

Probability



Author: Browning Neddeau 03/18/2007 09:09:00 PM PST

LESSON OVERVIEW

Subject(s): Mathematics

Topic or Unit of Study: This lesson belongs in the unit concerning Probability.

Grade/Level: 5

Objective: Students will create a class bar graph depicting results from the probability lesson.

Summary:

IMPLEMENTATION

Learning Context: This lesson is an introduction to our study of probability. Students will continue to explore probability as it pertains to their prior knowledge.

Teaching Strategies: model probability using connecting cubes; whole-class brainstorm

Time Allotment: 1 class period. 30 Min. per class.

Sample Student Products:

Author's Comments & Reflections: TPE 8, 9: Connects content standards

PROCEDURE

Anticipatory Set: I will ask the students to raise their hand and supply me with their prior knowledge of the idea "probability."

Modeling: Using different colored connecting cubes and a bag, I will model probability to the students. I will demonstrate how I put in a certain number of colored cubes in the bag. In addition, I will show how I can create a "probability" statement by just knowing how many and of what colors of cubes I placed in the bag.

Guided Practice: I will have a student take out a colored cube from the bag and share with me the probability that he or she pulled that color of connecting cube. Moreover, additional guided practice shall be noted during the creation of the class graph of the Heads or Tails activity. I will help create the class graph from student results.

Independent Practice: Using a coin, students will have the opportunity to see the probability that they can get "Heads" (H) or "Tails" (T). They will flip their coin 10 times and record their results on their paper.

Closure: The teacher will conduct a whole group closure by sharing the findings of the class in regards to Heads and Tails of the coin flip.

Follow-Up: Students will have the opportunity to work on more probability

questions including pages 238-241 of their mathematics textbook.

MATERIALS AND RESOURCES

Instructional Materials:

Resources:

- Materials and resources:
colored connecting cubes; bag; coins; pencil; paper; textbook; blackboard;
chalk; chart paper; markers

STANDARDS & ASSESSMENT

Standards:

CA- California K-12 Academic Content Standards

- **Subject** : Mathematics
 - **Grade** : Grade Five
By the end of grade five, students increase their facility with the four basic arithmetic operations applied to fractions, decimals, and positive and negative numbers. They know and use common measuring units to determine length and area and know and use formulas to determine the volume of simple geometric figures. Students know the concept of angle measurement and use a protractor and compass to solve problems. They use grids, tables, graphs, and charts to record and analyze data.
 - **Area** : Mathematical Reasoning
 - **Sub-Strand 2.0**: Students use strategies, skills, and concepts in finding solutions:
 - **Standard 2.3**: Use a variety of methods, such as words, numbers, symbols, charts, graphs, tables, diagrams, and models, to explain mathematical reasoning.

Assessment Plan: Student performance will be assessed by their completed work of pages 240-241 of their textbook.

Assessment/Rubrics: