



L.R.S INTERNATIONAL ACADEMY, RAIPUR SADAT

HOLIDAY HOME-WORK (2025-26)

CLASS- X

Dear Parents,

Summer is the time of Scorching heat but these vacations provide you an opportunity to make a better understanding with your ward. We suggest you to form a basic sketch for your ward to spend the day to avoid last minute hassles for the completion of Home Work. Kindly act as a helping hand to your ward in terms of giving practical help in finishing projects and assignments.

Thanks.....

English:-

1. Prepare the portfolios on the following topics.

i) A Letter to God

ii) Modals

Follow the format given below, while crafting the above project.

a) Cover page: Student's information, school name and session

b) Index: List of Contents c) Acknowledgement and preface

d) Introduction e) Topic/ Heading page

f) List of activities and planning done to gather information about the project.

g) Script / Written material about the topic.

h) Conclusion i) Photographs (if needed) wherever necessary.

j) Teacher's remark and signature.

2. Complete the assignment of chapter (A letter to God, Nelson Mandela, Dust of Snow, fire and ice, a triumph of Surgery, The thief story)

3. You are Rama, a student of class 10 at Pavan vidya niketan, Delhi and reside at 110/4, Rohini, Delhi. You require school text books, notebooks and stationery items. As you are unwell, place an order for home delivery with the school approved book seller, Gian pustak bhandar, Rohini.

2. Maintain a vocabulary diary, making a daily record of 'word of the day' for the whole month. Write the synonyms and antonyms of those words along with 3 examples each.

Hindi:-

1. वाच्य की परिभाषा, प्रकार व वाच्य के भेद तथा उपभेदों की उदाहरण द्वारा स्पष्ट कीजिये और चित्र बनाते हुए एक परियोजना तैयार कीजिये।

2. पोर्टफोलियो बनाते समय नीचे दिए गए संकेत बिंदुओं का पालन कीजिये।

* कवर पेज (आवरण पृष्ठ)

* शीर्षक, प्राप्तकर्ता, प्राप्त द्वारा

* सामान्य जानकारी (नाम, जन्म तिथि, पता, माता पिता का नाम, सदस्य, व्यवसाय)

* विषय सूची, एकनॉलेजमेन्ट (स्वीकृति)

* मुख्य विषय पर लेखन

* मेरा परिवार

* मैं और मेरा विद्यालय

* मेरा आदर्श

* प्रिय खेल

* प्रिय मित्र

* यादगार पल

* मेरी उपलब्धि

* जीवन का उद्देश्य

* मेरा सपना

*फोटो की फोटोकॉपी संलग्न करे।

Maths:- (Solve the following questions)

Q1 Find HCF and LCM of 12, 15 and 21

Q2 Prove i) $\sqrt{5}$ ii) \sqrt{n} (n be a non-perfect square number) are irrational number.

Q3 Prove $3 + 2\sqrt{5}$ is irrational number.

Q4 Write rule to identify given fraction or a rational number have terminating or non-terminating repeating decimals.

Q5 Define the following

i) Types of polynomial

ii) Zeros of polynomial

iii) Degree of polynomial

iv) Relation between zeros and coefficient of variable in polynomial

Q6 Find quotient and remainder when $p(x)$ is divided by $q(x)$

i) $p(x) = x^3 - 3x^2 + 5x - 3, q(x) = x^2 - 2$

ii) $p(x) = x^4 - 5x + 6, q(x) = 2 - x^2$

iii) $p(x) = 3x^4 + 6x^3 - 2x^2 - 10x - 5, q(x) = 3x^2 - 5$

Q6. Find a quadratic polynomial, the sum and product of whose zeroes are - 3 and 2 respectively.

Q7. Find the zeros of quadratic polynomial and verify the relationship between zeroes and coefficients.

i) $x^2 - 2x - 8$

ii) $2x^2 + 3x - 2$

Q8. Solve the pair of linear equation in two variable using graphical method.

$x + y = 8$

$x - y = 4$

Q9. The sum of the digits of a two digit number is 9. Also, nine times this number is twice the number obtained by reversing the order of the digits. Find the number.

Q10. If α and β are the zeroes of quadratic polynomial $ax^2 + bx + c$, then evaluate

i) $\alpha^2 + \beta^2$ ii) $\alpha^3 + \beta^3$ iii) $\frac{\alpha^2}{\beta} + \frac{\beta^2}{\alpha}$ iv) $\frac{\alpha}{\beta} + \frac{\beta}{\alpha}$

Q11. Check whether the given equation is a quadratic: $x^3 - 4x^2 - X + 1 = (x - 2)^3$

Q12. Find the roots of the quadratic equation $5x^2 - 6x - 10 = 0$

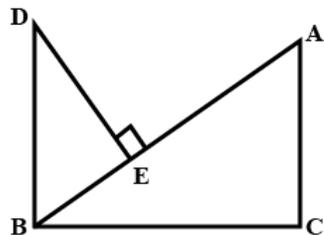
Q13. Find the discriminate of the quadratic equation $2x^2 - 4x + 3 = 0$, and hence find the nature of its roots.

Q14. Solve $a(x + y) + b(x - y) = a^2 - ab + b^2$

$a(x + y) - b(x - y) = a^2 + ab + b^2$

Q15. If one diagonal of a trapezium divides the other diagonal in the ratio 1 : 3. Prove that one of the parallel sides is three times the other.

Q16. In the given figure, $DB \perp BC, DE \perp AB$ and $AC \perp BC$. prove that $\frac{BE}{DE} = \frac{AC}{BC}$



Q17. Prove that if a line is drawn parallel to one side of a triangle to intersect the other two sides at distinct points, then other two sides are divided in the same ratio.

Q18. Find the quadratic equation whose sum of roots is -5 and product of roots is 6.

Q19. Product of two consecutive positive integers is 306. Find integers.

Q20. Find ratio between HCF and LCM of 5, 25 and 20

Science:-**Subject Biology**

- 1) Make a portfolio of topic Nutrition or Transportation (chapter 5 LIFE PROCESSES) on A4 size sheet.
- 2) Draw the diagrams of alimentary canal, Respiration, Transportation and excretory system on chart paper
- 3) Learn and write all NCERT questions and answers chapter life processes.

Subject Physics

- 1) Make a project file on optics under the topics.
 - i) Light and its property
 - ii) Reflection
 - iii) Refraction
 - iv) Spherical mirrors and their ray diagram of images formed for different positions of object.
 - v) Lenses – and the ray diagram of images formed for different positions of object.

Subject Chemistry:-

1. Do the activity of chapter 1 with all numerical.
2. Make a portfolio of chemistry chapter 1 and all PYQ.

Social Science:-

1. Draw India's map on a chart and show the soil types use proper colour and index.
2. Prepare a project on sustainable development.
3. Prepare 20 objective questions each from these 4 chapters
 - i) Nationalism in India
 - ii) Forest and wild life
 - iii) Sector of Indian economy
 - iv) Federalism

Information Technology:-

1. Make a portfolio on Data base management system-Which must be included.
 - a) DBMS
 - b) Types of DBMS
 - c) Objective of DBMS
 - d) Component of DBMS
 - e) SQL commands with 2 Example

Note: - ★ Make separate file for each subject.

★ Use drawing papers for pasting the picture and use lining papers for writing.