

DEHRADUN PUBLIC SCHOOL
HOLIDAY HOMEWORK (2023-24)
CLASS- IX

(The summer holiday homework is also available on school website i.e. www.ddps.in)

*To be ready for tomorrow's opportunities, do your homework today.
Learn, refine your skills and focus on your growth.*

Dear Students,

Summer has arrived and brought with it your amazing and fun filled holidays. Summer break is a well-deserved opportunity to relax and unwind by indulging in various activities. Your Holiday Homework has been specially designed for you to be creative, innovative and imaginative while completing your tasks. It will also enable you to recapitulate what was taught in the classrooms. We hope you will play, learn, research, analyze, experiment, imagine, think, value, appreciate and above all enjoy during your holidays.

Wishing you happy holidays!

Instructions for the students:

- ❖ Do your holiday homework in your respective subject notebooks.
- ❖ Mention date and day when you do your work.
- ❖ Paste the map neatly and label it correctly.
- ❖ Project/Activity File must be maintained separately.
- ❖ Use your creativity and imagination wherever required.
- ❖ Submit your holiday homework when the school re-opens.
- ❖ Use the holidays to thoroughly prepare topics given in August Periodic Test Syllabus.

ENGLISH LANGUAGE & LITERATURE (184)

READING

Q1. Read any story from your book and summarize it in the form of PowerPoint presentation (slides).

The slides must be in the following order:

- General information about the chapter (Background data)
- Author's description
- Characters' information
- Summary of the story
- Moral/What did you get from the story?

Note: You can include different pictures related to the text in the slides. Presentation in the form of paragraph will not be accepted. It must be in points. The slides must not exceed the count of 10.

Q2. Read an English newspaper daily and equip yourself with at least 5 cuttings of any informative write up or an article. Create a scrap book of the same.

WRITING

Q3. Write an article about the origin and progress of Ayurveda and Naturopathy in not more than 100-150 words.

SPEAKING

Q4. Record any short story/paragraph/poem in your own voice. Listen to it and check on the proper pronunciation, pauses, fluency and rhythm. Re-record its improvised version (if required).

निम्नलिखित प्रश्नों के उत्तर दीजिए –

- प्रश्न 1 मिट्टी की आभा क्या है? उसकी पहचान किससे होती है?
- प्रश्न 2 हीरे के प्रेमी उसे किस रूप में पसंद करते हैं?
- प्रश्न 3 हमारी सभ्यता धूल से क्यों बचना चाहती है?
- प्रश्न 4 मनुष्य के जीवन में पोशाक का क्या महत्व है?
- प्रश्न 5 लेखक उस स्त्री के रोने का कारण क्यों नहीं जान पाया?
- प्रश्न 6 बुढ़िया के दुःख को देखकर लेखक को अपने पड़ोस की संभ्रांत महिला की याद क्यों आई?
- प्रश्न 7 छुआछूत को लेकर रैदास ने क्या कहा है?
- प्रश्न 8 रैदास ईश्वर को मोती और स्वयं को धागा क्यों मानते हैं?
- प्रश्न 9 चाँद और चकोर के संबंध से कवि क्या स्पष्ट करना चाहता है?
- प्रश्न 10 जीव-जंतु भी मनुष्य की तरह संवेदनशील होते हैं। 'गिल्लू' पाठ के आधार पर सिद्ध कीजिए।
- प्रश्न 11 शब्द किसे कहते हैं? उदाहरण देकर समझाइए।
- प्रश्न 12 रचना के आधार पर शब्द के कितने प्रकार होते हैं? उनके नाम लिखिए।
- प्रश्न 13 शब्द और पद में अन्तर स्पष्ट कीजिए।
- प्रश्न 14 हिन्दी में पद कितने प्रकार के होते हैं? स्पष्ट कीजिए।
- प्रश्न 15 जिन स्वरों का उच्चारण मुख के साथ-साथ नासिका से भी होता है, उन्हें क्या कहते हैं?
- प्रश्न 16 उपसर्ग किसे कहते हैं? उदाहरण दीजिए।
- गतिविधि कार्य—
- प्रश्न 17 किन्हीं पाँच लेखकों अथवा कवियों के चित्रों सहित नाम तथा उनके जीवन परिचय 80 से 100 शब्दों में लिखिए।
- प्रश्न 18 आधुनिक जीवन शैली में आयुर्वेद व प्राकृतिक चिकित्सा का महत्व बताते हुए अपने मित्र को एक पत्र लिखिए।

MATHEMATICS (041)

SOLVE THE FOLLOWING QUESTIONS:

- Q1. The value of $0.\bar{2}$ in the form of $\frac{p}{q}$, where p and q are integers and $q \neq 0$, is :
- a. $\frac{1}{5}$ b. $\frac{2}{9}$ c. $\frac{2}{5}$ d. $\frac{1}{8}$
- Q2. The points (-5, 2) and (2, -5) lie in the_____.
- a. same quadrants b. II and III quadrants, respectively
- c. II and IV quadrants, respectively d. IV and II quadrants, respectively
- Q3. The zeros of the polynomial $p(x) = x^2 - 3x$ are :
- a. 0,0 b. 0,3 c. 0, -3 d. 3, -3
- Q4. The point at which the two coordinate axis meet is called the_____.
- a. abscissa b. ordinate c. origin d. quadrant
- Q5. In how many parts does the axis divide the plane?
- a. 1 part b. 2 parts c. 3 parts d. 4 parts
- Q6. The rationalization of $\frac{4\sqrt{3}+5\sqrt{2}}{\sqrt{48}+\sqrt{18}}$ is_____.

- a. $\frac{9-4\sqrt{6}}{15}$ b. $\frac{9+4\sqrt{6}}{15}$ c. $\frac{4-9\sqrt{6}}{15}$ d. $\frac{4+9\sqrt{6}}{15}$

Q7. Which of the following is a binomial?

- a. x^2+x+3 b. x^2+4 c. $2x^2$ d. 9

Q8. The point whose ordinate is 4 and which lies on y-axis is _____ .

- a. (4, 0) b. (0, 4) c. (1, 4) d. (4, 2)

Q9. If $x = 1 + \sqrt{2}$ then the value of $\left(x - \frac{1}{x}\right)^2$ is _____ .

- a. 2 b. 4 c. 6 d. 8

Q10. The degree of $4x^3 + 12x^2 + 3x + 9$ is:

- a. 0 b. 1 c. 2 d. 3

Q11. Expand : $(x - 2y - 3z)^2$

Q12. Simplify: $[5\{8^{1/3} + 27^{1/3}\}^3]^{1/4}$

Q13. Without plotting the points, indicate the quadrants in which they will lie, if

- i. ordinate is 5 and abscissa is -3. ii. abscissa is -5 and ordinate is -3.
iii. abscissa is -5 and ordinate is 3. iv. ordinate is 5 and abscissa is 3.

Q14. A point is such that (abscissa of the point, other than zero) that it equal to the ordinate of the point. In which quadrant can the point lie?

Q15. If $x = (5+2\sqrt{6})$, then find the value of $\sqrt{x} + \frac{1}{\sqrt{x}}$.

Q16. If $9^{x+2} = 720 + 9^x$, find the value of $(4x)^{1/x}$.

Q17. If in coordinates of a point B(3, -2), signs of both coordinates are interchanged, then it will lie in which quadrant ?

Q18. Explore the development of Ayurveda during the recent years in India and explain how its growth has affected the allopathic system of medicine by using statistical data.

ACTIVITY

❖ **OBJECTIVE :-** To verify the algebraic identity : $(a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$

❖ **MATERIAL REQUIRED :-** Adhesive, coloured papers, etc.

❖ **METHOD OF CONSTRUCTION :-**

- Cut out a square of side a units from a coloured paper [see Fig.1].
- Cut out a square of side b units from a coloured paper [see Fig. 2].
- Cut out a square of side c units from a coloured paper [see Fig.3].
- Cut out two rectangles of dimensions $a \times b$, two rectangles of dimensions $b \times c$ and two rectangles of dimensions $c \times a$ square units from a coloured paper [see Fig. 4].

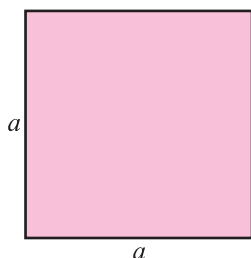


Fig. 1

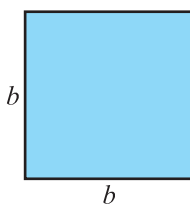


Fig. 2

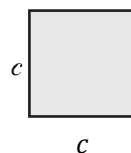


Fig. 3

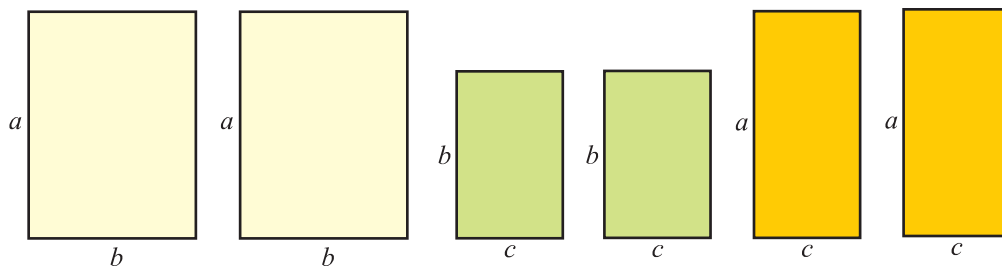


Fig. 4

v. Arrange the squares and rectangles as shown in Fig. 5.

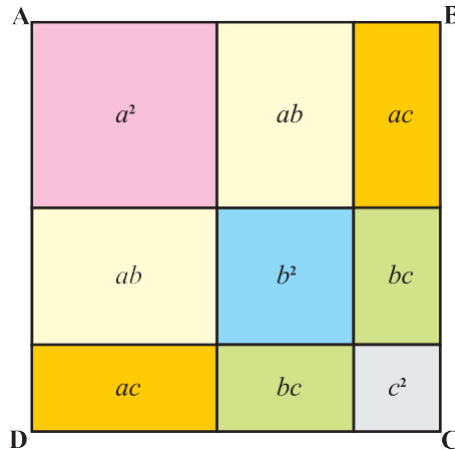


Fig. 5

❖ **DEMONSTRATION :-**

From the arrangement of squares and rectangles in Fig. 5, a square ABCD is obtained whose side is $(a + b + c)$ units.

Area of square ABCD = $(a + b + c)^2$.

Therefore, $(a + b + c)^2 =$ sum of all the squares and rectangles shown in Fig. 1 to Fig. 4.

$$= a^2 + ab + ac + ab + b^2 + bc + ac + bc + c^2$$

$$= a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$$

Here, area is in square units.

❖ **OBSERVATION :-**

On actual measurement :

$$a = \underline{\hspace{2cm}}, b = \underline{\hspace{2cm}}, c = \underline{\hspace{2cm}},$$

$$\text{So, } a^2 = \underline{\hspace{2cm}}, b^2 = \underline{\hspace{2cm}}, c^2 = \underline{\hspace{2cm}}, ab = \underline{\hspace{2cm}},$$

$$bc = \underline{\hspace{2cm}}, ca = \underline{\hspace{2cm}}, 2ab = \underline{\hspace{2cm}}, 2bc = \underline{\hspace{2cm}},$$

$$2ca = \underline{\hspace{2cm}}, a + b + c = \underline{\hspace{2cm}}, (a + b + c)^2 = \underline{\hspace{2cm}},$$

$$\text{Therefore, } (a + b + c)^2 = a^2 + b^2 + c^2 + 2ab + 2bc + 2ca$$

❖ **APPLICATION :-**

The identity may be used for

- i. Simplification / factorization of algebraic expressions.
- ii. Calculating the square of a number expressed as a sum of three convenient numbers.

SCIENCE(086)

ANSWER THE FOLLOWING QUESTIONS:

Q1. If the humidity in the air increase then the rate of evaporation:

- a. decrease
- b. increase
- c. remain same
- d. both a. and b. depending upon the temperature

Q2. Which of the following have least inter atomic spacing?

- a. solid
- b. liquid
- c. gases
- d. plasma

Q3. During summer, water kept in an earthen pot becomes cool because of the phenomenon of:

- a. diffusion
- b. transpiration
- c. osmosis
- d. evaporation

Q4. Liquid to gas and gas to liquid changes are called:

- a. vaporization and condensation
- b. condensation and vaporization
- c. sublimation and condensation
- d. condensation and sublimation

Q5. Physical state of water at 25°C , 0°C and 100°C is respectively:

- a. liquid, solid and gas
- b. solid, liquid and gas
- c. solid, gas and liquid
- d. gas, solid and liquid

Q6. Tabulate the differences in the characteristics of state of matter.

Q7. Why does our palm feel cold when we put some acetone , petrol or perfume on it?

Q8. Naphthalene balls disappear with time without leaving any solid. Why?

Q9. Draw the diagram of 'Power House' of a cell and write its functions also.

Q10. Draw a labeled diagram of a plant cell.

Q11. Present the medicinal value of different herbs to cure various diseases in a tabular form along with pictures.

PROJECT WORK

Prepare a **PROJECT FILE** which should be handwritten consisting of 15-20 A4 size sheets.

The project file must be presented in the following order:

- a. Cover Page:** Must contain title, student's detail, school's name and session
- b. Certificate:** Certificate of completion under the guidance of the teacher
- c. Acknowledgement:** Acknowledging the institution and the persons who helped
- d. List of Contents/Index:** List of contents with page numbers
- e. Introduction:** Introduction of the topic
- f. Theory:** Theory with relevant headings and their detail
- g. Case Study:** Must be made presentable with diagrams, pie charts, bar graphs etc.
- h. Bibliography:** It must have the names of books, magazines, websites along with their links from where the content is collected.

Note: Diagram/Flow Chart/ Pie Chart / Mind Map must be included in the project.

● List of suggested topics for project:

Students can select any one topic from the below mentioned topics-

1. Air for respiration, for combustion, for moderating temperatures; movements of air and its role in bringing rains across India.
2. Effect of Mobile radiation from Mobile towers on people and environment.
3. Effect of video games in adolescence.
4. Cancer and its treatment.
5. Holes in ozone layer and the probable damages.

SOCIAL SCIENCE (087)

ANSWER THE FOLLOWING QUESTIONS:

- Q1.** Draw up a list of democratic rights we enjoy today whose origins could be traced to the French Revolution.
- Q2.** On the political map of India mark States and Union Territories along with their capitals.
- Q3.** Compare the life style and ideology of Nelson Mandela and Mahatma Gandhi.
- Q4.** Explain the contribution of non-farm activities to the economic growth of the village.
- Q5. What is the history of Ayurveda in India? Explain the importance of Ayurveda in society.**

PROJECT WORK

Every student has to compulsorily undertake **one project on Disaster Management**.

❖ Guidelines for the students:

1. Students will conduct a research on various disasters and the Disaster Management methods and techniques.
2. The content must be relevant to the topic.
3. Project must be made presentable with the help of images, graphs, pie charts, diagrams etc.
4. Attention must be paid on **content**.
5. The projects and models should be made from eco-friendly products without incurring too much expenditure.
6. If possible, **various forms of Art** may be integrated in the project work.
7. The total length of the project must be **minimum 15 and maximum 20 A4 size sheets**.
8. After explaining the main points, each student will take up any one of the case study topics.
9. The project must be presented in the following order:
 - a. **Cover Page:** Must contain title, student's detail, school's name and session.
 - b. **Acknowledgement:** Acknowledging the institution and the persons who helped.
 - c. **List of Contents/Index:** List of contents with page numbers.
 - d. **Introduction:** Introduction of the topic.
 - e. **Subject Matter:** Chapters with relevant headings and their detail.
 - f. **Case Study:** Must be made presentable with charts, pictures, graphs, maps etc.
 - g. **Bibliography:** It must have the names of books, magazines, websites along with their links from where the content is collected.
 - h. **Project Evaluation Proforma**

TOPIC FOR THE PROJECT: DISASTER MANAGEMENT

(Subject matter must cover the following points. Students may add or change some more points of their choice to make their project unique.)

1. Definition of 'disaster'
2. Types of disasters (earthquake, tsunami, cyclone, flood, drought, landslide etc.)
3. Their causes
4. Vulnerability and risk
5. Hazards and their classification
6. Difference between a hazard and a disaster
7. Mitigation strategies for different disasters
8. Case Study

9. Conclusion/Summary Report

Also include a case study of 250-300 words, based on any one of the given topics. Also locate and label the place on a India map where your case study is based upon.

- a. Cyclonic storm Asani in Andhra Pradesh (May 2022).
- b. Flood in Assam (May 2020).
- c. The President of India Smt. Droupadi Murmu.
- d. Bandhavgarh forest fire in Bhopal (2022).
- e. Role of Mahatma Gandhi and Netaji Subhash Chandra Bose in the Indian freedom struggle.

PROJECT REPORT CLASS IX (SPECIMEN)

ACKNOWLEDGEMENT

This is to acknowledge all those without whom this project would not have been possible. Firstly, I wish to thank our Social Science teacher _____ who gave her immense support and made me understand how to make this project. Without her guidance and support, the project would not have been completed. The subject matter contained in the project has been widely taken from _____. The statistical data has been extracted from _____.

PROJECT EVALUATION PROFORMA (last page)

The distribution of marks over different rubrics relating to Project Work is as follows:

S. No.	Aspects	Total Marks	Marks Obtained
a.	Content accuracy, originality and collaborative skills	2	
b.	Competencies exhibited and Presentation	2	
c.	Viva	1	

Remarks _____ Teacher's sign. _____ Date _____

WEEKLY TASKS

❖ **Meaningful Monday:**

Read the newspaper and find out five new words. Note down these words and their meanings in your notebook.

❖ **Tech Tuesday:**

Watch some educational videos on [youtube.com/c/DDPSIndia/playlists](https://www.youtube.com/c/DDPSIndia/playlists) and write a two-line summary of what you learned from the video(s). Remember to mention the title of the video(s) that you watched.

❖ **Weather Wednesday:**

Every Wednesday find out the temperature of your place, note down the minimum and maximum temperature and next week compare it with the temperature of previous week.

❖ **Thoughtful Thursday:**

Go through the international news headlines of the day. Note down the news headlines that grabbed your attention the most. Study a little more about it.

❖ **Fun Friday:**

Read a book, article or story related to History, Geography or Civics. You may also solve quizzes, play games related to Social Science.

A moment of mindfulness

These ordinary practices may bring extraordinary results.

- ❖ Talk to your grandparents/elders at home and ask them what are their core values and principles in life.
- ❖ Help your parents in the household work like organizing, cleaning, cooking, laundry etc.
- ❖ Keep your room and study table neat and tidy. Remove clutter.
- ❖ Prepare a time table to schedule your activities. Practice a daily routine.
- ❖ Keep grains and water for birds on the roof/balcony of your house.



(The summer holiday homework is also available on school website i.e. www.ddps.in)