Mathematics, Grade 6 Unit IX: Lesson 5

## Experiment / Display: Fair Die

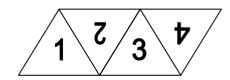


Dice that are sold in a store are called "fair" dice, because when tossed, there is an equal chance of a 1, 2, 3, 4, 5 or 6 landing face up. What about homemade dice? Your project is to construct a die and then test it to see if it is fair. You may use the pattern shown on the card to construct a 4 sided die or you may construct one of any number of sides you wish using a different material such as wood, Styrofoam, etc. Research how a frequency table is constructed.

After constructing your die, number the faces. Put the die in a box and shake the box. Drop the die to the table or floor. Do this at least 100 times. Is your die fair? If not, make it fair by weighting the side you want to land face down more frequently. You might use glue, tape or any successful method to weight the die. Continue until you have a fair die.

Mount your die on a piece of poster stock along with your frequency table. Write a description of what you did to make your die fair and mount this on your poster also.

Display the poster in the classroom. Maybe you could think of a game to play with your die.



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