ENGLISH
Your holiday homework this year is a fun mix of all the aspects of the language. It has been designed to ensure that you enjoy and learn at the same time. Do the homework in a folder using A4 size coloured sheets and present it beautifully.

1. Read the book Jane Eyre (Remember, you will have an FA based on the story and the incidents, so ensure that you read the entire text.)
   - Write a brief character sketch of Jane Eyre and the hero of the novel.
   - Pick up 20 words from the book. Find their dictionary meanings and use them in sentences of your own.

2. From the grammar workbook do all the exercises from units 1-4

3. The following work has to be done according to your respective roll numbers.

<table>
<thead>
<tr>
<th>Roll no.</th>
<th>Work assigned</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-7</td>
<td>Write the format of an email on an A3 size sheet. Write an email to your friend telling him how you plan to spend the holidays and take out the printout of the mail sent.</td>
</tr>
<tr>
<td>7-14</td>
<td>Write the format of a notice on an A3 size sheet. As the Head boy / Head girl of the school write a notice informing the students of your school about a trip that will be going to Manali during the summer holidays.</td>
</tr>
<tr>
<td>14-21</td>
<td>Write the format of an informal letter on an A3 size sheet. Write an informal letter to your friend about an interesting project that you did as an FA in your previous class.</td>
</tr>
<tr>
<td>22-35</td>
<td>Write the format of a formal letter on an A3 size sheet. Write a letter to the editor of a national daily on any issue related to the present day education system.</td>
</tr>
<tr>
<td>36-44</td>
<td>Write the format of a report on an A3 size sheet. Write a report on your school’s Silver jubilee function, for your school newsletter.</td>
</tr>
</tbody>
</table>

Note: Formats are to be laminated.
MATHS

I) PROJECT WORK

General Instructions:-

1. The student is required to do one project out of the given two projects.
   
   Project 1 on Probability
   
   Project 2 on Statistics.

2. The project work needs to be submitted in a file.

PROJECT 1:-

TASK TO BE DONE:-

1) Use the data already collected by you and represent it in the following format:

<table>
<thead>
<tr>
<th>Class</th>
<th>No. of Students</th>
<th>No of children having birthdays in the month of</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Jan</td>
</tr>
<tr>
<td>6A/B</td>
<td>48</td>
<td>6</td>
</tr>
<tr>
<td>7A/B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8A/B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9A/B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10A/B</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Students will obtain the fraction of number of children having their birthday in the month of Jan, Feb,……,Dec from the data given in the table.

3. They will make a pie diagram from the recorded data.

4. They will investigate if the fraction actually obtained in step 3 tallies with the calculated probability obtained in each month.

   For example,

   If total number of children whose birthday falls in the month of January is 38 and the total number of students is 500, the actual fraction of children born in January is 38/500 whereas the probability for a child to have birthday in January is 31/365.
PROJECT 2:-

TASK TO BE DONE:-

1. Student will select any paragraph containing approximately 250 words from any source.
2. They will read every word and obtain a frequency table for each letter of the alphabet as follows.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Tally marks</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. They will note down the number of two-letter words, three-letter words,…so on and obtain a frequency table as follows.

<table>
<thead>
<tr>
<th>Number of words with</th>
<th>Tally marks</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 letters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 letters</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. Investigate the following:-

a) What is the most frequently occurring letter?
b) What is the least frequently occurring letter?
c) Compare the frequency of vowels.
d) Which vowel is the most commonly used?
e) Which vowel has the least frequency?
The project report is to be developed and presented in the following order

- **Cover page** showing project title, student information, school and year
- **List of contents** with page numbers.
- **Acknowledgements** (acknowledging the institution, offices and libraries visited and persons who have helped).
- **Project Overview**: Purpose, Aim, Methodology and experiences while doing the project.
- **Chapters** with relevant headings.
- **Summary and conclusions** based on findings.
- **Planning** and activities that was done during the project, if any giving a calendar of activities.
- **Bibliography**: Name of the book, pages referred, author, publisher, year of publication and if a website the name of the website with the specific website link which has been used.
- All the photographs and sketches are to be labeled and acknowledged.

II ) Do the Exercise 1.1 to Ex1.4 from the book "MATHEMATICS EXEMPLAR PROBLEMS CLASS IX" in a separate note book.

III) Sharpen your Mathematical skills by practicing from the following website: www.indiabix.com

IV) Bring articles, amazing facts, riddles, cross-words, recent discoveries in the field of Mathematics for the school biannual Mathematics newsletter (minimum 2).

**SOCIAL SCIENCE**

**Our Heritage**

Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Together past and present traditions merge to become a feature of a civilizational identity. Hence Heritage is a **Parampara** and represents a Nation’s identity.

Cultural heritage refers to monuments, groups of buildings and sites with historical, aesthetic, archaeological, scientific, ethnological or anthropological value. Natural heritage refers to outstanding physical, biological and geological formations, habitats of threatened species of animals and plants and areas with scientific, conservation or aesthetic value.

Our cultural and natural heritage are both irreplaceable sources of life and inspiration. They are our touchstones, our points of reference, our identity. The identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.

**Objectives of the Holiday homework**

1. To make students aware of the Natural and tribal heritage of India.
2. To make the students realize the importance of the economic, social and cultural set up of the country.
3. To create awareness for taking positive steps to respect and protect India’s heritage.
General instruction-

- Each section is divided into six groups.
- Each group has to submit the project either in form of a file or PPT. Number of pages or slides should be between 15 -20 in numbers.
- Students have to give pictures, photos, news or advertisements from newspaper and maps where ever required.

You are required to submit your reports/presentations by 10/7/2013. Presentations are to be mailed at school email address skool.saket.del@apj.edu with subject **Social Science Holiday Homework of Class IX by 'Name of the Student'**

**Natural Heritage**

**Group A. Roll No. 1-6 - Mountains**

1. What are mountains?
2. Types and formation. (Collect Pictures and give examples.)
3. Mark and label the important peaks and ranges of India on two separate maps.
4. Significance of mountains.
5. Geographical features found in the mountain ranges.
6. Economic activities practiced in these regions
7. Crops grown.
8. Write about any two historical incident associated with any of the mountains in India.
9. Life and culture of people.
10. Factors responsible for their degradation and steps to be taken to protect (collect pictures and give examples).

**Group B. Roll No. 7-12 - Plateaus**

1. What are plateaus?
2. Types and formation. (Collect Pictures and give examples).
3. Mark and label the important plateaus of India on a map.
4. Significance of plateaus.
5. Economic activities practiced in these regions(collect pictures).
6. Crops grown/important natural resources found in these areas.
7. Life and culture of people.
8. Factors responsible for their degradation and steps to be taken to protect (collect pictures and give examples).

**Group C. Roll no.13-18 - Plains**

1. What are plains?
2. Types and formation. (Collect Pictures and give examples).
3. Mark and label the important plains of India on a map.
4. Significance of plains.
5. Economic activities practiced in these regions (collect pictures).
7. Contribution of the plains in shaping India’s history.
8. Life and culture of people.
9. Factors responsible for their degradation and steps to be taken to protect (collect pictures and give examples).

**Group D. Roll No. 19-24 Many Faces of Our Rivers**

1. Origin of rivers. (Collect Pictures and give examples.)
2. Mark and label the important rivers of India on a map.
3. Significance of rivers.
4. Economic activities practiced in river basins (collect pictures).
5. Write about the development of river valley civilization in India (Importance of rivers in shaping India’s history).
6. Rivers and their relation with historical /religious places (any five places, mark them on a map and collect pictures).
7. Social movements associated with rivers.
8. Rivers at risk – Give pictures/information from newspapers
9. Factors responsible for their degradation and steps taken/ to be taken to protect (collect pictures and give examples).

**Group E. Roll No. 25-30- Natural vegetation**

1. Name the different types of natural vegetation found in India.
2. Colour and label them on a map of India.
3. Write about their characteristic features.
4. Trees and tradition in India (collect pictures and stories).
5. Myths on Indian trees and plants.
6. Name (local name and botanical names) any ten medicinal plants/herbs and write about their uses.
7. How has the cosmetic industry benefitted from various indigenous plants? (use pictures wherever required)
8. Causes of deforestation under the British rule.
10. Factors responsible for their degradation and steps to be taken to protect (collect pictures and give examples).

**Group F. Roll No. 31-36 - Wild life**

1. Choose any one wildlife sanctuary and a bird sanctuary in India.
2. Colour and label its location on a map of India.
3. Write about the animals and birds found there and their habitat. (find out about the migratory birds)
4. Name the endangered species found there. (use pictures wherever required)
5. Give reasons for converting the area into a wildlife sanctuary.
6. Mention its impact on the immediate surroundings and on our country.
7. Mention different animals that are revered in different religions, mythical animals and brand species.
8. Factors responsible for their depletion and steps to be taken to protect (collect pictures and give examples). How as a student can you be involved in protecting wild life?
Group G Roll no. 37 onwards - Tribal Heritage

1. Who are tribals?
2. Tribal Population and their distribution in India (2011). Identify the states which have more than 50% tribal population.
3. Name the important tribal groups found in India along with the states.
4. Mention the tribal concentrated areas.
5. Write about their economic activities. (Occupation, agricultural practices, etc.)
6. Tribal culture - Art, Dresses, ornaments, and headgears, Festivals, Dances, Tribal religions, tribal society, languages, measuring units, etc.
7. Reasons for stereotyping and displacement (give examples with pictures)
8. Steps to be taken/are taken to protect and promote tribal culture (collect pictures and give example)

1. The project report /presentation is to be developed and presented in the following order
   - Cover page/1st slide showing project title, student information, school and year
   - List of contents with page numbers (in case of a file).
   - Acknowledgements (acknowledging the institution, offices and libraries visited and persons who have helped).
   - Chapters/slides with relevant headings.
   - Summary and conclusions based on findings.
   - Planning and activities that was done during the project, if any giving a calendar of activities.
   - Bibliography: Name of the book, pages referred, author, publisher, year of publication and if a website the name of the website with the specific website link which has been used.
   - All the photographs and sketches are to be labeled and acknowledged.

2. ALLOCATIONS OF MARKS
   Total Marks allocated over the different aspects of the Project Work in the following manner:-
   1. Content accuracy and originality 3 marks.
   2. Presentation and creativity 3 marks.

3. CRITERIA FOR PROJECT WORK
   Following are the criteria for evaluating Project Work :-
   - Content, accuracy and originality - Reads original sources and chooses content from books and internet
   - Presentation- Presents report with original thoughts and opinions supported by facts.
   - Process of Project Completion- Choose topics on ones own, shares information willingly, interacts with teachers and peers willingly and takes responsibility.
SCIENCE

1) Do the following activity

Procedure: Pour a little water in a small transparent bottle and add a drop of milk to it. Trap smoke from an incense stick in the upper part of the bottle. Now, immediately with the help of a laser torch let a thin beam of light fall at an acute angle on the surface of the water. Note down your observations and also give reasons for your answer. Write down the role of milk and smoke in this activity.

2) Create a crossword puzzle on each of the following topics:

   a) Micro-organism
   b) Matter in our surroundings
   c) Motion

   Visit the site classhelper.org to make the crossword. Also take a print out of the crossword generated by you

3) You must have heard about genetically modified (GM) foods. Find out about the nutritional value of GM foods. Make a report stating both the advantages and disadvantages of GM foods (any two).

4) The Science department is planning to start a Science newsletter shortly. For making this happen bring articles, amazing facts, riddles, cross-words, recent discoveries in the field of Science (minimum 2).

5) Plan out to go to a destination in a vehicle fitted with an odometer. After every 5 minutes record the distance covered by you through the odometer. Write the collected data of distance and time in tabular form. Use this data and plot distance-time graph on a graph paper.
   - What is the nature of the graph obtained?
   - Calculate the slope of the graph obtained. What does the slope of this graph indicates?

Note- All the work has to be done in the FA notebook

FRENCH

✓ Write a letter to Santa. (120-150 words)

Components
1. Greeting and introduction
2. Thank Santa for last year’s present
3. Ask for what you want this Christmas
4. Explain good things you've done this year
5. Apologize for bad things you've done this year
6. Close the letter
**Project**
Create a French village.

**Instructions**
1. Draw and/or cut out pictures to create a well-spaced village with at least 4 shops/businesses.
2. Label the shops in French.
3. Add drawings and/or cut-outs of at least 5 items which can be found in each shop. Label them.
4. Give the village a French name.

**Customization**
1. Label the streets
2. Give the shops French names (e.g., chez Pierre, Boulangerie De Gueldre)
3. Rather than a list of items, draw sale posters (e.g., Pommes - 2 Euros le kilo) or menus

**COMPUTER**

Make a CAL package in Visual Basic on any one of the following topics:

1. Social networking – a boon or a bane
2. Impact of advertisement on children
3. Are examinations necessary

Package should contain minimum 15 to 20 forms and mail at the school email id skool.saket.del@apj.edu with subject **Computer Holiday Homework Of Class IX by 'Name of the Student'**

**संस्कृत**

एक ‘PowerPoint Presentation’ का निर्माण कीजिए, जिसमें ‘उपपद विभक्तियों तथा कारक विभक्तियों’ में अन्तर को बताते हुए, उपपद विभक्तियों के नियमों को उदाहरण सहित दर्शाइए।

Note: Mail the PowerPoint Presentation to school e-mail id: skool.saket.del@apj.edu with subject **Sanskrit Holiday Homework of Class IX by 'Name of the Student'**

**हिंदी**

1) आपको पुस्तकालय से हिंदी की एक पुस्तक दी जा रही है | उस पुस्तक का अध्ययन करके दिए गए बिन्दुओं के आधार पर समीक्षा करिए -
   क) पुस्तक की कथा वस्तु?
   ख) प्रिय पाठक कौन और क्यों?
BOOK CLUB

Reading helps you to foster empathy, morality, and critical thinking, imaginations and creativity; it not only broaden your interests, spark your passions, but also inspire you to think great thoughts and do great things. Joining a book club is one of the greatest ways to develop all of these wonderful qualities. Our school also has a Book Club. Any student can be the member of this book club. Every month we choose a book to read and given a month time to read it. After a month, we have a discussion on the book in which anything related to the book, content or an interesting part of the book is read out.

The core idea of a book club is to come to express, share. As people, we can learn things independently, come up with great ideas alone, or enjoy books by ourselves. But a special feeling arises when we come together to share these experiences. It is human nature to want someone to hear what you have to say. It's empowering! It's fun! And it's what the book club is all about.

During this summer vacation the book to be read is “The Immortals of Meluha by Amish Tripathi”.