

# SUNRISE GLOBAL SCHOOL

Holiday Homework 2017-18

Class : IX

Subject : Hindi

<b>Topic</b>	नई सोच : सीखों, खेलो और खोजो
<b>Content Coverage</b>	<ul style="list-style-type: none"><li>• डाकघर में होने वाले क्रियाकलापों व गतिविधियों का निरीक्षण।</li><li>• अनुभव-लेखन</li><li>• पत्र-लेखन कला का विकास</li></ul>
<b>Nature of task</b>	<ul style="list-style-type: none"><li>• निकट के डाकघर का दौरा</li><li>• पाठ संबंधी</li></ul>
<b>Learning Objectives</b>	<ul style="list-style-type: none"><li>• डाकघर के बदलते स्वरूप व कार्यशैली से परिचय प्राप्त करना।</li><li>• ई-मेल के युग में पत्रों के महत्त्व को जानना।</li><li>• पत्र-लेखन शैली की सार्थकता को समझना।</li></ul>
<b>Duration</b>	ग्रीष्मावकाश
<b>Task</b>	<ul style="list-style-type: none"><li>• भारतीय डाकघर और उसकी सेवाओं के विषय में जानकारी एकत्र करेंगे।</li><li>• अपने अनुभवों व पत्रों के महत्त्व को पत्र विद्या के माध्यम से प्रसारित करेंगे।</li><li>• पत्रों के प्रति नवीन दृष्टिकोण का सृजन होगा।</li></ul>
<b>Execution of task / Procedure</b>	<ul style="list-style-type: none"><li>• प्रत्येक विद्यार्थी द्वारा ए.4 आकार की पीले रंग की 'तीन' शीट ली जाएगी।</li><li>• पहली शीट में विषय और मूल्यांकन बिंदु लिखे जाएंगे।</li><li>• दूसरी शीट में डाकघर व डाकसेवा संबंधी चित्र चिपकाए जाएंगे।</li><li>• तीसरी शीट में डाकघर में किए गए अपने दौरे के अनुभवों और पत्रों की उपयोगिता का उल्लेख करते हुए मित्र को पत्र लिखा जाएगा।</li></ul>

<b>Criteria / Rubrics for assessment</b>	विषयवस्तु (शोध) : 10 भाषा शुद्धता : 5 समग्र प्रस्तुतीकरण : 10 <b>कुल अंक</b> : 25
<b>Values imparted through the Activities</b>	<ul style="list-style-type: none"> <li>• भारतीय डाक-व्यवस्था का ज्ञान</li> <li>• महापुरुषों के पत्र-अनुसंधान का विषय</li> <li>• पत्र जैसा संतोष फोन या एसएमएस का संदेश नहीं दे सकता।</li> <li>• सरकारी विभागों व्यापारिक क्षेत्रों में पत्रों का अधिक चलन।</li> <li>• पत्र लेखन एक कला आत्मीयता, घनिष्ठता व स्नेह अभिव्यक्ति का सस्ता, सीधा व सच्चा माध्यम</li> </ul>
<b>Follow up</b>	विद्यार्थी अपने-अपने अनुभवों की चर्चा करेंगे।

## Subject : English

<b>Topic</b>	Redefining Approach-Learn, Play and Explore
<b>Content Coverage</b>	Survey Questionnaire and Report
<b>Nature of task</b>	Post content task
<b>Learning Objectives</b>	<ul style="list-style-type: none"> <li>• Develop a variety of approaches for learning</li> <li>• Develop an understanding of the purpose and importance of an educational survey research.</li> <li>• Analyze people's attitude towards keeping a hobby</li> <li>• Apply experiential learning achieved through research in the form of a report and in an unbiased manner.</li> </ul>
<b>Duration</b>	Summer holidays
<b>Task / Tools/ Techniques</b>	The task requires students to prepare a questionnaire, for 10 people, and conduct a research based on the questions. The student also writes a detailed report that discusses the findings of their research. The report aims at analyzing the data collected.
<b>Execution of task / Procedure</b>	<ul style="list-style-type: none"> <li>• The student prepares a questionnaire and takes readings from 10 randomly selected people, preferably of their residential locality.</li> <li>• The questionnaire would contain questions related to the hobbies that people in the area keep.</li> <li>• Based on the findings of the questionnaire, the student writes a report in not more than 120 words.</li> <li>• The student also pastes pictures of several interesting hobbies that they come across during the survey.</li> <li>• The student can paste a picture of himself/herself, showing him/her pursuing the hobby that he/she has.</li> </ul>
<b>Criteria / Rubrics for assessment</b>	<ul style="list-style-type: none"> <li>• Content relevance of the research questions - 10</li> <li>• Sentence structure and grammar of the report- 5</li> <li>• Presentation, originality &amp; creativity of the task - 10</li> </ul>
<b>Values imparted through the Activities</b>	<ul style="list-style-type: none"> <li>• The student realizes that keeping a hobby is an important aspect of life.</li> <li>• The student appreciates how hobbies help us to learn and explore, enjoy and relax.</li> <li>• The student learns the importance of how a hobby can be grown into a profession too.</li> </ul>

	<ul style="list-style-type: none"> <li>• They learn how hobbies help us to connect with people, and keep us away from negativities.</li> </ul>
<b>Follow up</b>	The students discuss the additional efforts they put to conduct their research. They share anecdotes about the hurdles they faced and overcame. The class talks about the values they inculcated during the research.

DETAILED GUIDELINES FOR THE PROJECT:

The students have to prepare a questionnaire containing 10 questions. The following hints can be used to prepare the questionnaire, or they can use their own ideas for the same:

- ✓ age, gender and occupation of the individual
- ✓ how does the individual spend his leisure hours
- ✓ regular work habits, a daily schedule that the individual keeps
- ✓ is the individual a homebody or prefers to go out during weekends
- ✓ what is the individual's favourite pastime/hobby
- ✓ why does he take interest in this particular activity
- ✓ since when has he been following this hobby
- ✓ what is the number of ..... he/she .....(does/reads etc) in a week/month
- ✓ would he like to interact with others who follow a similar interest
- ✓ what does the individual learn from the hobby
- ✓ does the hobby require any specific tools/objects
- ✓ where does the individual collect material to pursue the hobby
- ✓ what else can he do to enhance the learning from the hobby
- ✓ would he like to make his hobby his profession
- ✓ when does he prefer to follow his hobby the most; eg-time of day/ situation/circumstance
- ✓ does he face any obstacle/hurdle while pursuing this hobby; how does he overcome it

1. The student can make photocopies of this questionnaire and circulate them to **ten** people of their choice. These people can be their parents, friends, neighbors, domestic helper or anybody else who they are in contact with.
  2. The student collects the questionnaires back and compiles a report based on his data.
  3. The student should paste **one copy** of the questionnaire/writes the questions on a sheet of the English project work
  4. The student, then, writes the report.
  5. The report should consist of 3 paragraphs (with a title, an introduction, a body and a conclusion) and 100-120 words.
  6. The report should talk about how the survey was conducted and what was the general outcome/result of the survey.
  7. The report must have a catchy title.
  8. He/she pastes pictures of interesting hobbies that they came across during the survey.
  9. The student pastes a picture of himself/herself and his/her favourite hobby.
  10. The rubrics for assessment are to be mentioned on the last sheet of the English project work.
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## Subject : Mathematics

<b>Topic</b>	Redefining approach – learn, play, explore						
<b>Content Coverage</b>	<p style="text-align: center;"><b>Number System</b></p> <ul style="list-style-type: none"> <li>• Square Root Spiral</li> <li>• Representation of real numbers on the number line</li> <li>• Operations on real numbers</li> </ul>						
<b>Nature of task</b>	Post Content						
<b>Learning Objectives</b>	<p>I hear and I forget, I see and I remember, I do and I understand --- Confucius</p> <p>There is really only one way to learn how to do something and that is to do it. We learn a great deal by trial and error. All of us, especially children, should try, try and try until it comes right. If the learning process is accompanied by doing, it will be better instilled in the minds of the students.</p> <ul style="list-style-type: none"> <li>• To make the students explore that how the real numbers can be represented on the number line.</li> <li>• To make the students explore and find that how the square root of irrational numbers can be evaluated through graph paper instead of directly finding the answer by calculator.</li> </ul>						
<b>Duration</b>	Summer Holidays						
<b>Task / Tools</b>	A 4 Size sheets, Graph papers, coloured pencils						
<b>Execution of task / Procedure</b>	Students will be given some activity based questions and value based questions based on the concept of Number System. Students will do these questions and hence understand the importance of exploring, doing and learning.						
<b>Criteria / Rubrics for assessment</b>	<table style="width: 100%; border: none;"> <tr> <td style="width: 70%;">Questions and Answers</td> <td style="text-align: right;">10 marks</td> </tr> <tr> <td>Values inculcated</td> <td style="text-align: right;">10 marks</td> </tr> <tr> <td>Neatness and presentation</td> <td style="text-align: right;">5 marks</td> </tr> </table>	Questions and Answers	10 marks	Values inculcated	10 marks	Neatness and presentation	5 marks
Questions and Answers	10 marks						
Values inculcated	10 marks						
Neatness and presentation	5 marks						
<b>Values imparted through the Activities</b>	Active role of the learner, gaining of knowledge through active engagement rather than passivity.						
<b>Follow up</b>	The activity and its conduct will be discussed by the teacher in the class.						

### QUESTIONS

(1) Make a square root spiral to represent the real numbers  $\sqrt{2}$ ,  $\sqrt{3}$ ,  $\sqrt{4}$ ,..... upto  $\sqrt{17}$  on the real number line. You may colour the different triangles in different colours or use the different coloured origami sheets to form the different triangles. Use your creativity and imagination to form a beautiful spiral. (10)

(2) Find the square root of 13, 29, 73 and 82 using graph paper by choosing the scale: 10 small divisions = 1 unit. Use different coloured pencils for the different representations. (Hint:  $13 = 3^2 + 2^2$ ,  $29 = 5^2 + 2^2$ .....) (10)

(3) Represent  $-1/\sqrt{2}$  on the number line. (5)

### VALUE BASED QUESTIONS

(1) On his birthday, Rajesh distributed chocolates in an orphanage. The number of chocolates he distributed is given by  $(5 + \sqrt{3})(5 - \sqrt{3})$

(i) Find the number of chocolates distributed.

(ii) Write the moral values depicted.

(2) Varun was facing some difficulty in simplifying  $\frac{1}{7+3\sqrt{2}}$ . His classmate Priya gave him a clue to rationalize the denominator for simplification. Varun simplified the expression and thanked Priya for this goodwill.

(i) How did Varun simplify  $\frac{1}{7+3\sqrt{2}}$  ?

(ii) What values do the students indicate?

## Subject : History

<b>Topic</b>	<b>Redefining approach-Learn, play and explore!</b> <b>Sub Topic- Revolutions are the locomotives of History!</b>
<b>Content Coverage</b>	<ul style="list-style-type: none"> <li>⌚ To develop a comprehensive understanding about the causes that propelled the French Revolution.</li> <li>⌚ To apprise the learner about the concept of Liberty, equality and governance based on consent. .</li> <li>⌚ To dramatize the outbreak of Revolution.</li> </ul>
<b>Nature of task</b>	Post Content
<b>Learning Objectives</b>	<ul style="list-style-type: none"> <li>⌚ To enable the learner to find out about the role of thinkers in French Revolution.</li> <li>⌚ To gauge the phenomenal contribution of 3<sup>rd</sup> Estate in the French Revolution.</li> </ul>
<b>Duration</b>	Summer Vacation
<b>Tools</b>	<ul style="list-style-type: none"> <li>⌚ 2 -3 A4 size sheets</li> <li>⌚ Pictures, quotes, slogans etc. related to French Revolution</li> <li>⌚ Stationary items</li> </ul>
<b>Execution of task / Procedure</b>	<p>Imagine yourself to be one of the philosophers of the period of French Revolution (<b>Rousseau, John Locke, Montesquieu or any other</b>). You along with other thinkers plan to launch a Magazine to ignite the minds of the people of 3<sup>rd</sup> Estate and popularize the revolutionary ideas among them. The following key points must be included while designing the magazine:-</p> <ul style="list-style-type: none"> <li>⌚ The magazine should be of maximum 3-4</li> </ul>

	<p>pages.</p> <ul style="list-style-type: none"> <li>⌚ The cover page should be attractive and reflect the revolutionary spirit of the French society.</li> <li>⌚ Inspiring Slogans, quotes, pictures must be used to Substantiate/ support your findings.</li> <li>⌚ Highlight the reasons as to why the 3<sup>rd</sup> estate should question the monarchy.</li> <li>⌚ Ways through which the 3<sup>rd</sup> Estate can contribute in the revolution.</li> <li>⌚ Places where the 3<sup>rd</sup> Estate can assemble and discuss revolutionary ideals.</li> <li>⌚ Ways through which the 3<sup>rd</sup> Estate can secure rights and End Privileges of 1<sup>st</sup> and 2<sup>nd</sup> estate.</li> </ul>
<b>Criteria / Rubrics for assessment</b>	<ul style="list-style-type: none"> <li>*Understanding about the topic-10 marks</li> <li>*Use of slogan, quotes, pictures-10 marks</li> <li>*Presentation-10 marks</li> <li>*Creativity/out of the box thinking -10 marks</li> </ul>
<b>Values imparted through the Activity</b>	<b>When injustice becomes law, rebellion becomes duty.</b>
<b>Follow up</b>	<ul style="list-style-type: none"> <li>⌚ A detailed discussion on the topic shall be taken up and queries shall be redressed.</li> </ul>



## Subject : Physics

<b>Topic</b>	Describing Motion
<b>Content Coverage</b>	Average speed, Distance – Time graph
<b>Nature of task</b>	Post content
<b>Learning Objectives</b>	<ul style="list-style-type: none"><li>*Students will learn to find the average speed</li><li>*They will learn the use of speedometer &amp; odometer</li><li>*They will be able to plot distance-time graph for a data &amp; find speed using the graph</li></ul>
<b>Duration</b>	Summer vacation
<b>Task</b>	<ul style="list-style-type: none"><li>• To calculate the average speed of a vehicle for a journey</li><li>• To plot distance time graph for the journey</li><li>• To find speed of the vehicle at a given time from the graph</li></ul>
<b>Execution of task / Procedure</b>	<ul style="list-style-type: none"><li>• Student will visit a place with their parents, in a vehicle (minimum 10 km)</li><li>• They will note down the distance covered by the vehicle after every 5 minutes, and fill the table given along with the activity</li><li>• Using the data average speed will be calculated</li><li>• They will plot the distance-time graph for the observations taken by them and paste them on the sheet</li><li>• Then speed will be calculated from the graph for two instances of time(after 10minutes, after 20 minutes)</li><li>• A questionnaire will be answered by them ,attached along with the activity</li><li>• All the work , the observation table, graph ,calculation of speed &amp; the questionnaire will be binded along with other subject activities, as guided by the class teacher</li></ul>

<b>Criteria / Rubrics for assessment</b>	Observation Table : 5 marks Graph : 5 marks Calculation of speed : 5 marks Questionnaire : 10 marks
<b>Values imparted through the Activities</b>	<ul style="list-style-type: none"> <li>• Learning by doing</li> <li>• Observation skill is developed</li> </ul>
<b>Follow up</b>	<ul style="list-style-type: none"> <li>• Students unable to perform the activity in the correct manner, shall be explained again &amp; given another chance.</li> </ul>

### PART-A

#### EXAMPLE:

- Suppose if you start journey at 8:00 a.m. then

#### OBSERVATION TABLE

TIME(a.m./p.m.)	TIME IN MINUTES	ODOMETER READING (km)	DISTANCE TRAVELLED (km)
8:00 a.m.	0	13450	0
8:05 a.m.	5	13452	2

- This is how you should take the observations in the tabulated form, till the end of the journey.
- Then plot distance-time graph for your data. (take time in minutes on x axis and distance on y axis)

### PART-B

- Find the speed of the body after 10 minutes and after 20 minutes, from this graph.
- Convert this speed into (i) km/h (ii) m/s
- What type of motion is it? Why?

### PART - C

#### QUESTIONNAIRE

1. Under what condition the average velocity & average speed of a moving body are equal.
2. What is the nature of distance-time graph for a body having
  - i) uniform motion
  - ii) non-uniform motion
3. What does the slope of the following graphs represent

i) displacement-time graph

ii) distance-time graph

iii) velocity-time graph

4. During its journey, a car travels with a uniform speed of 30 km/h for first hour. Then it travels with a constant speed of 60 km/h for next 2 hours. Find the average speed of the car.

## Subject : Information Technology(IT)

<b>Topic</b>	How is a citizen/student responsible for maintaining discipline?
<b>Content Coverage</b>	Power Point Presentation
<b>Nature of task</b>	Post Content
<b>Learning Objectives</b>	To test their application of Power Point Presentation
<b>Duration</b>	
<b>Tools</b>	Power Point Presentation
<b>Execution of task / Procedure</b>	<p>Make A PRESENTATION on the topic '<b>Discipline</b>' with a minimum of 10 slides. The presentation is to be made in Powerpoint . Your presentation should include</p> <ul style="list-style-type: none"><li>• Different Background/Colour Schemes for each slide</li><li>• Movie clip (optional)</li><li>• Clip Art / Photos</li><li>• Animations</li><li>• Transition Effect</li></ul>
<b>Criteria / Rubrics for assessment</b>	<p>The presentation will be judged out of 25 Marks based on the following</p> <ul style="list-style-type: none"><li>• Backgrounds/Colour Schemes used ( 5 Marks)</li><li>• Movie clip/Clip Art/ Photos, Animations and Transition effects (10marks)</li><li>• Content (10 marks)</li></ul>
<b>Values imparted through the Activities</b>	<ul style="list-style-type: none"><li>• Importance of <b>Discipline</b> AND role of a citizen/student in maintaining discipline.</li></ul>
<b>Follow up</b>	Will be done after assessment