DELHI INTERNATIONAL SCHOOL EDGE
Holiday Homework 2024-2025
Class- XI A

Dear Students,

As the summer holidays approach, we hope you're looking forward to a well-deserved break filled with relaxation, fun, and plenty of sunshine! Before you dive into your vacation plans, we wanted to share some holiday homework to keep your minds engaged and active during the break.

Attached to this message, you'll find a set of assignments carefully crafted to reinforce and extend your learning beyond the classroom. These activities are designed to be enjoyable yet stimulating, offering you the opportunity to explore new ideas, develop your skills, and enrich your knowledge in various subjects.

While we encourage you to make the most of your time off, we also believe that learning is a lifelong journey that doesn't stop when the school bell rings. Whether you're travelling to exotic destinations, spending time with family and friends, or simply relaxing at home, we encourage you to find moments to engage with your holiday homework.

Remember, learning can take many forms, and the summer holidays present the perfect opportunity to discover new interests, pursue personal passions, and embark on exciting adventures. So, whether you're solving math puzzles, reading captivating stories, conducting science experiments, or exploring the wonders of nature, we encourage you to approach your holiday homework with enthusiasm and curiosity.

As you tackle each assignment, take pride in your efforts and celebrate your achievements, no matter how big or small. And if you have any questions or need assistance along the way, don't hesitate to reach out to us – we're here to support you every step of the journey.
Wishing you a summer filled with joy, laughter, and endless opportunities for growth and discovery. Have a fantastic break, and we look forward to hearing all about your adventures when you return!
Enjoy Your Summer Break! ����
Warm regards,
Class Teacher

CHEMISTRY

I) Handwritten project on any one of the following topics to be submitted.

Please Note: Include the following in your projects:

1. Cover Page (having the details of the student and the topic as well as the Subject Teacher) 2. Acknowledgement
3. Certificate
4. Project Introduction
5. Body
6. Conclusion
7. Bibliography

TOPICS- 1. Determination of rate of evaporation of different liquids.

2. Study the effect of acids and bases on tensile strength of fibers.
3. To determine the amount of caffeine present in tea samples.
4. Investigation of the foaming capacity of different washing soaps and the effect of addition of Sodium carbonate on it.
5. Study of the methods of purification of water.
6. Testing the hardness, presence of fluoride, chloride etc. depending on the regional variation in drinking water and study of causes of presence of these ions above permissible limit (if any) .

II) Write down the following experiments in practical file.

1. Crystallization of impure sample of Copper Sulphate.
2. Determination of pH of some solutions obtained from fruit juices, solution of known and varied concentrations of acids, bases and salts using pH paper or universal indicator.
3. i.Preparation of standard solution of Oxalic acid

ii. Determination of strength of a given solution of Sodium hydroxide by titrating it against standard solution of Oxalic acid.

PHYSICS

Instructions

1.Learn chapters that have been done in class .

2.Create a flow chart of at least 40 physical quantity including their dimension formula, unit and symbol on a chart paper using your creativity.

3.Make a collage /picture on a cartridge sheet of the latest scientific research using your creativity and innovation.

4)Investigatory Projects- Physics (2024-25) As per C.B.S.E. guidelines, all students have to prepare one Investigatory Project carrying 3 marks. All students are therefore, advised to prepare one Investigatory Project

on any one of the following topics or any other topic of their choice based on the concept of physics after consulting the teacher during the summer vacation.

1. Visible standing waves in the Real World.
2. Physics of Guitar Strings
3. Drinking happy bird. How it works?
4. Develop computer programs that simulate study of physics.
5. Make and study soap bubbles that last for months (or even years!)

6. Make and study your own electrochemical cell.
7. Build a research-quality telescope at home and study its resolving and magnification power.

COMPUTER SCIENCE

Solve the work sheet:
https://docs.google.com/document/d/14VBUVo7Ik61DcTccvrukSsOQ-QxFjhufOCF2yMPLNrc/edit?usp= sharing

ENGLISH

"Choose one of the topics listed below and create a project based on it."

NOTE FOR STUDENTS ON WHAT TO WRITE IN THE PROJECT:
The Project will include the following sections:
a)Acknowledgement
b)Certificate
c)Content :
I)Introduction of what they are going to write about ii)Procedure
iii)Output of the project : a story/ a report/ an interview/ a letter/ autobiography/travelogue/poetry/article etc.------ PASTE RELEVANT PICTURES
iv)Conclusion
v)Bibliography
WORD LIMIT : 800-1000 words.
Material : FILE
Topic: The Laburnum Top
1. What is the central theme of "Laburnum Top"?
2. How does Ted Hughes use imagery to depict the laburnum tree?
3. Explore the significance of the laburnum tree in the poem. What does it symbolize? 4. Analyze the mood and tone of the poem. How does Hughes create these effects? 5. Discuss the structure of the poem. How does it contribute to the overall meaning? 6. What is the relationship between humans and nature in "Laburnum Top"?
7. How does the poet convey the passage of time in the poem?
8. Compare and contrast "Laburnum Top" with another poem that explores similar themes. 9. Discuss the use of language and poetic devices in the poem.
10. How does "Laburnum Top" reflect the Romantic tradition in literature?

Topic -Advertisement writing
1. What is the purpose of a classified advertisement?
2. What are the key components of a classified advertisement?
3. How do you effectively capture attention in a classified advertisement?
4. What are some common mistakes to avoid when writing classified advertisements? 5. How do you tailor a classified advertisement to a specific target audience?
6. What role does language and tone play in crafting a successful classified advertisement? 7. How do you ensure clarity and conciseness in a classified advertisement?

8. Can you provide examples of effective classified advertisements and analyze why they work well? 9. How do you measure the success of a classified advertisement?
10. What are some strategies for enhancing the visibility of a classified advertisement in print or online platforms?

TOPIC : POSTER DESIGNING

1.What is a POSTER ?
2.How have POSTERS originated?
3.What is the need/purpose of a POSTER?
4. What kinds of POSTERS do you know ?
5.How are POSTERS generated/DESIGNED to create awareness ?
6. Who are the people involved in a Poster ?
7.What is the format of a POSTER?
8.What are the types of POSTER in your syllabus ?
9.How do you write a POSTER ?
10. PASTE SOME PICTURES OF ATTRACTIVE POSTERS.
10. What are the important ingredients of a Poster.
11. Draw a Colorful layout of a Poster.

TOPIC: A PHOTOGRAPH

1.Write the poem in your file.
2. Write the summary of the poem.
3.Mention the poetic devices used in the poem by the poet. Mention them with examples from the poem. 4.Mention the rhyme scheme used by the poet in the poem.
5. Mention the PHASES OF LIFE suggested by the poet. Paste pics.
6. Write about the poet- SHIRLEY TOULSON – Her life, career, books/poems that she has written. 7. Paste pics in support of the poem.
8.What do you think is a Photograph? Why do we preserve photographs ?
9.Do photographs affect you? How?
10.What do you say about the poem ? Write your views about the poem.
11.Write some exclusive quotations on the topic ‘’PHOTOGRAPHS’’
12.Write a song or a poem in English which is dedicated to the topic ‘’PHOTOGRAPH”. **TOPIC : DISCOVERING TUT THE SAGA CONTINUES**

1.What message is conveyed through the lesson?
2.What do you think is the lesson all about?(Theme)
3.What does the title of the lesson suggest?
4.What are the main events in the lesson?
5. Describe in your own way the character sketch of King TUT.
6. Elaborate the lesson with suitable pictures.
7.What do you know about the pyramids and mummies of Egypt? Describe them.Paste some pictures.
8. What is CT Scan?What did it reveal about KING TUT.
9.Do you find the ending of the lesson appropriate. Yes/No. Give reasons in support of your answer. **TOPIC: THE SUMMER OF THE BEAUTIFUL WHITE HORSE**

1.How does the story begin?
2.Who is MOURAD in the story?
3.What is the HALLMARK OF GAROGHLANIAN TRIBE in the story?
4.What is the setting of the story?
5.What is the theme of the story ?

6. Do you think Mourad had stolen the horse?
7.Paste a map of Asia and Europe and Locate Armenia, Russia, Ukraine and Uzbekistan in it . 8.What are the points to remember from the lesson?
9.What message does the story convey in the end?
10. Draw/Paste pictures based on the lesson.
11. Paste some pictures of Tribal people like Gurzars,Bhotias,Boxas and Rajis from Uttarakhand. **TOPIC: WE ARE NOT AFRAID TO DIE IF WE CAN ALL BE TOGETHER**

1.Write ONE PAGE about the writer of the lesson .
2.What is the moral of the lesson?
3.Who are the important characters in the lesson
4.What are the issues that the lesson deals with?
5.Do you hold the view that the story is written in an excellent manner? Support your view by stating examples from the story. Paste some colourful pictures based on the lesson.
6.Describe the different parts of a ship?Draw a picture of a ship on sail.
7.What is the setting of the lesson?
8.What impression of the narrator do you form on reading the story?
9. State the different difficult terms used to describe the voyage.
10. Draw a map of the route undertaken by Captain James Cook and the narrator along with his family.

MATHEMATICS: Worksheet

1. In a school at Chandigarh, students of class XI were discussing the relations and functions. Two studentsAnkita and Babita form two sets A = {1,2, 3, 4, 5} and B = {2, 4, 6}.

Based on the above information answer the following:

(i) Find the number of Subsets of (A x B)

(ii) A correspondence of elements from A to B given as {(1, 2), (2, 2), (3, 4), (3, 6), (4, 4), (5, 6)}. Is it a function? Justify your answer. also show all relations are not functions.

(iii) If the function f: A⟶B such that (a, b) ∈ f and a < b, defined by f = {(1, 2), (x, 4), (2, 4), (4, y), (5, 6)}, then find x and y.

(iv) Find the domain and range of $\frac{1}{9 - ⬚^2}$

(v) Let f be the subset of Z x Z, defined by f = $\{(x, \frac{⬚}{|⬚|}) : x \in Z\}$.Is f a function from Z to Z? Justify your answer.

1. If P = {1,3}, Q = {2,3,5}, find the number of relations from P to Q

2. If R = {(x,y): x,y ∈ Z, $x^2 + y^2 = 64$}, then,
Write R in roster form
3. Which of the following relations are functions? Give reason.
R = { (1,1), (2,2), (3,3), (4,4), (4,5)}
R = { (2,1), (2,2), (2,3), (2,4)}
R = { (1,2), (2,5), (3,8), (4,10), (5,12), (6,12)}
4. If A and B are finite sets such that n(A) = 5 and n(B) = 7, then
find the number of functions from A to B.
5. Find the domain of the real function, f(x)= $\sqrt{x^2 - 4}$
6. Find the domain of the function, f(x)=$\frac{x^2 + 2x + 3}{x^2 - 5x + 6}$
7. Find the range of the following functions. (Question- 8, 9)
8. f(x)=$\frac{1}{\sqrt{4 - x^2}}$
9. f(x) = $\frac{x}{x + 2}$
10. Find the domain of the relation,
R = {(x, y): x, y ∈ Z, xy = 4}
11. Let A = {1,2,3,4}, B = {1,4,9,16,25} and R be a relation defined
from A to B as,
R = {(x, y): x A, y B and y = x2}
(a) Depict this relation using arrow diagram.
(b) Find domain of R.
(c) Find range of R.
(d) Write co-domain of R.
12. If A = {2,4,6,9} B = {4,6,18,27,54} and a relation R from A to B is
defined by 13. R = {(a,b): a A, b B, a is a factor of b and a < b},
then find in Roster form. Also find its domain and range.
14. Draw the graph of the Greatest Integer function
15. If A = { 1, 3, 5, 7, 11, 13, 15, 17} B = { 2, 4, 6, 8 ... 18} and ∪ is universal set then find A' ∪ [(A ∪ B) ∩ B']
16. Let A = {1, 2, 4, 5} B = {2, 3, 5, 6} C = {4, 5, 6, 7} Verify the following
identity A ∪ (B ∩ C) = (A ∪ B) ∩ (A ∪ C)
Which of the following are sets? Justify your answer.
17.

Trigonometry

18. Write the radian measure of 5° 37' 30".
19. Write the degree measure of radian. $\frac{11}{16}$
20. What is the value of sin (–1125°).
21. Find the length of an arc of a circle of radius 5cm subtending a central
angle measuring 15°.

PHYSICAL EDUCATION

RECORD PRACTICAL FILE

1. SAI KHELO INDIA TEST
2. BODY MASS INDEX (calculation of BMI)
3. FLAMINGO BALANCE TEST

4. COORDINATION TEST
5. PARTIAL CURL- UP
6. PUSH UPS FOR BOYS
7. MODIFIED PUSH UPS FOR GIRLS
8. 50m DASH OR 50m STANDING START
9. 600m RUN / WALK
10. SIT AND REACH FOR FLEXIBILITY
11. HARVARD STEP TEST
12. PROFICIENCY IN GAME AND SPORTS (skill of any one IOA recognised sports/ game of choice) 13. FIVE ASANAS FOR EACH LIFESTYLE DISEASE
14. ATHLETIC TRACK & FIELD EVENTS

BIOLOGY

Prepare an investigatory project on the topics shared in the link. Find the instructions attached in the document.
https://docs.google.com/document/d/1oBl1XAXBYQ9aZHT1TulBb-yXfkPUa-qcXTQ9iWAKd9o/edit

PSYCHOLOGY

1. Conduct a study in your group to see the effect of recitation on learning poetry. Take 10 subjects (select age group, other variables & constant factors, mention them) and divide them into two groups.
Group 1 Ask them to read it loudly for 15 minutes.
Group 2 Give the same poem to them but do not let them read loudly.
After 15 minutes ask both groups to recall.
Points to remember

- The poem has to be new.
- Same for both groups.
- Learning of each group must be done Separately.
- Recall of each participant must happen individually
- Take three trials.
- Note down the observation.
- Post experiment :
- Write down the entire experiment.
- Identify method used
- Hypothesis
- Variables
- Extraneous variables
- Control method
- Experimental design
- Discussion of result
- Errors/biases
- Prepare project report and PowerPoint presentation on the same for class discussion. 2.

Complete the question & answer of chapter two. Find good examples for each question. 3. Movie analysis time: inside out. Note down your observations. Prepare 1-page report on psychological observations you made