Kendriya Vidyalaya NHPC, Gerukamukh
Holiday Homework (Summer Vacation 2022)

$$
\begin{aligned}
& \text { Class: X } \\
& \text { Sub- English }
\end{aligned}
$$

Objectives:
A. enhancing writing and thinking skills among the students
B. inculcating observing capacity among the students.
C. sensitizing them towards nature.
D. developing the feeling of self-awareness.
E. keeping them up-to-date with time.

1. Write an essay on 'the globe has become a small village'.
2. How important role does fiction play in our life? Write an answer with reference to the prose A Letter to God.
3. Record the reading of a poem of your own choice from the taught chapters and send me on the WhatsApp.

Project work:
A. Collect the information of ten $21^{\text {st }}$ century writers writing in English. It must be completed in A4 size paper.

Note:
A. Answers must be written in the notebook.
B. No words limit for the answers.
C. All the questions are compulsory.

## हिंदी

## 1. निम्न प्रश्नों के उत्तर लिखिए -

i) 'हालदार एक भावुक और देशप्रेमी इंसान थे' - उदाहरण देकर सिद्ध कीजिए।
ii) कौन था? वह मूर्ति के चश्मे को बार - बार क्यों बदल देता था?
iii) 'ऊधौ तुम हौ अति बड़भागी ' में किन लोगों पर व्यंग्य किया गया है? सूरदास इसके माध्यम से क्या कहना चाहते है ?
iv) 'हारिल की लकड़ी' का क्या तात्पर्य है? गोपियों ने कृष्ण को 'हारिल की लकड़ी' क्यों कहा है?

## 2. गत कुछ वर्षों से आप के क्षेत्र में अपराध बढ़ने लगे है। अपने आपको रमन मानते उनकी रोकथाम के लिए धानाध्यक्ष को पत्र लिखिए।

3. आपका नाम रीमा है, आप एक जागरूक नागरिक है, आपके क्षेत्र में पेड़ों की कटाई हो रही है। इसे रोकने के लिए जिलाधिकारी को एक पत्र लिखिए।
4. समय के सदुपयोग और परिश्रम पर बल देते हुए अपने छोटे भाई आदिल को एक प्रेरणादायक पत्र लिखिए।
5. अपने आप को $12 / 4$ किसनगंज, जयपुर निवासी आदित्य मानते हुए अपने जन्मदिन पर अपने मामा जी को आमंत्रित करते हुए उन्हें एक पत्र लिखिए।
6. शब्द-भेद - संज्ञा, सर्वनाम,क्रिया,क्रिया- विशेषण,समुच्चयबोधक अव्यय, संबंध बोधक अव्यय एवं विस्मयादिबोधक अव्यय की परिभाषा एवं उनके भेद लिखें।

## SOCIAL STUDIES

1. Explain the resource and classify resources.
2. Make a list of the soils found in India and write the names of the states in which this soil is found.
3. Differentiate between Horizontal division of power sharing and Vertical division of power sharing?
4. What are the outcomes and the lessons we learnt from the style of governance in Sri Lanka and Belgium.
5. Outline the features of Vienna Treaty.
6. Define the A literacy rate B Infant Mortality Rate C Net Attendance Ratio
7. "Napoleon had destroyed democracy in France, but in the administrative field he had incorporated revolutionary principles." Justify the statement with suitable arguments.
8. Make a picture on any Rajasthani topic on chart paper. You can choose from these. (Like any Rajasthani animal, any fort, any dress, any culturally images etc.)

## Science

## Biology

Q. 1 List the two common disorders associated with digestive system in humans, mention the causes \& remedy for them in the table given below:

| S.No. | Name of disorder | Causes | Remedy |
| :--- | :--- | :--- | :--- |

Q. 2 Find the various harmful effect of tobacco on respiratory health. Do the survey in your locality and prepare a brief report. Paste the appropriate a picture.
Q. 3 Exercises and Health: Collect information about various breathing exercises that are good for your health. Write about any two that you follow / are going to follow in your daily routine.

## PHYSICS

1. An object is placed 20 cm in front of a plane mirror. The mirror is moved 2 cm towards the object. What is the distance between the positions of the original and final images seen in the mirror?
2. A ray of light strikes a plane mirror $P Q$ at an angle of incidence 30 , is reflected from the plane mirror and then strikes a second plane mirror QR placed at right angles to the first mirror. What will be the angle of reflection at the second mirror? (Draw ray diagram to support your answer)
3. Draw ray diagrams to show the formation of images when the object is placed in front of a converging mirror: (i) between pole and focus (ii) between its centre of curvature and focus.
4. At what distance from a concave mirror of focal length 10 cm should an object be placed so that (i) its real image is formed 20 cm from the mirror (ii) its virtual image is formed

## CHEMISTRY

1.If an of the following reactions occurs spontaneously, write the balanced net ionic equation. If not, write no reaction\&
(a) $\mathrm{Pb}+\mathrm{Zn}^{2+}$ $\qquad$ $\mathrm{Pb}^{2+}+\mathrm{Zn}$
(b) $\mathrm{Fe}+\mathrm{H}^{+} \ldots \mathrm{Fe}^{2+}+\mathrm{H}_{2}$
(c) $\mathrm{Cu}+\mathrm{Ag}^{+} \ldots \mathrm{Cu}^{2+}+\mathrm{Ag}$
(d) $\mathrm{Cr}+\mathrm{Zn}^{2+} \quad \mathrm{Cr}^{2+}+\mathrm{Zn}$
2. Write a balanced chemical equation with state symbols for the following reactions: i.Solution of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.
ii.Sodium hydroxide solution (in water) reacts with hydrochloric acid solution (in water) to produce sodium chloride solution and water.

## Art Education

1 Scenery 2 (a3 size)
2 Craft work 1
3 Painting/Collage 1

MATHS

## Activity :-

1. Geometrical meaning of the zeroes of a polynomial.
2. Graphical method of solution of a pair of linear equations.

Creative and critical thinking based questions :-
Question:1. A woman wants to organize her birthday party. She was happy on her birthday but there was a problem that she does not want to serve fast food to her guests because she is very health conscious. She has 15 apples and 40 bananas at home and decided to serve them. She want to distribute fruits among guests. She does not want to discriminate among guests so she
decided to distribute equally among all. So,

(Image source - google)

1. How many guests she can invite?
2. How many apples and bananas will each guest get?
3. If a guest claims that he got the highest no of fruits amongst all, is this situation possible? If yes, what will be the number of fruits that person got?
4. If the number of guests double then is it possible to distribute the fruits equally?
Q.2. In the below given layout, the design and measurements has been made such that area of two bedrooms and Kitchen together is 95 sq . m.


Based on the above layout and situation, answer the following questions:

1. Form the pair of linear equations in two variables from this situation.
2. Find the length of the outer boundary of the layout.
3. Find the area of each bedroom and kitchen in the layout.
4. Find the area of living room in the layout.
5. Find the cost of laying tiles in Kitchen at the rate of Rs. 50 per sq. M
Q.3. Deepak bought 3 notebooks and 2 pens for Rs. 80 . His friend Ram said that price of each
notebook could be Rs. 25. Then three notebooks would cost Rs.75, the two pens would cost Rs. 5
and eachpen could be for Rs. 2.50. Another friend Ajay felt that Rs. 2.50 for one pen was too little. It should be at least Rs. 16. Then the price of each notebook would also be Rs.16.

Lohith also bought the same types of notebooks and pens as Aditya. He paid 110 for 4 notebooks and 3 pens.

1. Form the pair of linear equations in two variables from this situation.
2. Find whether the estimation of Ram and Ajay is applicable for Lohith?
3. Find the exact cost of the notebook and the pen?
4. Find the total cost if they will purchase the same type of 15 notebooks and 12 pens.
Q.4. Students on the basis of observation of your house answer these questions ?
5. Write the perimeter of your house?
6. Find the height of your house?
7. Write the number of windows and shapes of the them?
8. Calculate the area of one of the wall excluding the area of window?
Q.5. Suppose you wants to play cricket and you are going to market to buy 3 bats and 6 balls for Rs.
9. Later, she buys another bat and 3 more balls of the same kind for Rs. 1300. Represent this
situation algebraically and graphically.
Questions Based On Chapters :-
10. On comparing the ratios $\frac{a_{1}}{b_{1}}, \frac{a_{2}}{b_{2}}, \frac{a_{3}}{b_{3}}$, and, find out whether the lines representing the following pairs of linear equations intersect at a point, are parallel or coincident:
(i) $5 x-4 y+8=0,9 x+3 y+12=0$
(ii) $\quad 7 x+6 y-9=0,18 x+6 y+24=0$
(iii) $6 x-3 y+10=0,2 x-y+9=0$
11. Give examples of polynomials $p(x), g(x), q(x)$ and $r(x)$, which satisfy the division algorithm
and
(i) $\operatorname{deg} p(x)=\operatorname{deg} q(x)$
(ii) $\operatorname{deg} q(x)=\operatorname{deg} r(x)$
(iii) $\operatorname{deg} r(x)=0$
12. Given that $\operatorname{HCF}(306,657)=9$, find $\operatorname{LCM}(306,657)$.
13. Solve the following pair of linear equations by the substitution method.
$x+y=14, x-y=4$
14. Which of the following pairs of linear equations has unique solution, no solution, or infinitely many solutions.
$x-3 y-3=0,3 x-9 y-2=0$
$2 x+y=5,3 x+2 y=8$
$3 x-5 y=20,6 x-10 y=40$
$x-3 y-7=0,3 x-3 y-15=0$
15. Places A and B are 100 km apart on a highway. One car starts from A and another from B at the same time. If the cars travel in the same direction at different speeds, they meet in 5 hours. If they travel towards each other, they meet in 1 hour. What are the speeds of the two cars?

## Enjoy your vacation.

## Stay blessed and happy.

