

Strategic Rolling - Probability Worksheet

Name: _____

Date: _____

Instructions:

You are playing a game where you can roll 1, 2, or 3 dice. If you roll at least one 6, you win.

Use a probability tree to explore your chances of winning with each option.

Complete the tree and answer the questions below to determine the most strategic choice.

Step 1: Draw a probability tree or table for each option (1, 2, and 3 dice):

Step 2: Calculate the probability of rolling at least one 6 for each option:

Step 3: Which option gives you the best chance to win?

Step 4: What happens if you change the win condition to 'roll two 6s'?