



NORTHERN INDIA PUBLIC SCHOOL

HOLIDAY HOMEWORK

CLASS – IX

Subject :- English

Articles about 120-150 words :-

- (i) Project of Clean Ganga / Yamuna / Narmada.
- (ii) Quality education rather than quantity education.
- (iii) “ Desktop Diet ”

Practice for the letters and re-ordering sentences. Write an essay on How did you spent your summer vacations.

Maintain a diary entry during summer vacations with date.

Subject :- Maths

Solve all questions of ch.- 1 and 2 from NCERT. Make a list of import terms and formulae based on ch.-1 and 2 in your notebook and solve the given worksheets.

Subject :- S.St.

Geography :- Write few lines on the followings topics - Bay, Gulf, Island, Peninsula, tropic of cancer, Tropical Zone.

Economics :- Write your 25 views about the village in your mind. Learn ch.- 2.

Draw a map of India and show states and their capitals on it. On A4 sheet.

Subject :- Computer

Write in detail about keyboard function and mouse (Mouse types, mouse buttons etc.)
Write about type of computer in A4 sheet.

Subject :- Science

Chemistry :- Prepare a chart of Evaporation process of Ch.- 1. Learn all work of Ch.-1.

Physics :- Do all the questions of Ch.- 8.

Biology :- Make an assignment on types of microscope . Draw a neat labeled diagram on A4 size sheet and write their functions. Mitochondria, Endoplasmic, Reticulum, Plastids Lysosomes , Nucleus.

Subject :- Hindi

Kritika :- Learn Ch.- 1, Make 3 questions and find out their answers from each page of the chapter. Write 100 hard words.

Grammar :- Learn Ch.- 1, Fill the work sheet also.

पर्यावरण प्रदूषण की समस्या एवं निवारण और बेटी बचाओ बेटी पढ़ाओ पर निबन्ध लिखो।

समास लिखिए A4 size sheet.

Subject :- S.St.

Work sheet I

Q.1. Why is educated unemployed a peculiar problem in India ?

Q.2. Women work and get less paid compare to Men, Why ?

Q.3. What is the work of National Health Policy (NHO)? Describe.

Q.4. How can you say that “ People are as a resource” Explain in your words.

Q.5. Distinguish between traditional farming methods and modern farming methods.

Subject :- S.St.

Work sheet II

Q.1. Describe India's size and extent.

Q.2. Describe India's position and it's neighbors.

Q.3. What is subcontinent ? Name the Countries that constitute the Indian Subcontinent. How is India different from other countries of Asia ?

Q.4. Name the followings.

(i) The group of islands lying in Arabian sea.

(ii) Countries which are larger than India.

(iii) Our southern Neighboring countries.

Q.5. Name the following :-

(i) What does divides India into two equal halves ?

(ii) Total length of Indian Coastline.

(iii) Southern most point of India.

(iv) Union Territories of India.

Subject :- Computer

Work sheet III

Q.1. Answer the following questions :-

(i) Define IPO cycle with the help of diagram.

(ii) What are the characteristics of the computer describe in details ?

(iii) What are the difference between Internet and Interanet ?

(iv) How many types of printer ? Describe about any two in details.

(v) What is monitor ? Describe about each in details.

Subject :- Biology

Work sheet IV

Q.1. Write the discovery of the cell and it components.

(i) Cell was discovered by ?

(ii) Free living cells in pond water.

(iii) Nucleus in the cell.

(iv) Who coined the term protoplasm.

(v) Cell theory was proposed by.

Q.2. Distinguish between chromo last and leucoplast.

Q.3. What are lysosomes called as ?

Q.4. What is the full form of (RER) and (SER) ?

Q.5. Define Osmosis.

Q.6. What are the types of solution ?

Q.7. Can you name the two organelles we have studied that contain their own genetic material ?

Q.8. Why are lysosomes known as suicide bags ?

Q.9. Write the comparison between animal cells and plant cells.

Q.10. Identify single celled organisms from the following :-

Cockroach , Chlamydomonas, Snake, Mosquito, Bacteria.

Q.11. List the constituent of plasma membrane.

Q.12. Give one word answer :-

(i) Organelle containing chlorophyll.

(ii) Living matter of the cell.

(iii) Cell without membrane bound nucleus.

(iv) An organelle with criatae.

1. Which of the following rational numbers have terminating decimal representation

(i) $\frac{3}{5}$ (ii) $\frac{2}{13}$ (iii) $\frac{40}{27}$ (iv) $\frac{23}{7}$

2. How many rational numbers can be found between two distinct rational numbers?

(i) Two (ii) Ten (iii) Zero (iv) Infinite

3. The value of $(2 + \sqrt{3})(2 - \sqrt{3})$ is

(i) 1 (ii) -1 (iii) 2 (iv) none of these

4. $(27)^{-2/3}$ is equal to

(i) 9 (ii) 1/9 (iii) 3 (iv) none of these

5. Simplify: $\sqrt[3]{2} \times \sqrt[4]{3}$

6. Find the two rational numbers between $\frac{1}{2}$ and $\frac{1}{3}$.

7. Find two irrational numbers between 2 and 3.

8. Multiply $(3 - \sqrt{5})$ by $(6 + \sqrt{2})$

9. Express 0.8888... in the form p/q.

10. Simplify by rationalizing denominator $\frac{7 + 3\sqrt{5}}{7 - 3\sqrt{5}}$

11. Simplify $\left\{ \left[625^{\frac{-1}{2}} \right]^{\frac{1}{4}} \right\}^2$

12. Visualize 3.76 on the number line using successive magnification.

13. Prove that $\frac{1}{1 + x^{b-a} + x^{c-a}} + \frac{1}{1 + x^{a-b} + x^{c-b}} + \frac{1}{1 + x^{a-c} + x^{b-c}} = 1$

1. Which of the following expression is a polynomial

(a) $x^3 - 1$

(b) $\sqrt{x} + 2$

(c) $x^2 - \frac{1}{x^2}$

(d) $\sqrt{t} + 5t - 1$

2. A polynomial of degree 3 in x has at most

(a) 5 terms

(b) 3 term

(c) 4 terms

(d) None of these

3. The coefficient of x^2 in the polynomial $2x^3 + 4x^2 + 3x + 1$ is

(a) 2

(b) 3

(c) 1

(d) 4

4. The monomial of degree 50 is

(a) x^{50}

(b) $2x^{54}$

(c) $x+50$

(d) 50

5. Divide $f(x)$ by $g(x)$ and verify the remainder $f(x) = x^3 + 4x^2 - 3x - 10$, $g(x) = x + 4$

6. Find the value of K if $x - 2$ is factor of $4x^3 + 3x^2 - 4x + K$

7. Factorise the polynomial $x^3 + 8y^3 + 64z^3 - 24xyz$

8. Without actually Calculating the cubes, find the value of $(-12)^3 + (7)^3 + (5)^3$

9. If $x - 3$ and $x - \frac{1}{3}$ are both factors of $px^2 + 5x + r$, then show that $p = r$

10. Using suitable identity expand $\left(\frac{5}{4}x + \frac{3}{4}\right)^3$

11. Using factor theorem factorise $f(x) = x^2 - 5x + 6$

12. Without actual division, prove that the polynomial $2x^3 + 4x^2 + x - 34$ is exactly divisible by $(x - 2)$

13. If $x^2 - bx + c = (x + p)(x - q)$ then factorise $x^2 - bxy + cy^2$