

Fair vs. Unfair Dice - Probability Worksheet

Name: _____

Date: _____

Instructions:

1. Use a fair D6 and an unfair or simulated 'loaded' D6 from <https://FreeOnlineDiceRoller.com>.
2. Roll each die 60 times.
3. Record and compare the frequency of each outcome.
4. Use the table below to track your results.
5. Discuss whether the data suggests the die is fair or unfair.

Face	Fair Die Tally	Fair Total	Unfair Die Tally	Unfair Total
1				
2				
3				
4				
5				
6				

Discussion:

- What differences did you observe between the two dice?
- What makes a die fair or unfair?
- Can you calculate the theoretical probabilities for a fair D6?
- How might unfair dice affect games and outcomes?