You get to plan a special day just for you! You parents are letting you pick what you want to do, eat, drink and who you will invite to share your special day with! Your task is to keep a budget under \$100. You can invite whomever you want. You get to make all the decisions!

Use the price lists to find out how much you will spend. You must use at least one item in each category. Happy Planning!

FOOD	Cost per guest
Pizza	\$2
Hamburgers	\$2
Chicken Fingers	\$3
Ribs	\$5
Steak	\$7
Crab Legs	\$8
Japanese Steakhouse	\$10

DRINK	Cost per guest
Bottled water	\$1
Kool Aide	\$1
Lemonade	\$2
Fruit punch	\$2
Soda	\$2
Milkshakes	\$3
Rootbeer Floats	\$4

ACTIVITY	Cost per guest
Swimming	\$3
Roller skating	\$3
Bowling	\$4
Lazer tag	\$6
Limo ride	\$8
Waterpark	\$10
Amusement Park	\$10

FAVORS for GUESTS	Cost per guest
Stickers	\$1
Balloons	\$1
Υο γο	\$2
Frisbee	\$2
Silly string	\$2
Disposable camera	\$6
Gift card	\$10

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