INDIAN SCHOOL NIZWA - WORKSHEET

MATHEMATICS

14. Probability

Name: _____ Date:_____ Class: X Sec: ___

1.	A die is thrown once . What will be the probability of getting a prime number ? (a) $\frac{1}{6}$ (b) $\frac{1}{2}$ (c) 1 (d) 0
2.	Cards are marked with numbers 1 to 25 are placed in the box and mixed thoroughly. One card is drawn at random from the box. What is the probability of getting a number less than 11? (a) 1 (b) 0 (c) $\frac{1}{5}$ (d) $\frac{2}{5}$ What is the probability of getting a multiple of 5? (a) 1 (b) 0 (c) $\frac{1}{25}$ (d) $\frac{1}{5}$ What is the probability of getting an odd number? (a) 1 (b) 0 (c) $\frac{12}{25}$ (d) $\frac{13}{25}$ What is the probability of getting a prime number? (a) $\frac{8}{25}$ (b) $\frac{9}{25}$ (c) $\frac{12}{25}$ (d) $\frac{13}{25}$ What is the probability of getting a number divisible by 3? (a) $\frac{8}{25}$ (b) $\frac{9}{25}$ (c) $\frac{12}{25}$ (d) $\frac{13}{25}$
3.	A bag has 4 red balls and 2 yellow balls. A ball is drawn from the bag without looking into the bag. What is probability of getting a yellow ball? (a) $\frac{1}{6}$ (b) $\frac{2}{3}$ (c) $\frac{1}{3}$ (d) 1
4.	A coin is tossed 1000 times and 560 times a "head" occurs. The empirical probability of occurrence of a Head in this case is A. 0.5 B. 0.56 C. 0.44 D. 0.056
5.	On a particular day, the number of vehicles passing a crossing is given below : Vehicle: Two wheeler	Three wheeler	Four wheeler Frequency: 52	71	77 What is the probability of a two wheeler passing the crossing on that day ? A. 0.26 B. 0.71 C. 0.385 D. 0.615

6. In a bag, there are 100 bulbs out of which 30 are bad ones. A bulb is taken out of the bag at random. The probability of the selected bulb to be good is

A. 0.50 B. 0.70 C. 0.30 D. None of these

7. On a page of telephone directory having 250 telephone numbers, the Frequency of the unit digits of those number are given below :

0	1	2	3	4	5	6	7	8	9
18	22	32	28	40	30	30	22	18	10

A telephone number is selected from the page at random. What is the probability that its unit digit is

(*a*)2

A. 0.16 B. 0.128 C. 0.064 D. 0.04

(*b*) More than 6

A. 0.20 B. 0.25 C. 0.32 D. 0.16

(*c*) less than 2

A. 0.16 B. 0.18 C. 0.22 D. 0.32

8. **10 defective pens are accidentally mixed with 90 good ones. It is not possible to just look at a pen and tell whether or not it is defective. One pen is taken out at random from this lot. Determine the probability that the pen taken out is a good one.**

A. 0.10 B. 0.20 C. 0.90 D. 1.0

9. **One card is drawn from a well-shuffled deck of 52 cards.**

1. Find the probability of getting a king of red colour

(a) $\frac{1}{26}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{26}$

2. Find the probability of getting a face card.

(a) $\frac{1}{26}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{13}$

3. Find the probability of getting a black face card

(a) $\frac{1}{26}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{26}$

4. Find the probability of getting an ace.

(a) $\frac{1}{26}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{26}$

5. Find the probability of getting a black card.

(a) $\frac{1}{2}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{26}$

6. Find the probability of getting a face card or an ace.

(a) $\frac{4}{13}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{13}$

7. Find the probability of getting face card or black card.

(a) $\frac{4}{13}$ (b) $\frac{8}{13}$ (c) $\frac{7}{13}$ (d) $\frac{3}{13}$

8. Find the probability of getting a king or red card.

(a) $\frac{4}{13}$ (b) $\frac{8}{13}$ (c) $\frac{7}{13}$ (d) $\frac{3}{13}$

9. Find the probability of getting a king and red card.

(a) $\frac{1}{26}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{26}$

10. Find the probability of getting a king or queen card.

(a) $\frac{1}{26}$ (b) $\frac{2}{13}$ (c) $\frac{1}{13}$ (d) $\frac{3}{26}$

10.	Two dice are thrown at the same time. Find the probability of getting (i) same number on both dice. (ii) different numbers on both dice.

11.	Two dice are thrown simultaneously. What is the probability that the sum of the numbers appearing on the dice is (i) 7? (ii) a prime number? (iii) 1?
12.	Five cards—the ten, jack, queen, king and ace of diamonds, are well-shuffled with their face downwards. One card is then picked up at random. (i) What is the probability that the card is the queen? (ii) If the queen is drawn and put aside, what is the probability that the second card picked up is (a) an ace? (b) a queen?
13.	The king , queen and jack of clubs are removed from a pack of 52 playing cards. One card is selected at random from the remaining cards. Find the probability that the card is (a) neither a heart nor a king (b) neither an ace nor a king (c) neither a red card nor a queen card (d) a black card or an ace. (e) either a heart or a spade card (f) a king card (g) a heart card (h) a red card
14.	Two coins are tossed simultaneously. Find the probability of getting **i).** at least one head **ii).** at most one head **iii).** exactly two head **iv).** exactly one head **v).** no head **vi).** no tail **vii).** at least one tail **viii).** at most one tail **ix).** exactly two tails **x).** exactly one tail
15.	A coin is tossed 3 times. List the possible outcomes. Find the probability of getting (i) all heads (ii) at least 2 heads
16.	The probability that it will rain today is 0.84. What is the probability that it will not rain today?
17.	What is the probability that an ordinary year has 53 Sundays?
18.	Find the probability of getting 53 Fridays in a leap year.
19.	Find the probability of getting 53 Fridays or 53 Saturdays in a leap year.
20.	250 lottery tickets were sold and there are 5 prizes on these tickets. If Mahesh purchased one lottery ticket, what is the probability that he wins a prize?