# Probability of a Chance Event 

Grade 7 Probability \& Data Worksheet Date:<br>$\qquad$

Name: $\qquad$

## LET'S PRACTICE WITH PROBABILITY OF A CHANCE EVENT

Solve the following problems

1. Adam has a fan store. He has 40 fans, of which 30 are table fans. What is the relative frequency probability that a randomly selected fan will be a table fan?
2. James has a bag with 9 shoes in it. 4 of the shoes are sport shoes. What is the relative frequency probability that a randomly selected shoe will be a sport shoes?
3. Greg has kites. There are three types of kites. Red kites, yellow kites and green kites. If the probability of getting a Red kite is $\frac{3}{10}$ and the probability of getting yellow kite is $\frac{5}{10}$, what is the relative frequency probability of getting green kite?
4. Cameron has lots of cookies. There are three types of cookies (butter, chocolates, and nuts cookies). If the probability of getting a butter cookie is $\frac{6}{10}$ and the probability of getting a chocolate cookie is $\frac{2}{10}$, what is the probability of getting a nut cookie?
5. Raymond has a bag that contains fruit. The bag contains 16 pineapples, 17 pomegranates, and 12 melons. What is the probability pulling pomegranate out of the bag?
6. Victoria has a box that contains balloons. There are 60 balloons in the box. 30 of the balloons are red. What is the probability that a randomly selected balloon will be red?
7. The letters that form the word ALGEBRA are placed in a bowl. What is the probability of choosing a letter other than "A"?
8. A box has 3 limes, 5 grapes, and 2 oranges. What is P (NOT lime)?
9. A dice was rolled five times and the following were rolled: $1,3,3,4,4$ Based on this information, find the experimental $\mathrm{P}(1)$.

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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.

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

$\mathrm{P}(\operatorname{not} \mathrm{A})=1-\mathrm{P}(\mathrm{A})$
For mutually exclusive events: $\mathrm{P}(\mathrm{A}$ or B$)=\mathrm{P}(\mathrm{A})+\mathrm{P}(\mathrm{B})$
For independent events: $\mathrm{P}(\mathrm{A}$ and B$)=\mathrm{P}(\mathrm{A}) \times \mathrm{P}(\mathrm{B})$

1. $\frac{3}{4}$
2. $\frac{4}{9}$
3. $\frac{2}{10}$
4. $\frac{2}{10}$
5. $\frac{17}{45}$
6. $\frac{1}{2}$
7. $\frac{5}{7}$
8. $\frac{7}{10}$
9. $\frac{1}{5}$
