SAINIK SCHOOL CHITTORGARH

UNDER THE AEGIS OF THE SAINIK SCHOOLS' SOCIETY, MINISTRY OF DEFENCE, GOVERNMENT OF INDIA

AUTUMN BREAK
HOLIDAY HOMEWORK

CLASS : VIII

SAINIK SCHOOL CHITTORGARH

AUTUMN BREAK HOLIDAY HOMEWORK : 2024-25

SUBJECT : BIOLOGY	
CLASS & SECTION : VIII A, VIII B, & VIII C	**SUBJECT TEACHER** : MR BB VYAS
INSTRUCTION : Write the project report on given topic on A4 size plain paper in your own handwriting. Paste colourful pictures, cuttings from newspapers, data etc.	

ASSIGNMENT
CHAPTER /TOPIC: "CELL STRUCTURE & FUNCTIONS" Prepare an investigatory report on "CELL STRUCTURE & FUNCTIONS" emphasizing the following points or contents : Content 1. History of discovery of cell Content 2. Components of a cell Content 3. Cell membrane & cell wall Content 4. Nucleus : Structure & functions Content 5. Cell Organelles Content 6. Prokaryotes & Eukaryotes Content 7. Comparison of a plant & an animal cell

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

CHEMISTRY	
CLASS & SECTION: VIII – A,B,C	**SUBJECT TEACHER NAME: ASHI CHAUDHARY**

INSTRUCTIONS:
- The conceptual/HOTS questions must be written in your science notebook.
- Ensure clarity and neatness in presentation.
- The project work should be completed in a project file.
- Submit your holiday homework on the first day after the reopening of school

ASSIGNMENT

CHAPTER 1: **Combustion and Flame**
CHAPTER 2: **Coal and Petroleum**

PROJECT WORK:

Project Title: "The Impact of Fossil Fuels on the Environment"

Objective: To understand the role of fossil fuels in energy production and their impact on the environment.
Instructions
1. Research :
  - Gather information about fossil fuels, focusing on coal and petroleum.
  - Investigate their extraction, use, and the resultant environmental issues such as pollution and climate change.

2. Content :
  - Create a project file that includes:
    - An introduction to fossil fuels.
    - The extraction processes of coal and petroleum.
    - The impact of burning fossil fuels on air quality and climate.
    - Alternative energy sources (solar, wind, etc.) and their benefits.

3. Presentation:
  - Include visuals such as diagrams, charts, or pictures.
  - Present your findings in a clear and organized manner, using headings and bullet points.

4. Conclusion:
  - Summarize your findings and provide your thoughts on how we can reduce the negative impacts

of fossil fuels.

Note: Be creative and thorough in your research. This homework is an opportunity to explore and understand important concepts in chemistry and their real-world applications.

Notebook Assignment:

Chapter 1. Combustion and Flame
   - Define combustion. Explain the different types of combustion (complete and incomplete combustion) with examples.
   - Describe the process of combustion of a hydrocarbon. Write a balanced chemical equation for the combustion of methane (CH_4).
  - What are the three essential components of the fire triangle?
  - Why is complete combustion preferred over incomplete combustion?

Chapter 2. Coal and Petroleum
   - Describe the different types of coal (peat, lignite, bituminous, anthracite) and their uses.
   - Explain the refining process of petroleum and the significance of fractions like petrol, diesel, and kerosene.
  - What are the environmental impacts of coal mining and petroleum extraction?

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

COMPUTER SCIENCE	
CLASS & SECTION: VIII	SUBJECT TEACHER NAME: KULDEEP MALVIYA

INSTRUCTIONS:
- Make sure all the files are correctly named using the format: SCHOOL No_Name_HomeworkTitle (e.g., Class6_15_Arjun_ScratchProject).
- Plagiarism will not be tolerated, so ensure that the work is original.

ASSIGNMENT

Topic: Introduction to Programming with Scratch

1. Practical Task:
- Create a simple game or story animation using Scratch. The project should have at least 2-3 characters and simple interactions using loops and conditions.

2. Research Task:
- Write a 300-word essay on "How Artificial Intelligence is changing the future of education."

3. Activity Task:
- Draw a flowchart of the logic used in your Scratch project (either using a flowchart tool or manually on paper).

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME	
CLASS & SECTION: VIII	**SUBJECT TEACHER NAME: JAYANTI SAXENA**

INSTRUCTIONS: 1. The holiday homework will be considered and assessed as your English project work.
2. The marks awarded for this will be counted towards Internal –assessment.
3. Project will be done in a file (plastic strip file with A4 sheet may also be used) .
4. On page 1: write -English Project Work, name, class, roll number, topic etc.

ASSIGNMENT

ENGLISH PROJECT WORK
     NAME:
     CLASS: SECTION
     SCHOOL NUMBER:
     HOUSE:

5. Last page of the project will carry the following certificate

CERTIFICATE

This is to certify that I_____ OF Class _____. Have done the English project work on my own. It is my own original work as per the guidelines provided by _____(Name of the teacher).

Signature
Name:

Reading Activity

Q1.Read –a) The Hindu   b) Watch the Wion News   c) Read magazines like- Frontline

Learn at least 10 words daily and use it in sentences of your own. Do come prepared with 100 hundred words and sentences from English News Paper and daily news written in project file.

Creative -writing

Q2.**PORTFOLIO: PREPARE A PORTFOLIO WITH THE FOLLOWING** – (Prepare a file with A4 size sheets)

- Introduction   (1 Page each)
- My strengths   (1 Page each)
- I need to improve on…   (1 Page each)
- My achievements   (1 Page each)
- I have participated in…   (1 Page each)
- The books I have read   (1 Page each)
- The book I wish to read   (1 Page each)

Q3.Write two book reviews of the books which you will read during Autumn vacation

Q4.Complete the exercises of unit 1 to 5 from the practice book **English Work book** .

Q5. 50 sentences of reported speech from direct to indirect speech.

Q6.Login using English Language Lab ID allotted to you on www.ai.wordsworthlab.com. Complete the task assigned to you on software and Modules work book as well.

Q7.. Questionnaire Making :(i)Prepare 15 multiple choice questions from the chapters 5 and 6 from Honey Dew

.**The deadline for submission of the above work is 19 Nov, 2024, within the subject period.**

SAINIK SCHOOL CHITTORGARH

AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT - HINDI	
CLASS & SECTION: VIII A, B, C	**SUBJECT TEACHER NAME: RAMESH SAH**

INSTRUCTIONS:

- सभी प्रश्नों को क्रमानुसार हल करें।
- अवकाश के बाद विद्यालय आने पर गृहकार्य जमा करना अति आवश्यक है।
- यह अवकाश कार्य आप के आंतरिक मूल्यांकन के अंतर्गत बहु-मूल्यांकन (Multiple Assessment) का एक अंग है।

ASSIGNMENT

पुस्तक : पाठ्य पुस्तक एवं व्याकरण

प्रश्न 1. भगवतीचरण वर्मा एवं आचार्य हजारीप्रसाद द्विवेदी का संक्षिप्त जीवन परिचय लिखिए।

प्रश्न 2. क्या निराश हुआ जाए तथा लाख की चूड़ियाँ पाठ का सारांश लिखिए।

प्रश्न 3. विशेषण की परिभाषा एवं उनके भेदों को उदाहरण सहित स्पष्ट कीजिए।

प्रश्न 4. पंडित जवाहरलाल नेहरु का भारतीय इतिहास में क्या महत्त्व है तथा उनकी पुस्तक भारत की खोज के बारे में संक्षेप में लिखिए।

परियोजन कार्य - हिंदी के राष्ट्रीय चेतना से संबंधित किन्हीं पांच कवियों के बारे में एक चार्ट पेपर तैयार कीजिए।

NOTEBOOK ASSIGNMENT: अपने पाठ्य पुस्तक की कोई दो कविता याद करें।

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME - MATHEMATICS	
CLASS & SECTION: VIII A,B,C	**SUBJECT TEACHER NAME: AMIT KUMAR JHA**

INSTRUCTIONS:
1. *Make a separate notebook for holiday homework.*
2. *All Questions are compulsory.*
3. *Draw neat & clean figures wherever required.*

ASSIGNMENT

CHAPTER 1: **RATIONAL NUMBERS**

Q 1. 1/6 of the class students are above average, 1/4 are average and rest are below average. If there are 48 students in all, how many students are below average in the class?

Q 2. 2/5 of total number of students of a school come by car while 1/4 of students come by bus to school. All the other students walk to school of which 1/3 walk on their own and the rest are escorted by their parents. If 224 students come to school walking on their own, how many students study in that school?

Q 3. Huma, Hubna and Seema received a total of Rs. 2,016 as monthly allowance from their mother such that Seema gets 1/2 of what Huma gets and Hubna gets 5/3 times Seema's share. How much money do the three sisters get individually?

Q 4. A mother and her two daughters got a room constructed for Rs. 62,000. The elder daughter contributes 3/8 of her mother's contribution while the younger daughter contributes 1/2 of her mother's share. How much do the three contribute individually?

Q 5. Roller Coaster at an amusement park is 2/3 m high. If a new roller coaster is built that is 3/5 times the height of the existing coaster, what will be the height of the new roller coaster?

CHAPTER 2: **COMPARING QUANTITIES**

Q 1. If principal = Rs 1,00,000. rate of interest = 10% compounded half yearly. Find
   (i) Interest for 6 months.
   (ii) Amount after 6 months.
   (iii) Interest for next 6 months.
   (iv) Amount after one year.

Q 2. Babita bought 160 kg of mangoes at Rs 48 per kg. She sold 70% of the mangoes at Rs 70 per kg and the remaining mangoes at Rs 40 per kg. Find Babita's gain or loss per cent on the whole dealing.

Q 3. A shopkeeper was selling all his items at 25% discount. During the off season, he offered 30% discount over and above the existing discount. If Pragya bought a skirt which was marked for Rs 1,200, how much did she pay for it?

Q 4. Ayesha announced a festival discount of 25% on all the items in her mobile phone shop. Ramandeep bought a mobile phone for himself. He got a discount of Rs 1,960. What was the marked price of the mobile phone?

Q 5. A new computer costs Rs 1,00,000. The depreciation of computers is very high as new models with better technological advantages are coming into the market. The depreciation is as high as 50% every year. How much will the cost of computer be after two years?

CHAPTER 3: **DATA HANDLING**

Q 1. Following are the number of members in 25 families of a village:
6, 8, 7, 7, 6, 5, 3, 2, 5, 6, 8, 7, 7, 4, 3, 6, 6, 6, 7, 5, 4, 3, 3, 2, 5.
Prepare a frequency distribution table for the data using class intervals 0 –2, 2 –4, etc.

Q 2. The marks obtained (out of 20) by 30 students of a class in a test are as follows:
14, 16, 15, 11, 15, 14, 13, 16, 8, 10, 7, 11, 18, 15, 14, 19, 20, 7, 10, 13, 12, 14, 15, 13, 16, 17, 14, 11, 10, 20.
Prepare a frequency distribution table for the above data using class intervals of equal width in which one class interval is 4 –8 (excluding 8 and including 4).

Q 3. The weights (in kg) of 30 students of a class are:
39, 38, 36, 38, 40, 42, 43, 44, 33, 33, 31, 45, 46, 38, 37, 31, 30, 39, 41, 41, 46, 36, 35, 34, 39, 43, 32, 37, 29, 26.
Prepare a frequency distribution table using one class interval as (30 – 35), 35 not included.
   (i) Which class has the least frequency?
   (ii) Which class has the maximum frequency?

Q 4. In a hypothetical sample of 20 people, the amount of money (in thousands of rupees) with each was found to be as follows: 114, 108, 100, 98, 101, 109, 117, 119, 126, 131, 136, 143, 156, 169, 182, 195, 207, 219, 235, 118.
Draw a histogram of the frequency distribution, taking one of the class intervals as 50–100.

Q 5. The probability of getting a prime number is the same as that of a composite number in a throw of a dice.

CHAPTER 4: **SQUARE & SQUARE ROOTS, CUBE & CUBE ROOTS**

Q 1. A 5.5m long ladder is leaned against a wall. The ladder reaches the wall to a height of 4.4m.

Find the distance between the wall and the foot of the ladder.

Q 2. The perimeters of two squares are 40 and 96 metres respectively. Find the perimeter of another square equal in area to the sum of the first two squares.

Q 3. A three digit perfect square is such that if it is viewed upside down, the number seen is also a perfect square. What is the number? (Hint: The digits 1, 0 and 8 stay the same when viewed upside down, whereas 9 becomes 6 and 6 becomes 9.)

Q 4. 13 and 31 is a strange pair of numbers such that their squares 169 and 961 are also mirror images of each other. Can you find two other such pairs?

Q 5. What is the least number that should be subtracted from 1385 to get a perfect square? Also find the square root of the perfect square.

CHAPTER 5: **LINEAR EQUATION IN ONE VARIABLE**

Q 1. Rs. 13500 are to be distributed among Salma, Kiran and Jenifer in such a way that Salma gets Rs. 1000 more than Kiran and Jenifer gets Rs. 500 more than Kiran. Find the money received by Jenifer.

Q 2. The volume of water in a tank is twice of that in the other. If we draw out 25 litres from the first and add it to the other, the volumes of the water in each tank will be the same. Find the volume of water in each tank.

Q 3. Anushka and Aarushi are friends. They have equal amount of money in their pockets. Anushka gave 1/3 of her money to Aarushi as her birthday gift. Then Aarushi gave a party at a restaurant and cleared the bill by paying half of the total money with her. If the remaining money in Aarushi's pocket is Rs.1600, find the sum gifted by Anushka.

Q 4. Kaustubh had 60 flowers. He offered some flowers in a temple and found that the ratio of the number of remaining flowers to that of flowers in the beginning is 3:5. Find the number of flowers offered by him in the temple.

Q 5. The sum of three consecutive even natural numbers is 48. Find the greatest of these numbers.

CHAPTER 6: **UNDERSTANDING QUADRILATERALS**

Q 1. Two angles of a quadrilateral are each of measure 75° and the other two angles are equal. What is the measure of these two angles? Name the possible figures so formed.

Q 2. In a quadrilateral PQRS, $\angle P = 50°$, $\angle Q = 50°$, $\angle R = 60°$. Find $\angle S$. Is this quadrilateral convex or concave?

Q 3. Both the pairs of opposite angles of a quadrilateral are equal and supplementary. Find the measure of each angle.

Q 4. Find the measure of each angle of a regular octagon.

Q 5. Find the measure of an are exterior angle of a regular pentagon and an exterior angle of a regular decagon. What is the ratio between these two angles?

CHAPTER 7: **EXPONENTS & POWERS**

Q 1. About 230 billion litres of water flows through a river each day. How many litres of water flows through that river in a week? How many litres of water flows through the river in an year? Write your answer in standard notation.

Q 2. A half-life is the amount of time that it takes for a radioactive substance to decay to one half of its original quantity. Suppose radioactive decay causes 300 grams of a substance to decrease to 300×2^{-3} grams after 3 half-lives. Evaluate 300×2^{-3} to determine how many grams of the substance are left. Explain why the expression 300×2^{-n} can be used to find the amount of the substance that remains after n half-lives.

Q 3. Consider a quantity of a radioactive substance. The fraction of this quantity that remains after t half-lives can be found by using the expression 3–t .
    (a) What fraction of substance remains after 7 half-lives?
    (b) After how many half-lives will the fraction be 1 243 of the original?

Q 4. One Fermi is equal to 10–15 metre. The radius of a proton is 1.3 Fermis. Write the radius of a proton in metres in standard form.

Q 5. The paper clip below has the indicated length. What is the length in standard form.

PROJECT WORK:
  1. Make a project in which geometrical representation of square numbers and cubic numbers represented..

SAINIK SCHOOL CHITTORGARH
AUTUMN VACATION HOLIDAY HOMEWORK

SCIENCE	
CLASS & SECTION: VIII– A, B, C	**SUBJECT TEACHER NAME: SOHIT KUMAR YADAV**

INSTRUCTIONS:
- The conceptual/HOTS questions must be written in your science notebook.
- Ensure clarity and neatness in presentation.
- The project work should be completed in a project file.
- Submit your holiday homework on the first day after the reopening of school

---

ASSIGNMENT

CHAPTER 1: **FORCE AND PRESSURE**
CHAPTER 2: **SOUND**

PROJECT WORK: **"Understanding Friction and Its Effects"**

Objective:
To understand the concept of friction, its types, its advantages and disadvantages, and how it affects motion. Through simple experiments, students will explore how friction works in everyday life.

1. **Experiment 1: Friction on Different Surfaces**
   - Procedure:
     - Attach a spring balance to a wooden block.
     - Pull the block across a smooth surface (like a tile or glass) and note the force required (in Newtons).
     - Now pull the block across a rough surface (sandpaper or carpet) and note the force again.
     - Compare the force required to pull the block across both surfaces.
2. **Experiment 2: Effects of Weight on Friction**
   - Procedure:
   - Place the wooden block on the smooth surface and pull it using the spring balance, noting the force.
     - Now place some weights on the block and pull it again, measuring the force.
     - Repeat on a rough surface.
3. **Documentation:**
   - Write down your observations for each experiment.

     Include pictures or diagrams of the setups, surfaces, or friction types.
4. **Presentation:**

Prepare a presentation chart with diagrams showing the experiments.

Notebook Assignment: -

Chapter 1. FORCE AND PRESSURE

Que 1. What is the definition of force and what is the types of force?
Que 2. What is the pressure? and write five applications of pressure in our daily life.
Que 3. What is the similarity between Electrostatic and Magnetic forces? And write definition of these forces.
Que 4. Define Atmospheric pressure? State the difference between Pressure and Force.

Chapter 2. SOUND

 Que 1. What is the sound energy and how it transmits from one place to another place? Explain.
 Que 2. Can sound travel through water? How do whales communicate under water? Explain the reason behind this.
 Que 3. Iqbal has to push a lighter box and Seema has to push a similar heavier box on the same floor. Who will have to apply a larger force and why?
 Que 4. What is the fluid friction? Explain why objects moving in fluids must have special shapes.

Note*: Kindly allocate the required number of questions.

SAINIK SCHOOL CHITTORGARH

AUTUMN VACATION HOLIDAY HOMEWORK

SUBJECT NAME : SANSKRIT	
CLASS & SECTION: VIII	**SUBJECT TEACHER NAME : P CHANDRASEKHARAN**
INSTRUCTIONS: – सर्वेषां प्रश्नानां उत्तराणि करणीयानि ।	

ASSIGNMENT

व्याकरणम् ।

1. इदम् एवं एतत् शब्दयोः रूपाणि त्रिषु लिङ्गेषु हिन्दी शब्दार्थसहितं लिखत ।

2. पठितपाठभागात् अव्यय शब्दान् एवं तुमुन् अन्त शब्दान् च चित्वा वक्येषु प्रयोगं कुरुत ।

3. कृ एवं दृश् धातोः रूपाणि लट् लृट् लङ् लोट् एवं विधिलिङ् लकारेषु हिन्दी अर्थ सहितं लिखत ।

पाठः – सप्तभगिन्यः ।

1. वस् एवं पिब् धातेः रूपाणिलट् लृट् लङ् लोट् एवं विधिलिङ् लकारेषु हिन्दी अर्थ सहितं लिखत ।

2. भारतजनता अहम् इति पाठं पुस्तिकायां लिखित्वा हिन्दीभाषायां अनुवादयत । ।

3. पाठभागेभ्यः अथवा स्वरचित वाक्यानि वर्तमान काले भूतकाले एवं भविष्यत् काले दशवाक्यानि (प्रत्येक काले) हिन्दी अनुवादसहितं लिखत ।

4 किमपि विषयमधिकृत्य दशवाक्यानि लिखत ।

कक्ष्याकार्याणि पूर्तिं कुरुत ।

SUBJECT NAME : SOCIAL STUDIES

CLASS & SECTION : VIII (A+B+C)	SUBJECT TEACHER NAME : MR CHANDRAPRAKASH

ASSIGNMENT

HISTORY

CHAPTER 5: WHEN PEOPLE REBEL 1857 and AFTER

Content 1. Write the main causes of the revolt in 1857.
 Instructions : (a) Word limit- 350-450 words
　　　　　(b) Do the work in History Homework Notebook

Content 2.　　Write 35 MCQs from the chapter and also write their correct answer.
Instructions : (a) Do the work in History Notebook

Content 3. Write the consequences and result of 1857's revolt. Also write the role of different leader from different places.
Instructions : (a) Word limit- 350-450 words
　　　　　(b) Do the work in History Homework Notebook

GEOGRAPHY

CHAPTER 4: **INDUSTRIES**
Content 1. Write the different factors responsible for the establishment of any Industry in any area.
Also explain the factors with suitable examples.
Instructions : (a) Word limit- 350-450 words
　　　　　(b) Do the work in Geography Practical Notebook

Content 2. Write 35 MCQs from the chapter and also write their correct answer.
Instructions : (a) Do the work in Geography Practical Notebook

Content 3. Write a detailed note on the topics:-
　　　　　(a) Iron and Steel Industry
　　　　　(b) Cotton Textile Industry
Instructions : (a) Word limit- 250-300 words each
　　　　　(b) Do the work in Geography Practical Notebook

CIVICS
CHAPTER 5 : **UNDERSTANDING MARGINALISATION**
Content 1. Write 35 MCQs from the chapter and also write their correct answer.
Instructions : (a) Do the work in Civics Notebook

PROJECT & ASSIGNMENT WORK
(a) Fill the all 03 maps of World in chapter 4 Industries viz *World's Industrial Regions, World : Major Iron Ore Producing Areas, World : Major Cotton Textile Manufacturing Regions*
Instructions : (i) Paste the maps in Geography Practical Notebook

(b) Write in details about important **key features of Indian Constitution** and **Directive Principles of State Policy (DPSPs).**
Instructions : (i) Make a separate file for the work
　　　　　(ii) Use some pictures and quotes to make the assignment work interesting.