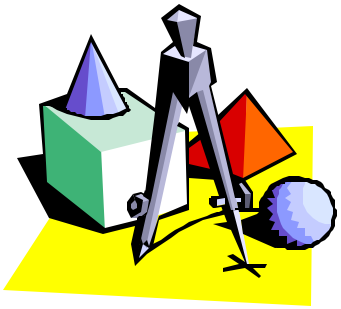
Algebra/Geometry Institute Summer 2003



Lesson Plan 3

Faculty Name: Mary C. Brown
School: Shelby Middle School
City: Shelby, MS 38732
Grade Level: 4th

1 Teaching objective(s)

Collect, read, organize, and interpret data and explore probability.

2 Instructional Activities

- Present problem of the day. (See Attachment #1)
- Discuss vocabulary.
- Students will record words and place them in their mathematics notebook. (See Attachment #2).
- Place six colored cubes in a paper bag. (2 red, 1 blue, 1 yellow, l green, 1 orange)
- Have students to predict which color will be drawn out of the bag first. Why?
- Repeat drawing at least six times and record results.
- Construct a chart on the board to show result when drawn.
- Explain to students that the chance of drawing a red cube out of the paper bag is 2out of 6, because there is a total of six cubes and two of the cubes are red.
- Have students form groups of three or four.
- Give each group a small bag of M & M's, a large sheet of paper and a worksheet. (See Attachment #3)
- Explain that students are to predict how many of each color will be found in a bag of M & M's.
- After prediction and recording, have students open bag and complete table.
- Select groups at random to share findings.
- Have students display work on display wall.
- Ask questions: If I were to open a bag of M & M's, what is the chance of selecting a red M & M? Which M&M has the chance of being selected first? Why? Which color appeared more in the bag?
- Students will complete handout on probability. (Attachment #4)

3 Materials and Resources

Pencil
Paper
Colored Cubes
Paper Bag
Bags of M & M's/ or Assorted Colored Candy
Butcher Paper
Notebook
Handouts
Dryboard/Markers

References: Textbook - Houghton Mifflin Mathematics. Houghton Mifflin Company, 2002. pp. 437-443. 4th Grade

Implementing Mathematics Using Technology and Emphasizing Literature. Mississippi Mathematics Framework 2000.

4 Assessment

Teacher Observation
The students will complete a handout on probability.

Attachment #1

Problem of the Day

How many different ways can three people seat themselves in three chairs? (Six ways)

Attachment #2

Vocabulary

1. Probability
2. Data
3. Outcome
4. Prediction

Attachment #3

Number of M & M's In A Bag

Colors	Estimated Number	Actual Number	Difference in Estimated/Actual Number
Total			

Attachment #4

Directions: Suppose you pick one of the letters below without looking. Write the probability of picking each letter.

M A T H E M A T I C S