LEARNING ACTIVITY SHEET **GRADE 10 Mathematics**

Name: _____ **Date:** _____ **Rating Score:**_____

Activity 1: Go for the Best!

Directions: Read each item carefully. Write the letter of correct answer before the number.

___1. A pair of dice is rolled, what is the probability of getting a sum of seven or eleven?

A. $\frac{4}{8}$ B. $\frac{1}{8}$ C. $\frac{2}{9}$ D. $\frac{6}{8}$

___2. What is the probability of drawing a Queen or a King on an ordinary deck of cards?

A. $\frac{4}{8}$ B. $\frac{2}{13}$ C. $\frac{5}{8}$ D. $\frac{4}{52}$

___3. If a card is drawn from an ordinary deck of 52 cards, find the probability of getting a heart or a face card.

A. $\frac{11}{26}$ B. $\frac{12}{13}$ C. $\frac{5}{8}$ D. $\frac{4}{52}$

___4. A bag contains 7 white balls, 11 orange balls and 12 red balls. If a ball is drawn, find the probability that it is a white or a red ball.

A. $\frac{4}{8}$ B. $\frac{19}{30}$ C. $\frac{7}{12}$ D. $\frac{6}{8}$

___5. In a standard deck of cards, find the probability of getting a face card or an ace.

A. $\frac{1}{46}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___6. A bowl contains 15 chips numbered 1 to 15. If a chip is drawn randomly from the bowl, what is the probability that it is 5 or a number divisible by 3?

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. 1

For # 7- 8. Two dice are rolled. What is the probability of

___7. Getting the same number on both dice or a sum of seven?

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. $\frac{1}{3}$

___8. Getting a sum of 4 or a pair where the first number is less than the second number?

A. $\frac{2}{5}$ B. $\frac{1}{2}$ C. $\frac{1}{10}$ D. $\frac{1}{3}$

For # 9-12. Two cards are drawn from the standard deck of 52 cards. What is the probability that the following occurs?

___9. A diamond or a king

A. $\frac{1}{46}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___10. Either black or an ace

A. $\frac{11}{26}$ B. $\frac{12}{13}$ C. $\frac{5}{8}$ D. $\frac{7}{13}$

Specific Week: Week 8 and 9

Target Competency: Illustrates mutually exclusive events (M10SPIIIi-1) and solves problem involving probability. (M10SPIIIj-1)

Note to the Teacher: This LAS is designed to develop the students' comprehension and understanding and think deeper about mutually exclusive events, identify events that are mutually and not mutually exclusive events and find the probability. You may refer your students to LM pages 335-351.

___11. Both red or both face cards

A. $\frac{8}{13}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___12. A red card or a black card

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. 1

For # 13-15. A basket contains fifteen chips numbered 1 to 15. If a chip is drawn randomly from the basket, what is the probability that it is.

___13. Seven or a number divisible by 3?

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. $\frac{1}{3}$

___14. Even or divisible by 3?

A. $\frac{2}{3}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___15. A number divisible by 3 or divisible by 4?

A . $\frac{4}{8}$ B. $\frac{19}{30}$ C. $\frac{7}{15}$ D. $\frac{6}{8}$

___16. If a card is drawn from an ordinary deck of 52 cards, find the probability of getting a spade or a face card.

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. $\frac{11}{26}$

For # 17-20. A card is drawn at random from a 52-deck of card. Find the probability of getting

___17. A spade or a Jack

A. $\frac{8}{13}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___18. A heart or an ace of spade

A. $\frac{7}{26}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___19. A red card or a Queen

A. $\frac{8}{13}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{7}{13}$

___20. A King or a Queen

A. $\frac{7}{26}$ B. $\frac{4}{13}$ C. $\frac{2}{13}$ D. $\frac{1}{13}$

For # 21-23 A box contains 3 red balls, 4 green balls, and 5 blue balls and a ball is taken at random. What is the probability of getting

___21. A red or a green ball?

A. $\frac{7}{12}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___22. A green or a blue ball?

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. $\frac{3}{4}$

___23. A red or a blue ball?

A. $\frac{2}{5}$ B. $\frac{2}{3}$ C. $\frac{1}{10}$ D. $\frac{3}{4}$

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For # 24-27. Suppose you are going to randomly choose one individual from a population of 120 people. In the population, there are 18 children, 24 teenagers, 36 adults and 42 senior citizens. What is the probability that the individual you select is/are

___24. A teenager or an adult?

A. $\frac{2}{5}$ B. $\frac{1}{2}$ C. $\frac{1}{10}$ D. $\frac{3}{4}$

___25. Children or a senior citizen?

A. $\frac{2}{5}$ B. $\frac{1}{2}$ C. $\frac{1}{10}$ D. $\frac{3}{4}$

___26. Children or an adult?

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{1}{10}$ D. $\frac{9}{20}$

___27. A teenager or a senior citizen?

A. $\frac{2}{5}$ B. $\frac{1}{9}$ C. $\frac{11}{20}$ D. $\frac{9}{20}$

For # 28-30. A box contains slips of papers containing two-digit positive integers. A slip of paper is taken at random, what is the probability of each event?

___28. A perfect square or a perfect cube

A. $\frac{7}{90}$ B. $\frac{4}{13}$ C. $\frac{1}{10}$ D. $\frac{1}{13}$

___29. Divisible by 5 or 10

A. $\frac{7}{90}$ B. $\frac{4}{13}$ C. $\frac{3}{10}$ D. $\frac{1}{13}$

___30. Even or greater than 90

A. $\frac{2}{5}$ B. $\frac{5}{9}$ C. $\frac{11}{20}$ D. $\frac{9}{20}$

Activity 2: Exclusive or Not!

Directions: Consider each problem below. Determine whether the events are **mutually exclusive** or **not mutually exclusive.** Write your answer in the blank.

1. Maggi has 45 red chips., 12 blue chips, and 24 white chips. What is the probability that Maggi randomly selects a red chip or a white chip?

   Answer: _____

2. Of 240 students, 176 are on the honor roll, 48 are members of the varsity team, and 36 are in the honor roll and are also members of the varsity team. What is the probability that a randomly selected student is on the honor roll or is a member of the varsity team?

   Answer: _____

3. Ruby's dog has 8 puppies. The puppies include white females, 3 mixed-color females, 1 white male, and 2 mixed-color males. Ruby wants to keep one puppy. What is the probability that she randomly chooses a puppy that is female and white?

   Answer: _____

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4. Carl's basketball shooting records indicate that for any frame, the probability that he will score in a two-point shoot is 30%, a three-point shoot, 45% and neither, 25%. What is the probability that Cindy will score either in a two-point shoot or in a three-point shoot?

Answer: _____

5. If a card is drawn from an ordinary deck of 52 cards, find the probability of getting a diamond or a face card.

Answer: _____

6. What is the probability of getting a diamond or a queen from a well shuffled deck of 52 cards?

Answer: _____

7. A lottery box contains 50 lottery tickets numbered 1 to 50. If a lottery ticket is drawn at random, what is the probability that the number drawn is a multiple of 3 or 5?

Answer: _____

8. There are 4 Kings in a deck of 52 cards. What is the probability of picking a King?

Answer: _____

9. Rhian likes to wear colored shirts. She has 15 shirts in the closet. Five of these are blue, four are in different shades of red, and the rest are of different colors. What is the probability that she will wear a blue or a red shirt?

Answer: _____

10. Marge has pairs of pants in three different colors, blue, black and brown. He has 5 colored shirts: a white, a red, a yellow, a blue, and a mixed-colored shirt. What is the probability that Marge wears a black pair of pants and a red shirt on a given day?

Answer: _____

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