

WORKSHEET-54
SUBJECT – MATHEMATICS
CLASS – IX
CHAPTER-15
(PROBABILITY)
INTRODUCTION
SESSION - (2020-21)

Instructions to be followed: -

- 1: -From now onwards students do your worksheets in your particular subject notebook respectively. Don't use rough sheets, old copies or anything else. All the stationary shops have already opened. So, you can purchase it.**
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 - 3: - Read each and every topic (which will be given in worksheets) of the chapters from NCERT books.**
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WHAT IS PROBABILITY?

Probability is the branch of mathematics which deals with the measurement of uncertainty.

TRIAL

A trial is an action which results in one or several outcomes.

Example 1: “Tossing a coin” is a trial.

Example 2: “Tossing two coins simultaneously” is a trial.

Example 3: “Throwing a dice” is a trial.

OUTCOME

An outcome is a possible result of an experiment or trial.

Example 1: Throwing a dice

‘1’ is an outcome

‘2’ is an outcome

‘3’ is an outcome

‘4’ is an outcome

‘5’ is an outcome

‘6’ is an outcome

Example 2: Tossing a coin

“Head” is an outcome.

“Tail” is an outcome.

EVENT

Example: Tossing a coin

“getting a tail” is an event with outcome “tail”.

“getting a head” is an event with outcome “head”.

WHAT IS EXPERIMENTAL PROBABILITY?

The probability which we get from performing actual experiments is called Experimental probability.
It is also known as Empirical probability.

Probability of an Event P(E) = Number of trials in which the event occurs / Total number of trials.

NOTE 1: The probability of each event lies between 0 and 1.

NOTE 2: The sum of all the probabilities is 1.

NOTE 3: The probability of an event can be any fraction from 0 to 1.

- 1.) In a sample survey of 645 people, it was found that 516 people have a high school certificate. If a person is chosen at random, what is the probability that he/she has a high school certificate?
- 2.) In a medical examination of students of a class, the following blood groups are recorded:

Blood group	A	B	AB	O
Number of students	11	15	8	6

From this class, a student is chosen at random. What is the probability that the chosen student has blood group AB?

- 3.) 80 bulbs are selected at random from a lot and their lifetime in hours is recorded as under.

Lifetime (in hours)	300	500	700	900	1100
Frequency	10	12	23	25	10

One bulb is selected at random from the lot. What is the probability that its life is 1150 hours?

- 4.) In a survey of 364 children aged 19 - 36 months, it was found that 91 liked to eat potato chips. If a child is selected at random, then what is the probability that he/she does not like to eat potato chips.

- 5.) Two coins are tossed 1000 times and the outcomes are recorded as given below:

Number of heads	2	1	0
Frequency	200	550	250

Now, if two coins are tossed at random, what is the probability of getting at most one head?

For Solutions: <https://www.topperlearning.com/r-s-aggarwal-and-v-aggarwal-solutions/cbse-class-9-mathematics/r-s-aggarwal-and-v-aggarwal-mathematics-ix/probability>

HARI VIDYA BHAWAN
SUBJECT- SOCIAL SCIENCE
CLASS – IX
SESSION – 2020 – 21
WORK SHEET - 54

Date:- 08-12-2020

General Instructions: -

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Chapter-2

What is Democracy? Why Democracy?

Very short Answer

1. In which country women do not right to vote.
2. Give one argument in favour of democracy?
3. What is a representative democracy?
4. What is ZANU-PF?

5. To whom the ruling party is accountable?
6. What limits a democratic government 's power to make rule?

हरि विद्या भवन

विषय - हिंदी

सामान्य निर्देश

- * प्रस्तुत कार्य अपनी हिंदी साहित्य की पुस्तिका में कीजिए। किसी अन्य पुस्तिका में किया गया कार्य स्वीकार नहीं किया जायेगा।
- * सभी विद्यार्थियों को परीक्षा हेतु यह कार्य करना अनिवार्य है।
- * वर्कशीट में दिए गए पाठ और कविता को ध्यानपूर्वक पढ़ें।
- * वर्कशीट से सम्बंधित समस्या पूछने के लिए आप अपने कक्षा ग्रुप पर सुबह 8 बजे से 3 बजे तक मैसेज कर सकते।

हरि विद्या भवन

कक्षा - दसवीं

विषय - हिंदी

वर्कशीट - 57

दिनांक :- 8|12|20

प्र0क) निम्नलिखित सरल वाक्यों को मिश्र वाक्यों में बदलिए।

- 1) बच्चों ने दिवाली पर पहनने के लिए कपडे खरीदे हैं।
- 2) मेहनत करने वाले को ही नौकरी मिलेगी।
- 3) मेरे कमरे का फ्रिज खराब है।
- 4) जानेवाला कहाँ रुकता है।
- 5) लिखकर अभ्यास करने से कुछ भूल नहीं सकते।

प्र0ख) निम्नलिखित संयुक्त वाक्यों को सरल वाक्यों में बदलिए।

- 1) उसने समझाया था पर मैं ही नहीं माना।
- 2) बादल छाए और बिजली कड़कने लगी।

- 3) वे बाजार गए और सब्जी ले आए।
- 4) पिता जी जाएँगे या माता जी जाएँगी।
- 5) माँ ने मुझे दही खिलाया फिर मुझे यात्रा पर भेज दिया।

प्र0ग) निम्निलिखित संयुक्त वाक्यों को मिश्र वाक्यों में बदलिए।

- 1) मैं मंदिर गया क्योंकि मुझे दर्शन करने थे।
- 2) हम घर से बहार निकले और बारिश होने लगी।
- 3) वह बीमार है अतः बहुत दुखी है।
- 4) विद्यार्थी मेहनती है तो अवश्य उत्तीर्ण होगा।
- 5) गार्ड ने लाल झंडी दिखाई और ट्रेन रुक गई।

HARI VIDYA BHAWAN

Worksheet-57

Class-X

Subject-Science

Session-2020-21

Ch-9: Heredity and Evolution (Practice Questions)

Date: 8/12/2020

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Short Answer Type Question: -

- Q.1 Name the plant on which Mendel performed his experiments.
- Q.2 What is a sex chromosome?
- Q.3 Define a allele.
- Q.4 Differentiate between homozygous and heterozygous.
- Q.5 Write the sex of the baby that inherits Y-chromosome from the father.

Q.6 Define heredity.

Q.7 Define a gene.

Long Answer Type Question: -

Q.8 In pea plant, round seed is dominant over wrinkled. If a cross is carried between these two plants, give answer to the following questions.

- (a) Mention the genes for the traits of parents.
- (b) State the trait of F₁ hybrids.
- (c) Write the ratio of F₂ progeny obtained from this cross. What is the name of the cross?

Q.9 Can you justify the statement that “Human males are responsible for determining the sex of the baby and not females”?

Q. 10 If we cross pure-bred tall (dominant) pea plant with pure-bred dwarf (recessive) pea plant we will get pea plants of F₁ generation. If we now self-cross the pea plant of F₂ generation, then we obtain pea plants of F₂ generation.

- (a) What do the plants of F₂ generation look like?
- (b) State the ratio of tall plants to dwarf plants in F₂ generation.
- (c) State the type of plants not found in F₂ generation but appeared in F₂ generation, mentioning the reason for the same.

Note –

- This worksheet is for your self assessment. To solve the above questions read all the notes of chapter 9 and try to answer them.
- All the practice worksheets have to be done in same notebook wherever you are writing notes.