

EXPLORING MULTIPLICATION AND DIVISION AT A PARTY

Performance Standard 6B.B

Solve a multiplication and a division problem using Unifix Cubes accordingly:

- *Mathematical knowledge*: Represent multiplication and division problems with Unifix cubes to obtain correct answers;
- *Strategic knowledge*: Manipulate cubes to represent solutions;
- *Explanation*: Explain completely what was done and why it was done.

Procedures

1. ***In order to investigate, represent and solve problems using number facts, operations, and their properties, algorithms, and relationships(6B)***, students should experience sufficient learning opportunities to develop the following:
 - Explore multiplication and division through equal grouping of objects and sharing.
2. Have students review and discuss the task to be completed and how it will be evaluated. This task may be videotaped to observe student's verbal cues and manipulation. Have plenty of Unifix cubes on the table for students to use while solving and explaining their thinking.
3. Using the "Exploring Multiplication and Division at a Party" teacher assessment task worksheet, read each of the two problems to each student individually. Students are to use the cubes to solve the problems. Encourage them to 'think aloud' so you can assess the strategy used.
4. Evaluate each student's performance on each problem using the rubric as follows and use the guide on the rubric to determine the performance level:
 - *Mathematical knowledge*: check for accuracy of final answer and accuracy of operation,
 - *Strategic knowledge*: observe the student's manipulations of the cubes, and
 - *Explanation*: as student thinks aloud, listen for key mathematical vocabulary words such as "groups of," "multiply," and "divide" and for clarity and confidence in the explanation. Prompt student with questions such as "Why did you do that?" and "How did you know?"

Examples of Student Work not available

- Five to ten minutes per student and must be given individually

Time Requirements

Resources

- Teacher task sheet
- Unifix Cubes for student use
- Mathematics Rubric

NAME _____ DATE _____

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TEACHER TASK SHEET

MULTIPLICATION

Eight people came to my birthday party. They each ate four cupcakes. How many cupcakes did my friends eat?

MULTIPLICATION	SCORE	COMMENTS
Mathematical Knowledge		
Strategic Knowledge		
Explanation		

DIVISION

I bought 56 pieces of candy to put in treat bags at my birthday party. If all eight guests get a treat bag, how many pieces does each friend get?

DIVISION	SCORE	COMMENTS
Mathematical Knowledge		
Strategic Knowledge		
Explanation		