

SAINIK SCHOOL BHUBANESWAR
SUMMER VACATION HOMEWORK 2024-25
CLASS-VIII
HISTORY

1. How dates are important in History? Give an example.
2. Why do we divide history into periods?
3. What were the various types of surveys and why were they conducted by the Britishers?
4. Explain the system of subsidiary alliance?
5. How were the regional kingdoms set up after Aurangzeb's death?
6. Explain in brief the six fundamental rights.
7. Prepare a Time-line of various events in history of India from the coming of British to the revolt of 1857. Also paste the pictures of Governor Generals of British India.
8. When did the Constituent Assembly draft the Constitution for independent India?

SAINIK SCHOOL BHUBANESWAR

SUMMER VACATION HOMEWORK 2024-25

CLASS-VIII

BIOLOGY

1. Write about two broad cropping patterns with examples.
2. Write the name and uses of any 5 agriculture machines with diagrams.
3. Describe the sprinkler system of irrigation with diagram. State its advantages.
4. What is a fertiliser? Name any two fertilisers. State two harmful effects caused by the excessive use of fertilisers.
5. Farmers in Northern India grow legumes as fodder in one season and wheat in the next season.
 - (a) What is this practice known as?
 - (b) How does this practice help in the replenishment of soil?
6. Why are manures better than fertilisers?
7. Collect information about the problems faced by Indian farmers that cause poor yield of crops. Suggest way and means to tackle them.
8. Write a paragraph on the topic GREEN REVOLUTION.
9. Write 20 MCQs related to chapter-1 CROP PRODUCTION.
10. Search the hybrid crops of wheat, rice, maize, and cotton.
11. Collect seeds of different types of crops and segregate and put them in packets and display them well.
12. Make a poster On World Environment Day.

SAINIK SCHOOL BHUBANESWAR

HOLIDAY HOMEWORK

CLASS- VIII

SUBJECT- SCIENCE (CHEMISTRY)

Answer the following questions.

1. Fill in the blanks.

(a) Fossil fuels are _____ and _____.

(b) Process of separation of different constituents from petroleum is called _____.

(c) Least polluting fuel for vehicle is _____.

2. Tick True/False against the following statements.

(a) Fossil fuels can be made in the laboratory. (T/F)

(b) CNG is more polluting fuel than petrol. (T/F)

(c) Coke is almost pure form of carbon. (T/F)

(d) Coal tar is a mixture of various substances. (T/F)

(e) Kerosene is not a fossil fuel. (T/F)

3. Name some renewable sources of energy.

4. Name the process of conversion of wood into coal.

5. Name the elements present in coal.

6. Which are the two main techniques of mining?

7. Describe characteristics and uses of coke.

8. Differentiate between coke and coal.

9. Name three constituents of petroleum and write their uses also.

10. Explain the process of formation of petroleum.

11. Explain about the varieties of coal.

12. List the steps to conserve the resources.

13. Radhey prefers to go to school by pooling car. On other occasions he like to opt for public transport rather than private transport. For short distances, he walks or uses bicycle.

- (a) What are the benefits of carpooling?
- (b) Which mean of transport do you think is best for short distances?
- (c) How on our end we can reduce the consumption of fossil fuels?
- (d) What values of Radhey are shown here?

14. There was an essay-writing competition on 'How to Reduce your Carbon Footprint' in Satish's school. Satish enquired his best on this topic to his elders and searched internet. He got the first prize in the competition.

- (a) What do you understand by the term 'Carbon Footprint'?
- (b) Suggest ways to reduce your carbon footprint.
- (c) What values of Satish are shown here?

15. Get an outline map of India. Mark the places in the map where coal, petroleum and natural gas are found. Show the places where petroleum refineries are situated.

SUMMER VACATION TASK (2024-25)

GEOGRAPHY

CLASS-VIII

- 1) Make a list of the natural resources found in your locality.
- 2) List down the various alternatives to conserve the natural resources.
- 3) What is technology?
- 4) Define Sustainable development.
- 5) What is a Human Resource?
- 6) When can people make the best use of nature?
- 7) Write some principles of Sustainable development.
- 8) Collect pictures of natural and human-made resources at least 5 each.
- 9) What do you know about CITES?
- 10) Make a PPT on any one of the given topics-
 - a) Landslide/ Flood
 - b) Environmental Degradation
 - c) National Park/ Wildlife Sanctuary
 - d) Urbanisation
 - e) Water Resources & Its Conservation
 - f) Sustainable Development
 - g) Water Market in Amreli

Sainik School Bhubaneswar

Vacation Assignment

Class-VIII

Sub-Physics

1. What happens when two forces act in same direction?
2. Does liquids and gases also exert pressure?
3. What is atmosphere? (diagram)
4. What is electrostatic force? Why is it called non-contact force?
5. We observe that the wheels of buses and trucks are heavier than the wheels of car or scooters. Why?
6. What are the examples of muscular force? (with diagram)
7. Give two examples of a situation in which applied force causes a change in the shape of an object.
8. What are the five applications of force? (with examples)
9. Identify the agent exerting force and the object on which it acts when a piece of lemon is squeezed between fingers and juice comes out.
10. Explain contact and non-contact forces? (with examples)
11. Explain the force of gravity? (with diagram)
12. What do you mean by pressure? How can we increase the pressure by exerting same force?
13. What is atmospheric pressure? Write any three applications of atmospheric pressure.
14. If 320 N force applied on a body of area 10 cm^2 . Find out pressure.
15. How atmospheric pressure help in the working of rubber sucker.(diagram)

Project work-

16. Make any one of the projects based on your knowledge and understanding. (Try to make the instrument using paper, cardboard and simple mirror)
 - ❖ Periscope
 - ❖ Kaleidoscope
17. Make a project on any one of the following topics- (Try to put more pictures and less explanation in the project)
 - ❖ Force and application of force.
 - ❖ Atmospheric pressure and its applications.

VACATION TASK SUMMER BREAK 2024

CLASS VIII– ENGLISH

1. Write and learn the Qtn Ans of the first chapter along with the exercises given in the text book (Reader) in your notebooks.
2. Read the first three chapters of the supplementary reader and solve the exercises in your note books.
3. Write an Article/Poem on any topic of your choice for the school magazine.
4. Write a letter to the S.P. of your district to look after the excessive theft cases in your locality.
6. Write a paragraph on the given topics in 150-200 words –
 - a. India of my dreams.
 - b. Importance of discipline.
 - c. If I were the school captain.
 - d. Role of media.
7. Write a letter to your friend staying abroad describing your studies and activities in your school.
8. Write a Bio- sketch of your favourite writer/poet.
9. Grammar-What is Tense? Explain with definitions & examples.
10. Story: Given below is the outline of a story. Construct the story using the outline.

A young, newly married doctor————- freedom fighter———— exiled to the Andaman and Nicobar Islands by the British———— infamous cellular Jail———— prisoners tortured ———- revolt by inmates———— doctor hanged———— wife waits for his return — becomes old———— continues to wait with hope and faith.
11. Read a book of your interest and write the Book Review of the same.



SAINIK SCHOOL BHUBANESWAR

SUMMERCATION TASK 2024 (CLASS VIII)

INFORMATION TECHNOLOGY

A. Solve the following questions by using Microsoft Excel

1. Exercise on formula for calculating total marks, average marks and grade by applying following formula.

Total=ENG+MATH+COMPUTER

AVG=TOTAL/3

GRADE="A" IF AVG>=60,"B" IF AVG>=50,"C" IF AVG>=30 OTHER WISE "F"

(HINT: USE SUM(), AVERAGE(),IF(), COUNTIF,SUMIF)

ROLL NO	NAME	ENG	MATH	COMPUTER	TOTAL	AVERAGE	GRADE
101	SUSHIL	56	77	55			
102	PRITAM	66	45	33			
103	SOUMIL	22	33	34			
104	SUNITA	45	66	45			
105	KUNAL	56	77	88			
106	KRISH	33	22	12			

2. Find the maximum total marks.
3. Find the total number of students whose percentage greater than 60.
4. Find the average mark of all students.
5. Find the minimum mark in English subject.
6. Find the maximum mark in Math subject.
7. Sort all the student records based on descending order of avg.
8. Find all the students who have grade="F".
9. Find all the students average between 50 and 60.
10. Filter all students whose total is more than 100 to cell A50.

B. Short questions and answer.

1. How many types of number system are there in computer.
2. Convert binary number $(11110)_2$ into decimal number $(?)_{10}$
3. Convert decimal number $(9)_{10}$ into binary number $(?)_2$
4. What is base of Binary, Decimal, Octal & Hexadecimal number system?
5. Solve this binary addition
6.
 - i) $(1000)_2 = (?)_{10}$
 - ii) $(1111)_2 = (?)_{10}$

C. Choose the correct option

Question 1

In a decimal number system, the base of a number is represented by

1. 2
2. 10
3. 16
4. All of them

Question 2

The base of an octal number is represented by:

1. 2
2. 8
3. 7
4. None

Question 3

To convert an octal number to its binary equivalent, each octal digit is expressed as

1. 3 bits form
2. 4 bits form
3. 8 bits form
4. All of them

Question 4

Sixteen raised to the power zero (16^0) is equivalent to

1. 0
2. 1
3. 0 and 1
4. None

Question 5

An octal number system uses the digits from

1. 0 to 8
2. 1 to 8
3. 0 to 7
4. All of them

Question 6

The base of a hexa-decimal number is represented by

1. H16
2. 16
3. 15
4. None

Question 7

In a hexa-decimal number system, 'B' represents the digit

1. 11
2. 12
3. 14
4. 13

Question 8

To express a hexa-decimal number to its binary equivalent, each hexa-decimal digit is expressed as

1. 2 bits form
2. 3 bits form
3. 4 bits form
4. None

Question 9

The binary equivalent of a hexa-decimal digit 12(C) is represented by

1. 1010
2. 1011
3. 1101
4. 1100

Question 10

The hexa-decimal equivalent digit of 1011 (4 bits form) is

1. 14
2. 15
3. 11
4. 12

D. Case-Study Based Questions**Question 1**

Your teacher has assigned you a task to give a presentation on conversion of octal numbers into binary numbers and vice-versa. You are asked to create some aids to support your presentation. You have created two tables, Table 1 and Table 2, to demonstrate some examples.

Octal Number	Binary Equivalent
1	001
5
3	010
6	110

Binary Number	Octal Equivalent
100
111	7
011	2
001110	16

In the above tables, some entries have either been missed or incorrect. Answer the following questions based on the above case:

- (a) What will be filled in the blank space of Table 1?
- (b) Find and rectify the incorrect binary equivalent in Table 1.
- (c) Fill the appropriate octal equivalent in the blank space of Table 2.
- (d) Find and rectify the incorrect octal equivalent in Table 2.

E. Convert the following to their binary equivalents

Question 1

$(78)_{10}$

Question 2

$(99)_{10}$

Question 3

$(141)_{10}$

Question 4

$(123)_{10}$

F. Convert the following to their decimal equivalents

Question 1

$(10101)_2$

Question 2

$(10000)_2$

Question 3

$(11001)_2$

Question 4

$(101010)_2$

G. Short Answer Questions

Question 1

What are the different types of number systems that a computer deals with?

Question 2

What is meant by the following terms? Give an example of each.

- (a) An octal number
- (b) A hexa-decimal number

Question 3

Give two differences between Binary number and Decimal number

Question 4

Give two differences between Octal number and Binary number

H. Making poster on “Cyber Security and Ethics”.

SEND PROJECT OF MAIL MERGE IN THE FOLLOWING GOOGLE FORM LINK:

https://docs.google.com/forms/d/1_EcKjQz-sWzWAcDEvwJ_2MtdjqGmOpZgRxRDMI9TRNU/edit

or

EMAILID: 1261@sainikschoolbhubaneswar.org

SAINIK SCHOOL BHUBANESWAR

Library Vacation task: Class VIII

1. My favorite news of the Day(For any two articles from newspaper)
Note: Use your library notebook for the task.

**I will paste the newspaper articles of my choice
in this place**

Answer 5Ws and 1H

1. Why is this news selected by you?
2. Where is the place of the news?
3. What is the news about(Headline)?
4. Who reported this news(Byline)?
5. When did it happen?
6. How the issue mentioned in the news will affect the other people of the state/ country/world?

2. Design a 'Book cover' of your favourite read book. The book covers should be designed by your own imagination and creativity relating the content of the book. Write the original title of the book on your book cover. Use A4 drawing sheet for the activity.

SUMMER VACATION HOME WORK 2024-25

CLASS-VIII MATHEMATICS

1. The sum of three consecutive even natural numbers is 48. Find the greatest of these numbers.
2. The sum of three consecutive odd natural numbers is 69. Find the prime number out of these numbers.
3. The sum of three consecutive numbers is 156. Find the number which is a multiple of 13 out of these numbers.
4. Find a number whose fifth part increased by 30 is equal to its fourth part decreased by 30.
5. Sum of the digits of a two-digit number is 11. The given number is less than the number obtained by interchanging the digits by 9. Find the number.
6. Anima left one-half of her property to her daughter, one-third to her son and donated the rest to an educational institute. If the donation was worth Rs.1,00,000, how much money did Anima have?
7. If 12 is subtracted from a number and the difference is multiplied by 4, the result is 5. What is the number?
8. The sum of four consecutive integers is 266. What are the integers?
9. The perimeter of a rectangle is 240 cm. If its length is increased by 10% and its breadth is decreased by 20%, we get the same perimeter. Find the length and breadth of the rectangle.
10. The age of A is five years more than that of B. 5 years ago, the ratio of their ages was 3:2. Find their present ages.
11. If numerator is 2 less than denominator of a rational number and when 1 is subtracted from numerator and denominator both, the rational number in its simplest form is $\frac{1}{2}$. What is the rational number?
12. In a two digit number, digit in units place is twice the digit in tens place. If 27 is added to it, digits are reversed. Find the number.
13. A man was engaged as typist for the month of February in 2008. He was paid Rs. 500 per day but Rs. 100 per day were deducted for the days he remained absent. He received Rs. 9,100 as salary for the month. For how many days did he work?
14. A lady went to a bank with Rs. 1,00,000. She asked the cashier to give her Rs. 500 and Rs. 1,000 currency notes in return. She got 175 currency notes in all. Find the number of each kind of currency notes.
15. There are 40 passengers in a bus, some with Rs. 3 tickets and remaining with Rs. 10 tickets. The total collection from these passengers is Rs. 295. Find how many passengers have tickets worth Rs. 3 ?
16. Denominator of a number is 4 less than its numerator. If 6 is added to the numerator it becomes thrice the denominator. Find the fraction.

17. An employee works in a company on a contract of 30 days on the condition that he will receive Rs. 120 for each day he works and he will be fined Rs. 10 for each day he is absent. If he receives Rs.2300 in all, for how many days did he remain absent?

18. A carpenter charged Rs.2500 for making a bed. The cost of materials used is Rs. 1100 and the labour charges are Rs.200/hr. For how many hours did the carpenter work?

19. Madhulika thought of a number, doubled it and added 20 to it. On dividing the resulting number by 25, she gets 4. What is the number?

20. The digits of a two digit number differ by 3. If the digits are interchanged and the resulting number is added to the original number, we get 143. What can be the original number.

21. Divide 54 into two parts such that one part is $\frac{2}{7}$ of the other.

22. Solve for x, $6 - \frac{2x+1}{5} = 5 - \frac{7x-2}{15}$

23. Find the sum of additive inverse and multiplicative inverse of $-5/9$

24. Find 5 rational number between $\frac{1}{4}$ and $\frac{1}{2}$.

25. Write

(a) A rational number between -1 and -2.

(b) Property allows you to compute $\frac{1}{3} \times \left(7 + \frac{4}{3}\right)$ as $\left(\frac{1}{3} \times 7\right) + \left(\frac{1}{3} \times \frac{4}{3}\right)$

(c) Multiplicative inverse of $\left(\frac{-4}{7} \times \frac{-3}{2} \times \frac{7}{12}\right)$

(d) Additive inverse of $\frac{-m}{n}$

(e) Property used in $\frac{4}{3} + \frac{-1}{5} = \frac{-1}{5} + \frac{4}{3}$

(f) The rational number that does not have a reciprocal.

(g) The rational number that is equal to its negative

26. Fill in the blanks

(a) The product of a rational number and its reciprocal is -----.

(b) The numbers ----- and ----- are their own reciprocals.

(c) Reciprocal of $\frac{-1}{a}$, where $a \neq 0$ is -----.

27. Find $\left(2\frac{1}{5} \div 1\frac{2}{3}\right) + \left(2\frac{1}{5} \div 1\frac{1}{5}\right)$

28. The digits of a two digit number differ by 5. If the digits are interchanged and the resulting number is added to the original number, we get 121. What can be the original number

29. Solve for x, $\frac{3x+1}{5} + 2 = \frac{7x-3}{15} + 1$

30. Solve for x, $\frac{3y+4}{2-6y} = \frac{-5}{3}$

SUMMER VACATION TASK-2024-25

SAINIK SCHOOL BHUBANESWAR

CLASS –VIII(A) ODIA

1) ନିମ୍ନ ବିଷୟ ଗୁଡ଼ିକର ଅଭ୍ୟାସ କର ।

କ) ବୃକ୍ଷ ମାହାତ୍ମ୍ୟ

ଖ) ଉଦ୍‌ବୋଧନ

ଗ) ରୋଗୀସେବା

ଘ) ଡାକମୁନସି

ଙ) ସୁନା ନେଉଳ

2) 'ଭାଷା ପରିଚୟ'-ବିଷୟଟିର ପ୍ରଶ୍ନ ଉତ୍ତର କର ।

3) ନିଜ ମନରୁ 50 ଟି ଶବ୍ଦର ବିପରୀତ ଶବ୍ଦ ଲେଖ ।

4) ନିଜ ମନରୁ 30 ଟି ଶବ୍ଦର ବିପରୀତ ଲିଙ୍ଗ ଲେଖ ।

5) ନିମ୍ନ ଲିଖିତ ବିଷୟରେ ପ୍ରବନ୍ଧ ଲେଖ ।

ଅଂଶୁଘାତ, ବୃକ୍ଷ ରୋପଣ, ନାରୀଶିକ୍ଷା, ବିଜ୍ଞାନର ବରଦାନ, ପରିବେଶ ସୁରକ୍ଷା ,ପରିବେଶ ପ୍ରଦୂଷଣ ,ମୋ ଜୀବନର ଲକ୍ଷ୍ୟ,ମୋ ପ୍ରିୟ ସାଙ୍ଗ,ମୋ ପ୍ରିୟ ଶିକ୍ଷକ/ଶିକ୍ଷୟିତ୍ରୀ,ବର୍ଷା ଋତୁ

6) ଗ୍ରୀଷ୍ମ ଅବକାଶ କିପରି କଟାଇଲ ସାଙ୍ଗ ନିକଟକୁ ପଢ଼ି ଲେଖ ।

7) ବ୍ୟାୟାମର ଉପକାରिता ବର୍ଣ୍ଣନା କରି ସାନ ଭାଇ ନିକଟକୁ ପଢ଼ି ଲେଖ ।

8) ଏକ ଦର୍ଶନୀୟ ସ୍ଥାନ ବିଷୟରେ ବର୍ଣ୍ଣନା କରି ସାଙ୍ଗ ନିକଟକୁ ପଢ଼ି ଲେଖ ।।

SUMMER VACATION TASK-2024-25

SAINIK SCHOOL BHUBANESWAR

CLASS –VIII(B & C) LOWER ODIA

1) ନିମ୍ନଲିଖିତ ବିଷୟ ଗୁଡ଼ିକୁ ଦେଖିଲେଖ ଓ ଏହାର ଅଭିପାସ କର ।

- କ) ସେହି ମୋ ପ୍ରିୟ ଜନମ ଭୁଇଁ
- ଖ) ଆସରେ ଧରିବା ଜହ୍ନ
- ଗ) କହିବା ଆଗରୁ କରିବା
- ଘ) ଭାସି ଯା ମୋର କାଗଜ ଡଙ୍ଗା
- ଙ) ପୁଣି ସେମାନେ ହସିଲେ
- ଚ) ତୁଳସୀ ଦୁଇ ପତ୍ରରୁ ବାସେ
- ଛ) ତୁମ ପରି ଛୋଟ ପିଲାଟିଏ

2) ନିମ୍ନ ଲିଖିତ ବିଷୟରେ ଲେଖ (20 ଟି ଧାଡ଼ି)

- କ) ମୋ ଜୀବନର ଲକ୍ଷ୍ୟ
- ଖ) ମୋ ପ୍ରିୟ ଶିକ୍ଷକ/ଶିକ୍ଷୟିତ୍ରୀ
- ଗ) ମୋ ପ୍ରିୟ ସାଙ୍ଗ
- ଘ) ମୋ ବିଦ୍ୟାଳୟ
- ଙ) ଡାକ୍ତରଖାନା ।

SAINIK SCHOOL BHUBANESWAR 2024-25

SUMMER VACATION TASK

CLASS- VIII

HIGHER HINDI

1. भारत की खोज पुस्तक को पढ़कर प्रत्येक पाठ से 05 कठिन शब्दों को छाँटकर लिखिए ।
2. 'बस की यात्रा' पाठ के आधार पर अपनी किसी यात्रा का रोचक वर्णन कीजिए ।
3. मशीनी युग से मानव जीवन में आए सकारात्मक बदलावों के ऊपर एक लघु निबंध लिखिए ।
4. किन्हीं 30 शब्दों के विलोम शब्द लिखिए ।
5. किन्हीं 20 शब्दों के दो - दो समानार्थी शब्द लिखिए ।
6. निम्नलिखित विषयों पर पत्र लिखिए -
 - (क) गर्मी से बचने की सलाह देते हुए छोटे भाई को ।
 - (ख) अपनी वार्षिक परीक्षा के परिणाम के विषय में बताते हुए हुए मामा जी को ।
7. निम्नलिखित विषयों पर अनुच्छेद लिखिए -
 - बाल मजदूरी
 - कृषक जीवन की समस्याएँ
 - संगीत क्यों है जरूरी ?
8. निम्नलिखित विषयों पर संवाद लिखिए -
 - (क) पुरानी पुस्तकों के महत्त्व को लेकर ग्राहक और दुकानदार के मध्य ।
 - (ख) शहरों में बढ़ते प्रदूषण पर चिंता व्यक्त करते हुए दो नागरिकों के मध्य ।
9. निम्नलिखित विषयों से संबंधित आकर्षक विज्ञापन तैयार कीजिए -
 - रोशनी मोमबत्ती
 - अप्सरा पेंसिल
 - रक्षक हेलमेट
10. कोई एक स्वरचित कविता या कहानी लिखिए ।

VACATION TASK

CLASS-VIII

LOWER HINDI

1. अनुच्छेद लिखिए-
 - क. मेरा घर
 - ख. पेड़-पौधे और हम
 - ग. मेरा विद्यालय
 - घ. मेरा मित्र
 - ङ. मेरा गाँव / शहर
 - च. मेरा देश
 - छ. पक्षी जो मुझे पसंद है
 - ज. होली
 - झ. फुटबॉल
 - ञ. प्रदूषण
2. पढ़ाई गई कोई एक कविता लिखिए।
3. हमसे सब कहते कविता के प्रश्न-उत्तर लिखिए।
4. शेखीबाज़ मक्खी के 25 MCQ और उत्तर लिखिए।
5. शेखीबाज़ मक्खी कहानी को चित्रकथा रूप में लिखिए।
6. एक से सौ तक गिनती अक्षरों में लिखिए।
7. स्वरचित लेख लिखें।(For school magazine)
8. पढ़ाए गए पाठों में से कोई 50 शब्द तीन-तीन बार लिखिए।
9. विज्ञापन बनाइए—
 - क. चॉकलेट
 - ख. पेंसिल
 - ग. छाता
 - घ. साबुन
 - ङ. केश शैंपू
10. पढ़ाए गए पाठों में से कोई 10 मुहावरों से वाक्य बनाइए।