

Name : _____

The Ideal New Star English School Varanasi

Homework for Summer Holidays

Session : 2025-26

Class – X

Kids, the much awaited holidays are here and it's time to play and have fun!! We have planned some work for you to make the optimum use of your energy and give a vent to your creativity so that you continue learning during the holidays.

- ❖ Parents are requested to encourage their ward to do the homework independently.
- ❖ They can help the child if he/she needs help.
- ❖ Creativity and originality of the work will be appreciated.
- ❖ Complete the homework of each subject in a thin notebook, separate report file, stick file or scrapbook as per requirement of the subject and the activity.

Subject - English

Answer the following Questions:

1. In the lesson 'A Letter to God' what moral values does the postmaster display in his behaviour?
2. The postmaster was a representative of God. Evaluate this statement in the context of your understanding of 'A Letter to God'.
3. What is the central message Robert Frost conveys in the poem "Dust of Snow"?
4. It is our attitude towards a situation that makes it positive or negative. Do you agree with it? Express your views with reference to the poem "Dust of Snow".
5. What does the poet think could destroy the world if it perished a second time?
6. Explain the theme of the poem "Fire and Ice".
7. Explain determiners, types of determiners with example.

हिन्दी

निर्देश—समस्त प्रश्न अनिवार्य है।

1. सूरदास की किसी भी रचना के कोई पाँच पद लिखे और याद करें जो आपकी पाठ्य पुस्तक में न दिए गए हो।
2. 'माता का आँचल' पाठ में भोलानाथ व उसके साथी घर के अनुपयोगी वस्तुओं से खेल की सामग्री बनाते थे, आप भी किसी एक खेल की सामग्री घर के अनुपयोगी वस्तुओं से बनाए।
3. नेताजी सुभाषचंद्र बोस के व्यक्तित्व पर एक प्रोजेक्ट बनाइए।
4. 'नवयुग हिन्दी व्याकरण' से वाक्य अध्याय के प्रश्न 3, 4 व 5 से दस-दस वाक्य बनाइए।

Mathematics

1. Prove that each of the following numbers is irrational.
(i) $\sqrt{2}$ (ii) $\sqrt{3}$ (iii) $\sqrt{11}$ (iv) $\sqrt{5}$ (v) $\sqrt{7}$
(vi) $2 - \sqrt{3}$ (vii) $3 + \sqrt{2}$ (viii) $3\sqrt{7}$ (ix) $\frac{3}{\sqrt{5}}$ (x) $\sqrt{3} + \sqrt{5}$
2. Find the zeroes of the following quadratic polynomials and verify the relationship between the zeroes and the co-efficients.
(i) $x^2 + 7x + 12$ (ii) $x^2 - 2x - 8$ (iii) $x^2 + 3x - 10$
(iv) $4x^2 - 4x - 3$ (v) $5x^2 - 4 - 8x$ (vi) $2\sqrt{3}x^2 - 5x + \sqrt{3}$
(vii) $2x^2 - 11x + 15$ (viii) $4x^2 - 4x + 1$ (ix) $x^2 - 5$
(x) $5y^2 + 10y$
3. If α and β are the zeroes of the quadratic polynomial $P(x) = ax^2 + bx + c$, then evaluate –
(i) $\alpha - \beta$ (ii) $\frac{1}{\alpha} - \frac{1}{\beta}$ (iii) $\frac{1}{\alpha} + \frac{1}{\beta} - 2\alpha\beta$
(iv) $\alpha^2\beta + \alpha\beta^2$ (v) $\alpha^4 + \beta^4$

4. Solve the given Pair of Linear equations graphically.
- (i) $x + 2y = 3$ (ii) $4x - 5y + 16 = 0$ (iii) $4x - 5y - 20 = 0$
 $4x + 3y = 2$ $2x + y - 6 = 0$ $3x + 5y - 15 = 0$
- (iv) $3x + 2y - 11 = 0$ (v) $3x + y - 11 = 0$
 $2x - 3y + 10 = 0$ $x - y - 1 = 0$
5. Solve for x and y by both substitution and Elimination method.
- (i) $x - y = 3$ (ii) $0.4x + 0.3y = 1.7$ (iii) $\frac{x}{2} - \frac{y}{9} = 6$
 $\frac{x}{3} + \frac{y}{2} = 6$ $0.7x - 0.2y = 0.8$ $\frac{x}{7} + \frac{y}{3} = 5$
- (iv) $2x + 3y + 1 = 0$ (v) $\sqrt{2}x - \sqrt{3}y = 0$
 $7 - 4x = 3y$ $\sqrt{5}x + \sqrt{2}y = 0$

Science

Physics

- Magnification produced by a mirror of focal length 10 cm is $\frac{1}{2}$. Find the distance of object and image.
- Draw all the 6 cases of image formation by concave mirror and 2 cases of convex mirror.
- An object of size 4 cm is placed in front of concave mirror of focal length 15 cm at a distance of 20 cm from it. Find the distance of image from the mirror. Also find magnification produced by mirror.

Chemistry

- List 4 observations that help us to determine whether a chemical reaction has taken place?
- Write 5 redox reactions?
- Write difference between endothermic & exothermic reactions?
- What is Rancidity?
- What is Rusting? Write formula of copper, Iron & Silver Rust.

Biology

- What is Ozone layer depletion? How it can be stopped?
- Name 10 scientists? Write down their work and achievements. (Paste photographs if possible)
- Paste 10 leaves of plant & Name them?
- What is the role of decomposers in ecosystem?
- Draw structure of Human digestive system/Brain/Kidney/Respiratory System on chart paper or thermocol?

Social Science

Project Report

- It is compulsory for every student to undertake any one or two projects on the following topics:
Consumer Awareness
OR
Sustainable Development
OR
Resources and development
OR
Getting acquainted with Disaster Management becoming a disaster manager.
