

# D.A.V. PUBLIC SCHOOL

Sector-VI , Dwarka, New Delhi-110075

## Holidays' Homework Class IX

### ENGLISH

1. Make book covers of any two books of your favourite author. Use A4 size sheets to do the same. Be as creative as you can.
2. Do the Integrated Grammar Practice Exercises from 1-7 from the English workbook.
3. Read chapters 1-10 of 'Three Men in a Boat' in detail and write chapter wise summary. Also write character sketches of any two characters you liked the most in the story in about 100 words each.

Visit the given websites to have fun while you learn.

<http://learnenglishteens.britishcouncil.org/en/>

[www.funenglishgames.com](http://www.funenglishgames.com)

### हिन्दी

- (1) जीवन में आगे बढ़ती भारतीय महिलाओं के जीवन पर एक पावर पॉइंट प्रेजेंटेशन तैयार कीजिए या उनसे सम्बंधित चित्रों का संग्रह कर उनके जीवन पर प्रोजेक्ट बनाइये जैसे – पी. टी. उषा, आरती सहा, किरन बेदी आदि |
- (2) भक्तिकाल के किन्हीं दो कवियों जैसे – कबीर, रहीम तुलसी, मीराबाई की पाँच-पाँच रचनाओं का संकलन करें |
- (3) 'मन के हरे हर है, मन के जीते जीत' विषय पर अनुच्छेद/भाषण लिखिए |
- (4) 'अतिथि देवो भव' पर कहानी रचना करें |
- (5) 'गोधूली बेला' पर कविता लिखिए |

### संस्कृतम्

१. विभिन्नसंस्थानां ध्येयवाक्यानि प्रतीकचिह्नानि च सुन्दरैः अक्षरैः सुसज्जिते पत्रे (A4) सञ्चिकारूपेण (File) आनयन्तु ।
२. पाठित-पाठ्यक्रमस्य लिखित्वा अभ्यासं कुर्वन्तु , तदाधारेण कक्षा परीक्षा भविष्यति ।
३. व्याकरणकार्यम् अभ्यासपुस्तिकायां कुर्वन्तु ।

# MATHS

## Assignment

Q1. The value of  $(2-\sqrt{3})(2+\sqrt{3})$

Q2. Give examples of two rational numbers, the product of which is :

(i) a rational number (ii) an irrational number .

Q3. Is every integer a rational number? Give reason .

Q4. If the polynomial  $3x^4 - 4x^3 - 3x - 1$  is divided by  $x-1$ , then find the remainder .

Q5. Find the distance of the point  $(-3, 5)$  from the x-axis .

Q6. If  $z = 0.064$ , then find the value of  $(\frac{1}{z})^{1/5}$  .

Q7. Locate  $\sqrt{8.7}$  on number line .

Q9. Rationalize the denominator :  $\frac{30}{5\sqrt{3}-3\sqrt{5}}$  .

Q10. If  $(x - 3)$  and  $(x - \frac{1}{3})$  are both factors of  $ax^2 + 5x + b$  show that  $a = b$  .

Q11. Rationalise the denominator of  $\frac{\sqrt{6}+\sqrt{3}}{\sqrt{6}-\sqrt{3}}$  and hence find its value if  $\sqrt{2} = 1.414$  .

Q12. Find the value of  $(106)^3 - (96)^3$  using suitable identity .

Q13. If  $\frac{\sqrt{2}+\sqrt{3}}{3\sqrt{2}-2\sqrt{3}} = a+b\sqrt{6}$  find the value of  $a$  and  $b$  .

Q14. Factorize using factor theorem :

(i)  $y^3 - 2y^2 - 29y - 42$

(ii)  $y^3 - 7y + 6$

Q15. Find the image of point  $(2, 5)$  under x-axis and y-axis .

Q16. Plot the points  $A(4,4)$ ,  $B(-4,4)$  and join  $OA, OB, BA$  . What figure do you obtain.

Q17. Express the following in the form  $p/q$ , where  $p$  and  $q$  are integers and  $q \neq 0$  .

Q18. Find the area of a triangle whose vertices are  $(0,4)$ ,  $(0,0)$ ,  $(2,0)$  by plotting on a graph .

Q19. Simplify :  $(3x - 2y)^3 + (2y - 5z)^3 + (5z - 3x)^3$

Q20. Factorize : (a)  $x^2 + 3\sqrt{3}x + 6$  (b)  $343a^3 - 125b^3$

## Activity 1

### The National Sun Temperature Project

Different geographic locations (i.e. where we live) affect the average daily temperature and hours of sunlight of a place. Find out from friends/ relatives living in 5 different states and determine how their geographical location affects the day temperature and hour of sunlight at their place. Make a record of your findings.

- Find the temperature and the number of minutes of sunlight per day for a week.
- Draw a Bar graph of the above data and represent the same using Pie chart.

## Activity 2

Make a power point presentation (15-20 slides) on any one of the following

- a. Fractals
- b. Tessellation
- c. Quadrilateral
- d. Polynomial
- e. Number System

## SCIENCE

Make a **Power Point Presentation** on any one of the following topics:

- Various techniques of **CROP PRODUCTION MANAGEMENT**
- Various techniques of **CROP PROTECTION MANAGEMENT**
- Usage of **MANURES AND FERTILIZERS** with their positive and harmful effects in the fields
- **CROP ROTATION , MIXED CROPPING , INTERCROPPING** methods of increasing crop production
- **ANIMAL HUSBANDRY** as a whole
- **CATTLE INDUSTRY** as an agricultural resource
- **POULTRY BIRDS AND BROILERS** differences in their management and nutritional requirements
- **BEE KEEPING** as an additional source of income for the farmers
- **PISCICULTURE** : different breeds of fishes used **MARICULTURE, CULTURE FISHING AND CAPTURE FISHING**

**Guidelines:** The Presentation should consist of 20- 25 slides. You can even insert a video in your presentation. It should be submitted on a CD mentioning the following details with a permanent marker:

- Name
- Class
- Section
- Topic

## COMPUTER SCIENCE

Research on the following personalities and make a presentation on them.

- i. Steve Jobs
- ii. Mark Zuckerberg
- iii. NR Narayan Murthy
- iv. Azim Premji
- v. Bill Gates

Minimum two slides on each personality should be there. Covering all the personalities in your presentation is mandatory. The printout of the slides (preferred in the handout format) has to be submitted.

This activity will be assessed as FA-2 Activity.

## SOCIAL SCIENCE

1. Prepare a guide book on first aid which can be helpful to provide first aid for fractures, poisoning, cuts and burns and road accidents.
2. Prepare a campaign strategy for creating awareness among the illiterate people about first aid.
3. Prepare a list of doctors, local health practitioners, trained volunteers of Red Cross/ NGO'S which can be helpful at the time of need.

### **Guidelines for the project**

1. The project needs to be done individually in a creative manner.
2. Project needs to be handwritten.
3. The project should be of 6 to 8 pages on A4 size sheets together.
4. Project should be presented in the following format :
  - Cover page
  - Acknowledgement
  - Content and sub topic
  - Bibliography ( This should include websites visited, newspaper, books etc.

## Multidisciplinary Project

### Topic - Importance of Literacy

Subject	Description	Specific Guidelines
<b>English</b>	<ul style="list-style-type: none"> <li>Make a brochure of a Literacy Campaign to inspire/motivate people to join evening classes of schools in their locality.</li> </ul>	<ul style="list-style-type: none"> <li>Brochure should be a minimum of 4 printed pages.</li> <li>The first page should mention the theme (Adult Education) .</li> <li>The second and third page should have the objectives and benefits of Education.</li> <li>The last page should have the details (duration, timings, venue etc.) about the campaign</li> <li>Make the brochure attractive by pictorial illustrations &amp; slogans</li> </ul>
<b>Hindi</b>	<ul style="list-style-type: none"> <li>'साक्षरता' पर जागरूकता प फैलाने के लिए नारा ;स्लोगनद्ध लिखकर एक सुंदर पोस्टर बनाए। ;ए-4 पेस्टल शीट का प्रयोग करें।द्ध</li> </ul>	<ul style="list-style-type: none"> <li>चित्रों का प्रयोग यथासंभव कीजिए</li> </ul>
<b>Sanskrit</b>	<ul style="list-style-type: none"> <li>'साक्षरतायाः जीवने महत्त्वम्' इति विषयम् अधिकृत्य 100-150 शब्दैः अनुच्छेदं लिखत</li> </ul>	<ul style="list-style-type: none"> <li>A4 सुसज्जिते पत्रे विद्यायाः महत्त्वम् ' इति विषये श्लोकानां संग्रहणम् अपि कुरुत ।</li> </ul>
<b>Mathematics</b>	<ul style="list-style-type: none"> <li>Draw a comparison chart (on a bar diagram) comparing the illiterate population in different states of India.</li> <li>Draw another comparison chart showing different age groups and the percentage of the illiterate population in that age group.</li> <li>Collect data depicting the outcome of eradication measures adopted by the Indian government in different states and present it graphically.</li> </ul>	<ul style="list-style-type: none"> <li>A-4 size sheets should be used.</li> <li>Graphs should be colourful and accurate.</li> <li>Data used for the graphs should also be mentioned.</li> </ul>

<b>Science</b>	<p>Illiteracy hampers the development of scientific temperament in the society. The unscientific approach leads to---</p> <ul style="list-style-type: none"> <li>• a barrier between the old and the young generation</li> <li>• a rise in superstitious beliefs and prejudices</li> <li>• hinders the mental and physical growth of an individual and hence the society</li> </ul> <p>Comment</p>	<ul style="list-style-type: none"> <li>• Work should be done neatly and presented beautifully.</li> <li>• To be done on ruled A-4 size sheets.</li> <li>• You can use pictorial illustrations to make it attractive</li> </ul>
<b>Social Science</b>	<ul style="list-style-type: none"> <li>• Identify the major causes of Illiteracy in India.</li> <li>• Make a list of the measures undertaken by the Indian government and United Nations to eradicate illiteracy in India.</li> <li>• On a political map of India name and mark at least eight states which have high literacy rate.</li> </ul>	<ul style="list-style-type: none"> <li>• Internet, books, magazines and newspapers can be referred to, for information.</li> <li>• Presentation of the findings should be made in the form of drawings, photographs etc on coloured A-4 size sheets.</li> <li>• Map should be pasted on an A-4 pastel sheet.</li> </ul>
<b>Work Education</b>	<ul style="list-style-type: none"> <li>• The folder that contains the sheets of different subjects should be creatively prepared. Presentation of the folder will be considered.</li> </ul>	<ul style="list-style-type: none"> <li>• Use handmade paper and decorate it imaginatively.</li> </ul>

**NOTE:**

- Each group will consist of 6 students. The leader of each group will take the responsibility of planning, coordination and execution of the project.
- Each member of a group has to perform the assigned tasks of one subject of the project.
- Internet, books, magazines and newspapers can be referred to, for information.
- After compilation, the projects of all subjects should be punched in a folder or a file consisting/containing A-4 sheets. The first sheet of the folder should have the name, class and roll nos. of the students of the group.
- Students who have opted for Hindi should do the Hindi part and students who have opted for Sanskrit should do the Sanskrit part.