COMPARING M & M'S

Performance Standard 6D.A

Sort a bag of M & M's by colors and use the M & M's to answer comparison problems accordingly:

- *Mathematical knowledge*: Count correctly and identifies more, less, most and fewest.
- *Strategic knowledge*: Solve the problem using one to one correspondence or number sentences.
- *Explanation*: Explain what was done and why it was done.

Procedures

1. ***In order to solve problems using comparison of quantities, ratios, proportions, and percents (6D),*** students should experience sufficient learning opportunities to develop the following:
   - Compare two or more sets, using manipulatives, to solve problems.
2. Have students review and discuss the task to be completed and how the rubric will be used to evaluate it. This task should be done individually and videotaped (if a record of performance is desired), as there is no written part to evaluate.
3. Give student an individual bag of M & M's and ask them to sort them by color. If any of the piles have equal quantities of M & M's, direct students to eat (or otherwise dispose) some of the M & M's to create different quantities in each pile. You may have to be specific with this direction (e.g., please eat 2 green M & M's).
4. Ask the following questions:
   (1) Which pile has the most?
   (2) Which pile has the least?
   (3) Which pile has more _____or _____? How many more does it have? (USE 2 Examples)
   (4) Which pile has less _____or_____? How many less does it have? (USE 2 EXAMPLES)
   (5) Order the piles from least to most. How many more does the largest pile have than the smallest pile?
5. Record comments on each student's performance on the rubric. After students give an answer, ask them to explain how they know they are correct. Have paper and pencil available if you prefer to have the students record a number sentence.
6. Evaluate each student's performance using the rubric as follows and use the guide on the rubric to determine each student's performance level:
   - *Mathematical knowledge*: check the answers to the questions given. Correct counting techniques are imperative to this component. Does student know more, less, most and fewest?,
   - *Strategic knowledge*: observe the way the student compares sets. A student who is exceeding or meeting the standard will use one-to-one set matching or number sentences to solve, and
   - *Explanation*: observe the student's use of mathematical vocabulary and the clarity of response.

Examples of Student Work not available

Resources

- 1 bag of individual-sized M & M's per student
- Mathematics Rubric

Time Requirements

- 20 – 30 minutes and should be given individually