



MULTIPLE CHOICE

- Which is the probability of tossing a number greater than 3 on a number cube? (5-12)

A. $\frac{1}{6}$ B. 1 C. $\frac{1}{2}$ D. 0
- Which event does not have equally likely outcomes? (5-10)

A. Tossing a coin C. Tossing a number cube
B. Spinning a spinner with two sections of equal size D. Choosing a vowel from the word MATH

FREE RESPONSE

Use the letters in the word RABBIT. (5-10)

- What are two letters that are equally likely to be picked? **Any two of the letters R, A, I, T.**
- Which is more likely, picking a vowel or picking a consonant? **Picking a consonant**
- What is an impossible event, involving picking a letter in the word RABBIT?
Sample answer: picking a C

Use the data in the table at the right. (5-11)

- Draw a tree diagram to determine how many different outfits Hillary has packed that consist of pants and a top.
See margin.
- How many outfits include khaki pants?
2 outfits
- How many outfits include jeans and a sweatshirt? **1 outfit**

Hillary's Suitcase for Camping

Pants	Tops
Jeans	T-Shirt
Khaki pants	Sweatshirt
Sweat pants	

Using the letters in the word MATHEMATICS, find the probability of choosing each letter or letters randomly out of a bag. (5-12)

9. a vowel $\frac{4}{11}$ 10. the letter M $\frac{2}{11}$ 11. not T $\frac{9}{11}$ 12. the letter S $\frac{1}{11}$

Suppose you toss a nickel and a quarter. (5-12)

13. Find $P(\text{two heads})$ $\frac{1}{4}$ 14. Find $P(\text{no tails})$ $\frac{1}{4}$ 15. Find $P(1 \text{ head, } 1 \text{ tail})$ $\frac{2}{4}$ or $\frac{1}{2}$

Writing in Math

- Explain how to construct a spinner so that all outcomes are equally likely. (5-10)
All spaces of the spinner must be the same size.
- Explain how to determine which event is most likely to occur when spinning a spinner with unequal sections. (5-10) **The largest space is most likely to occur.**
- Suppose you wrote each of the letters of the word MISSISSIPPI on a slip of paper and put the slips in a bag. Describe an event that is likely. Describe an event that is unlikely. (5-11) **Sample answer: Picking an I or S; picking M**