Probability of a Chance Event

Grade 7 Probability & Data Worksheet

Date:_____   Name:_____

LET'S PRACTICE WITH PROBABILITY OF A CHANCE EVENT
Solve the following problems

1. There are candies of different colors in a bowl: 4 yellow, 6 orange, 3 green, 5 blue, 2 black. What is the probability of selecting a black candy?

2. A jar contains 2 pink, 6 red, and 4 blue marbles. If you pick one marble without looking, what is the probability that the marble you pick will be red or blue?

3. What is the probability of rolling an even number on a dice? The dice is numbered 1-6.

4. A box contains 3 black pens, 7 blue pens, and 5 red pens. Without looking; What is P(red or black)?

5. A jar contains 8 marbles: 3 are red and 5 are blue. What is the probability of selecting a red marble, replacing it, and then selecting another red marble?

6. A bag of marbles contains 5 red, 7 purple, and 3 blue marbles. If one marble is chosen at random, what is the probability that the marble is NOT blue?

7. A bag has 3 red marbles, 2 blue and 4 yellow. What is the probability of pulling a red?

8. If a dice is rolled 300 times, how many times would you predict a roll of a 1 or a 6?

9. If I flip a coin 10 times, how many times should I get heads?

10. A dice (numbered 1-6) is rolled 20 times. How many times will a number less than 4 show?

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Answers

Hint: Probability formulas are used to calculate the probabilities of events. Finding the probability of an event A happening can be calculated using the formula.

$$P(A) = \frac{\text{Number of times A occurs}}{\text{Total number of possible outcomes}}$$

$P(\text{not A}) = 1 - P(A)$

For mutually exclusive events: $P(A \text{ or } B) = P(A) + P(B)$

For independent events: $P(A \text{ and } B) = P(A) \times P(B)$

1. $\frac{1}{10}$

2. $\frac{5}{6}$

3. $\frac{1}{2}$

4. $\frac{8}{15}$

5. $\frac{9}{64}$

6. $\frac{4}{5}$

7. $\frac{1}{3}$

8. 100

9. 5

10. 10