## SmartMathz 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. A letter of English alphabet is chosen at random. Find the probability that the letter chosen is a vowel.
- 2. One card is drawn from a well shuffled deck of 52 cards. Find the probability of getting a face card.
- 3. Find the probability of getting even number between 10 to 25.



4. What is the probability of pulling out an orange marble OR a green marble?

a. $\frac{3}{5}$	b. $\frac{5}{6}$	c. $\frac{1}{2}$	d. $\frac{1}{4}$

- 5. What is the probability of NOT pulling an orange marble? a.  $\frac{3}{4}$  b.  $\frac{2}{3}$  c.  $\frac{5}{6}$  d.  $\frac{1}{6}$
- 6. In a family of two children. Find the probablity of at least one girl child.
- 7. From 1 to 50 find the probability of getting a multiple of 6.
- 8. Out of 400 bulbs in a box. 15 bulbs are defective. One bulb is taken at random from the box. Find the probability that the bulb is not defective.
- 9. A class has 40 students, 25 boys and 15 girls. A student of the class is selected at random as the monitor. Find the probability of selecting a girl student as the monitor.
- 10. What is the maximum value of the probability for an event?



## **Probability of a Chance Event**

## Answers

Hint: The relative frequency probability of an event is the ratio of the number of times the event occurs to the total number of trials or opportunities.

Experimental probability means you count the number of occurrences of the event and divide

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

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

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

For mutually exclusive events: P(A or B) = P(A) + P(B)

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

- 1.  $\frac{5}{26}$
- 2.  $\frac{3}{13}$
- 13
- 3.  $\frac{7}{15}$
- 4.  $\frac{1}{2}$
- 5.  $\frac{5}{6}$
- **5**. 6
- 6.  $\frac{3}{4}$
- 7.  $\frac{8}{50}$
- 8.  $\frac{385}{400}$
- 9.  $\frac{3}{8}$
- 10. 1