

SANT NIRANKARI PUBLIC SCHOOL, FARIDABAD

SUMMER HOLIDAYS HOMEWORK

CLASS IX (2022-23)

GENERAL INSTRUCTIONS:

Dear Parents

Warm greetings, as you know that vacations are about to come so here are some tips to make your ward's vacation a fruitful and happy period for them.

- Share some stories or thoughts with your ward related to humanity ,religion, peace etc.
- Help your ward to learn new English sentences and try to give them instructions in English.
- Please allow your ward to play indoor games instead of playing games on mobiles and computer.
- Have atleast two meals together with your child. Teach them the importance and hard work of the farmers and ask them not to waste their food.
- Before sleep spend atleast 10 minutes daily with your child and ask him/her about their whole day activities.
- School will reopen on 4 July,2022.

ENGLISH

1. Write one bio sketch (on any famous personality of Telangana)
2. Read the story book “ A Monk Who Sold His Ferrari” and make a book mark for it using waste material.
3. Letter writing (on A4size sheet)
 - Imagine yourself as Gaurav Mishra. Your roommate Tarun's right hand is plastered and it got fractured while playing badminton in the school. Write a letter to God father informing him about the accident and also asking him not to worry.
 - Your uncle had offered to get your pet for your birthday. Write a letter to him telling him what you like, give reasons for your choice and tell him how you take care of your pet.

4. Class magazine on the three following topics. (Each student will make one page on the given topic)
Roll No. 1-10 Environment
Roll No 11-20 Adventure
Roll No. 21-29 Sports and Games
(Use only A4size sheet)
5. Make a poster on advantages of having a pet. (A3 sheet)
6. Learn the syllabus done in class .

हिंदी

- स्पर्श व संचयन में कराए गए सभी पाठों को ध्यानपूर्वक पढ़िए व उनके प्रश्नोत्तर याद कीजिए।
- कक्षा में करवाए गए समस्त व्याकरण कार्य की पुनरावृत्ति लिखित रूप में कीजिए।
- व्याकरण की पुस्तक में अपठित गद्यांश (पृष्ठ संख्या 27-33) में अभ्यास प्रश्न 1 से 10 तक कीजिए।
- व्याकरण की पुस्तक में दिए गए अनौपचारिक पत्रों का अभ्यास कीजिए।

क्रियाकलाप

- हरियाणा व तेलंगाना में प्रयोग किए जाने वाले मिट्टी के बर्तनों में से एक किसी मिट्टी के बर्तन का निर्माण कीजिए।
- हरियाणा व तेलंगाना में बहने वाली नदियों के नाम लिखकर तेलंगाना के किसी एक नदी का वर्णन कीजिए।
- लॉकडाउन के बाद स्कूल खुलने पर आपकी दिनचर्या में क्या बदलाव आया है। यह बताते हुए दो मित्रों के बीच संवाद लिखिए।
- 'पर्यावरण संरक्षण' विषय पर दो नारे आकर्षक व सुंदर ढंग से लिखिए।

(सभी क्रियाकलापों के लिए ए 4 आकार के कागज़ का प्रयोग करें।)

Mathematics

1. Do all the attached assignments in sheets and submit all sheets after vacations to be kept in portfolio.
2. Do following activities: -
 - a. Calculate average performance of any player from state of Telangana and to represent it graphically on A4 Sheets.

- b. Make a circular dish plate made of cardboard containing recipes of Telangana (using Mathematical shapes) and create a pie chart on A4 sheet to represent quantity of various recipes used in dish plate.
 - c. Make a creative power point presentation based on identities of Ch2 Polynomial and get it checked at WhatsApp of teacher before printout submission after vacations.
 - D. Prepare a game about coordinates of geometry (You can make 3-D Model/App. Based Game or any other form etc.)
- Practice Maths Daily (Min. 1 Hour) to cover all topics done in class and also work on basic concepts of Maths.
- In case you face difficulty in understanding any topic you may connect with your subject teacher.

Assignment :-chapter3(Coordinate Geometry)

Q1. Plot the following points and check whether they are collinear or not:

- (i) $(1, 3), (-1, -1), (-2, -3)$
- (ii) $(1, 1), (2, -3), (-1, -2)$
- (iii) $(0, 0), (2, 2), (5, 5)$

Q2. Without plotting the points indicate the quadrant in which they will lie, if

- (i) The ordinate is 5 and abscissa is -3
- (ii) The abscissa is -5 and ordinate is -3
- (iii) The abscissa is -5 and ordinate is 3
- (iv) The ordinate is 5 and abscissa is 3

Q3. See figure and write the following:

1. The coordinates of B. 2. The coordinates of C.
2. The point identified by the coordinates $(-3, -5)$.
3. The point identified by the coordinates $(2, -4)$.
4. The abscissa of the point D.
5. The ordinate of the point H.
6. The coordinates of the point L
7. The coordinates of the point M.

Q4. Write the coordinates of each of the points P, Q, R, S, T and O from the figure given

. Assignment CH-7 "TRIANGLES"

Q1. In $\triangle ABC$, if $\angle C > \angle B$, then which two sides of the triangle can you relate?

Q2. It is given that $\triangle ABC \cong \triangle DEF$. Is it true to say that $AB = EF$? Justify your answer.

Q3. In triangles ABC and PQR, $\angle A = \angle Q$ and $\angle B = \angle R$, Which side of $\triangle PQR$ should be equal to side AB of $\triangle ABC$ so that the two triangles are congruent? Give reason for your answer.

B C R P

Q4. In $\triangle PQR$, $\angle P = 70^\circ$ and $\angle Q = 30^\circ$. Which side of this triangle is the longest?

Q5. If the corresponding angles of two triangles are equal, then they are always congruent. State true or false and justify your answer.

Q6. In Figure $\triangle PQR$, if $\angle Q = 40^\circ$ and $\angle R = 72^\circ$, then find the shortest and the largest sides of the triangle.

Q7. Is it possible to construct a triangle with lengths of its sides 5cm, 3cm and 8cm? Give reason for your answer. Q8. In Figure, it is given that $AB = CF$, $EF = BD$ and $\angle AFE = \angle CBD$. Prove that $\triangle AFE \cong \triangle CBD$.

Q9. S is any point on side QR of a $\triangle PQR$. Show that: $PQ + QR + RP > 2PS$.

Q10. In the given figure, T is a point on side QR of $\triangle PQR$ and S is a point such that $RT = ST$. Prove that $PQ + PR > QS$.

Assignment Ch 1 Number System

Q1. Find five rational numbers between 1 and 2.

Q2. Find five rational numbers between $\frac{3}{5}$ and $\frac{4}{5}$.

Q3. Locate $\sqrt{3}$ on the number line.

Q4. Are the square roots of all positive integer's irrational? If not, give an example of the square root of a number that is a rational number.

Q5. Find the decimal expansions of $\frac{10}{3}$, $\frac{7}{8}$ and $\frac{1}{7}$.

Q6. Show that 0.33333..... can be expressed in the form $\frac{p}{q}$, where p and q are integers and $q \neq 0$.

Q7. What can the maximum number of digits be in the repeating block of digits in the decimal expansion of $\frac{1}{17}$? Perform the division to check your answer.

Q8. Add $2\sqrt{2} + 5\sqrt{3}$ and $\sqrt{2} - 3\sqrt{3}$.

Q9. Simplify: $(\sqrt{3} + \sqrt{7})(\sqrt{3} - \sqrt{7})$.

Q10. Rationalise the denominator of $\frac{1}{7 + 3\sqrt{3}}$.

Q11. Simplify:

(i) $\frac{72}{3.71/5}$

(ii) $\frac{101/2}{101/4}$

Q12. What is the product of a rational and an irrational number? A) Always an integer

b) Always a rational number

c) Always an irrational number

d) Sometimes rational and sometimes irrational

Q13. What is the value of $(256)^{0.16} \times (256)^{0.09}$?

Assignment Ch 2 Polynomials

1. Give an example of a monomial and a binomial having degrees as 82 and 99, respectively.
2. Compute the value of $9x^2 + 4y^2$ if $xy = 6$ and $3x + 2y = 12$.
3. Find the value of the polynomial $5x - 4x^2 + 3$ at $x = 2$ and $x = -1$.
4. Calculate the perimeter of a rectangle whose area is $25x^2 - 35x + 12$.
5. Find the value of $x^3 + y^3 + z^3 - 3xyz$ if $x^2 + y^2 + z^2 = 83$ and $x + y + z = 15$.
6. If $a + b + c = 15$ and $a^2 + b^2 + c^2 = 83$, find the value of $a^3 + b^3 + c^3 - 3abc$.
7. If $(x - 1/x) = 4$, then evaluate $(x^2 - 1/x^2)$ and $(x^4 - 1/x^4)$.
8. Find the values of a and b so that $(2x^3 + ax^2 + x + b)$ has $(x + 2)$ and $(2x - 1)$ as factors.
9. Check whether $(7 + 3x)$ is a factor of $(3x^3 + 7x)$.
9. Factorise $x^2 + 1/x^2 + 2 - 2x - 2/x$.

ASSIGNMENT

CHAPTER – 6 LINES AND ANGLES

SECTION-A

1. In the given figure, $AB \parallel CD$. Find the value of x .
2. In the given figure, find the value of x if $AB \parallel CD$.
3. An angle is 30° more than one-half of its complement. Find the angle in degrees.
4. Ray OP bisects $\angle AOB$ and OQ is the ray opposite to OP . Show that $\angle QOB = \angle QOA$.
5. In the given figure, If AB is parallel to CD , $\angle 2 = 120^\circ + x$ and $\angle 6 = 6x$. Find the measure of $\angle 2$ and $\angle 6$.

SECTION-B

6. In the given figure, prove that $p \parallel m$.
7. In the given figure ray OS stands on a line POQ . Ray OR and ray OT are angle bisector of $\angle POS$ and $\angle SOQ$, respectively. If $\angle POS = x$, find $\angle ROT$.
8. In the given figure, AB is parallel to DE . Prove that $\angle ABC + \angle BCD = 180^\circ + \angle CDE$.
9. In the given figure, l is parallel to m , find the value of x .
10. In the given figure, $\angle 1 = 55^\circ$, $\angle 2 = 20^\circ$, $\angle 3 = 35^\circ$ and $\angle 4 = 145^\circ$. Prove that $AB \parallel CD$.

SECTION-C

11. In the given figure, $n \parallel m$ and $p \parallel q$. $\angle 1 = 75^\circ$, prove that $\angle 2$ is a right angle.
12. In the given figure, $AB \parallel CD \parallel EF$. Find the value of $(y + x) : (y - x)$
13. In the given figure, the sides AB and AC of $\triangle ABC$ are produced to points E and D respectively. If bisectors BO and CO of $\angle CBE$ and $\angle BCD$ respectively meet at point O , then prove that $BO \parallel CO$.
14. In the given $AB \parallel CD$ and PQ is a transversal. Find the value of x and y .
15. In the following figure, $QP \parallel ML$ and the other angles are shown. Find the Value of x .

SECTION-D

16. If a transversal intersect two lines such that bisectors of a pair of corresponding angles are parallel, then prove that the two lines are parallel.
17. In the given figure $AB \parallel DC$. Find the values of x, y and z .
 $\angle A$
18. In $\triangle ABC$, the bisector of $\angle B$ and $\angle C$ meets at O . Prove that $\angle BOC = 90^\circ + \frac{1}{2} \angle A$
19. Find the value of x, y and z in the adjoining figure.
20. In the given figure, $EF \parallel DQ$ and $AB \parallel CD$. If $\angle FEB = 64^\circ$, $\angle PDC = 27^\circ$, then find $\angle PDQ, \angle AED$ and $\angle DEF$.

SCIENCE

- 1 Read Chapters 1, 2, 5 and 8 thoroughly.
3. Learn question answers of chapters 1, 2, 5 and 8.
3. Do EBSB ACTIVITY:
 - A). Different types of crops and agricultural practices in Haryana and Telangana.
4. ART INTEGRATED ACTIVITIES OF SCIENCE
 - A). Velocity- Time, Distance-Time graph on A-4 sheet with the help of waste material. (Chap-8 Motion)- MATHS AND DRAWING
 - B). Circular Motion (Chap-8 Motion)- shot put and Javelin throw
- SPORT INTEGRATED
 - C). Prepare the collage/ Pictorial Representation/ Flowchart/Ppt. On Topics
States of Matter, true solution, colloidal solution and suspension solution (Chap- 2 Is all matter around us pure)
4. Learn symbols of the following:

SUBJECT ENRICHMENT ACTIVITIES:

- Experiment 2 . Preparation of a mixture and compound using iron filings and Sulphur
- (a) A mixture
 - (b) A compound using iron filling and sulphur powder and distinction between of the basis of:
 - (i) Appearance, i.e. homogeneity and heterogeneity
 - (ii) Behavior towards a magnet
 - (iii) Behavior towards carbon disulphide as a solvent
- Effect
- Experiment 4. Performing the following reactions and classifying them as physical or chemical changes:
- (a) Iron with copper sulphate solution in water
 - (b) Burning of magnesium ribbon in air
- Experiment 9. Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder
- Experiment 6 . Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibres and nerve cells
- In animals from prepared slides. Drawing of their labeled diagrams.

SOCIAL SCIENCE

1. LEARNING WORK

1. History: The French Revolution. Russian Revolution
2. Geography: India Size and Location, Physical features of India, Drainage
3. Civics: What is Democracy, Why is Democracy?, Electoral apolitics
4. Economics: The story of Palampur Village & People as resource

2. MAP WORK

Geography: Chapter-1, 2 & 3 (Political & Physical Map of India)

History: - Chapter-1, 2 & 3

3. PROJECT FILE

Disaster Management (Take help from Pdf shared in class group)

4. Write the drainage area, length, outflow and covered districts of Rivers of Telangana.
5. Make your Portfolio Folder with cartridge/handmade sheet
6. Write three form of government and write their features on A4 size Sheet.
7. Write a report on" the Green revolution" on A4 size sheet.
8. Draw any six political symbols used by French people during the French revolution.
9. Write India's preamble on A4 sheet
10. Draw the flowchart of the classification of activities in various sectors on A4 sheet.
11. Write three differences between ideology of radicals, conservatives and Liberals on A4 sheet
12. Write a survey report on the physical features of Telangana.

IT (402)

1. Visit a place where computer is used and make your field work file.
2. Do assignments shared in class group and keep them in portfolio.
3. Complete questions-answers of chapter – communication skills and digital documentations.
5. Type a paragraph of 100 words on the topic –" The Power of word processor" in MS Word with following specifications
 - Page Size: A4
 - Orientation : Portrait
 - Margins: 1" form all four sides
 - Apply page border and page colour
6. Create a new document with a story titled" The loin and the Mouse" add some pictures with the story apply paragraph formatting.

Note- Save your MS word files and take printouts of both Q.4 and Q5 for making practical file.

Drawing

- A. Complete page numbers:-99,100,104,106&107
- B. Make a poster on the topic 'Save Water' on A3 sheet

C. Make 4 Notice board corners with waste material



