

HOLIDAY HOME WORK

class - 9th

SCIENCE

- Use a reference book and solve the conceptual, numerical and graphical questions (in total 30 questions)
- Complete chapter end Q&A (NCERT) up to the taught topic.

CHEMISTRY

- In your practical notebook, write the experiment related to melting and boiling point of water
- Write 5 lines each - Table 3.1 and 3.6 of NCERT containing symbols and names of ions and elements
- Make a model for converting of solid to liquid and liquid to gas (Activity given on page 13 NCERT).

Biology

- learn and write ① Intext Q/Ans Pg no. - 59, 61, 63
② Exercise Q/No. - 1, 2, and 3, of NCERT BOOK.
- make a model of animal cell using clay or cardboard.
- Prepare a chart on Nucleus and its functions.
- Make 25 MCQ from the topic - cell organelles.

Sist

- ① Prepare 25 MCQs from chapter one from History, Civics, Economics and Geography
- ② Map work - History ch-01

③ Map work - Geography
ch-01

④ Project - symbols related
to french Revolution

Sanskrit

1. पाठ-2 के सभी श्लोकों के अन्वय लिखें।
2. शब्दरूप एवं धातुरूप याद करें एवं लिखकर अभ्यास करें।
3. पठित पाठों की आवृत्ति करें।

Hindi

Holiday Homework

Class - 9

— ENGLISH —

The Lost Child

- 1) When does he realise that he has lost his way? How have his anxiety and insecurity been described?
- 2) What do you think happens in the end? Does the child find his parents?

The Adventures of Toto

- 1) Give a brief description of Toto, the monkey.
- 2) Give a brief character sketch of author's grandfather describing his qualities. What values are reflected from his character?

The fun they had

- 1) What kind of teachers did Margie and Tommy have? How were they different from teachers in the book?
- 2) Margie's mother was very particular about her studies. Justify with evidence from the story.

The road not taken

- 1) Does one road seem to be more appealing than the other? Use examples from the poem to support your answer.
- 2) Bring out the symbolism in the poem "The Road not Taken".

Sound of music - IIT

- 1) How is Evelyn a source of inspiration to people who are in any way disabled?
- 2) Why does the author believe that Bismillah Khan's life is "a perfect example of the rich, cultural heritage of India"?

DAV PUBLIC SCHOOL BSEB COLONY PATNA-23
SUMMER VACATION ASSIGNMENT:2023-24

Std. X

Maths Activity :-

1. To find the number of tangents from a point to the circle.
2. To obtain the formula for area of a circle experimentally.(By paper cutting method)
3. To verify that the sum of first n natural numbers is $n(n+1)/2$ by graphical method.
4. To find the formula for the volume of sphere.
5. To verify basic proportionality theorem.
6. To verify Pythagoras' theorem

(To be prepare in practical notebook)

Project :-

1. Shreedharacharya life history and his contribution in the field of Maths,
2. Write & Learn all the formulae and concept of Real Numbers, Polynomial and Trigonometry taught in the class room.

(To be prepared in stick file)

Std. IX

Maths Activity :-

01. To construct \sqrt{x} on number line and explain its method.
02. To prove if the sum of a pair of opposite angles of a quadrilateral is 180 degree, then the quadrilateral is cyclic
03. Define data, explain the methods for calculating mean, median and mode of ungrouped data and give example for each
04. State and Explain mid point theorem with example.
05. State and explain RHS property in congruence of triangles.

(To be prepare in practical notebook)

Project :-

1. Srinivasa Ramanujan life history and his contribution in the field of Maths.
2. Write & Learn all the formulae and concept of Real Numbers, Polynomial and factorization taught in the class room.

(To be prepared in stick file)

Holiday Homework

Class: X

Subject: Mathematics

- Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the coefficients.
(i) $5x^2 - 29x + 20$ (ii) $x^2 - 5x$
- Form the quadratic polynomials whose zeroes are (i) $3 \pm \sqrt{2}$ (ii) $-\sqrt{2}$ and $\sqrt{2}$
- Find all the zeroes of $x^3 + 6x^2 + 11x + 6$ if $(x+1)$ is a factor.
- Find all the zeroes of $x^3 - 10x^2 + 31x - 30$ if 2 is a zero of it.
- Find the values of 'a' and 'b', if 2 and 3 are zeroes of $x^2 + ax^2 + bx - 30$
- Divide $x^4 - 4x^3 + 8x^2 + 7x + 10$ by $(x-2)$ and verify the division algorithm.
- Find the value of 'k', if $(x-2)$ is a factor of $x^2 - kx + 10$.
- Find the value of 'm', if 2 is a zero of $3x^2 - 17x + m$.
- Find all the zeroes of $4x^3 - 20x^2 + 23x - 6$ if two of its zeroes are 2 and 3.
- If α and β are the zeroes of $x^2 + 5x + 6$, find the value of $\alpha^{-1} + \beta^{-1}$.
- If $\frac{1}{2}$ and 1 are the zeroes of $2x^4 - 3x^3 - 3x^2 + 6x - 2$, find the other zeroes.
- If one of the zeroes of the polynomial $5z^2 + 13z - p$ is the reciprocal of the other, find 'p'.
- On dividing the polynomial $4x^4 - 3x^3 - 42x^2 - 55x - 17$ by the polynomial $g(x)$ the quotient is $x^2 - 3x - 5$ and the remainder is $5x + 8$. Find $g(x)$.
- Verify that 1, 2 and $\frac{1}{2}$ are zeroes of $2x^3 + x^2 - 5x + 2$. Also, verify the relationship between the zeroes and the coefficients.
- If α and β are the zeroes of the quadratic polynomial $x^2 - kx + 15$ such that $(\alpha + \beta)^2 - 2\alpha\beta = 34$, find 'k'.

Class - IX Subject - MATHS

- Solve the following sums:
 - Find the value of $34^2 - 21^2$.
 - If $a = 5 - 2\sqrt{5}$, then find a^2 .
 - Find five rational numbers between $\frac{4}{5}$ and $\frac{7}{5}$.
 - If $x = 0.28$, then find x^2 .
 - Add $5\sqrt{2} + 4\sqrt{3}$ and $7\sqrt{2} - 6\sqrt{3}$.
 - Represent the rational numbers on number line.
 - $\frac{3}{4}$ (b) $-\frac{9}{5}$ (c) $2\frac{1}{2}$ (d) $-\frac{7}{8}$
 - Rationalise the denominators:
 - $\frac{5}{2+\sqrt{3}}$ (b) $\frac{9}{\sqrt{5}-\sqrt{6}}$ (c) $\frac{3}{\sqrt{3}}$
 - If $x + y = 12$ and $xy = 32$, Find the value of $x^2 + y^2$. (Hint : use identity $(x+y)^2 = x^2 + y^2 + 2xy$ to substitute values)
 - If $3x + 2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$. (Hint : use identity $(x+y)^2 = x^2 + y^2 + 2xy$ to substitute values)
 - Write the following cubes in the expanded form:
 - $(3a + 4b)^3$
 - $(5p - 3q)^3$
 - Represent the Number System with the help of a Flow Chart and write examples also.
 - Learn and write algebraic identities.
 - Make a list of law of exponents.
 - Factorise :
 - $x^2 - 4x - 21$ (b) $x^2 - 19x + 78$ (c) $x^2 + 9x + 18$
- Note: Do practice of all the sums in the given worksheets.

Date of submission :-

Class IX
Note Book 22/06/2023
Activity 26/06/2023
Project 26/06/2023

Class X
22/06/2023
26/06/2023
26/06/2023

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HOLIDAY HOMEWORK

CLASS – IX

PART- A (EMPLOYABLITY SKILLS)

UNIT – I (COMMUNICATION SKILLS)

1. DO ALL THE CHECKPOINTS AND SOLVED ASSIGNMENTS WITH GLOSSARY IN C.W. COPY OF SESSION 1 TO 14
2. DO ALL THE ASSIGNMENT IN H.W. COPY OF SESSION 1 TO 14

PART – B (VOCATIONAL SKILLS)

UNIT – I (INTRODUCTION TO I.T & ITes)

- 1.DO ALL THE CHECKPOINTS AND SOLVED ASSIGNMENTS WITH GLOSSARY IN C.W. COPY
- 2.DO THE ASSIGNMENT IN H.W. COPY

वर्ग - नवम्

- i> 'दुख का अधिकार' एवं 'गिल्लू' पाठ से 20-20 बहुवैकल्पिक प्रश्नोत्तर लिख कर याद करें।
- ii> 'समय की पाबंदी' एवं 'वृक्षारोपण' विषय पर 120 शब्दों में अनुच्छेद लिखें।
- iii> 20 उपसर्ग एवं 20 प्रत्यय से तीन-तीन नवीन शब्दों का निर्माण कर लिखें।
- iv> अखबार से कटिंग कर कोई आकर्षक चित्र अपनी कॉपी में चिपकाइए एवं उस चित्र का वर्णन 50-60 शब्दों में कीजिए।