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Class 8

Holiday Homework

(Summer Vacation 2025–26)

Mathematics

1. Sudoku puzzle

   Grid: A Sudoku puzzle consists of a 9x9 grid, divided into nine 3x3 blocks.
   Numbers: The puzzle uses the numbers 1 through 9.
   Rows: Each row must contain all the numbers 1 through 9, without any repetitions.
   Columns: Each column must contain all the numbers 1 through 9, without any repetitions.
   Blocks: Each 3x3 block must contain all the numbers 1 through 9, without any repetitions.
   Unique Solution: Every valid Sudoku puzzle has a unique solution.

5	2		3	6				
			5				9	3
3	8		7	4		1	5	2
		1				4	3	9
8	9	7	2				6	1
		8	4			9		7
7								
		2	1		5		8	6

	7					1	8	
			3		8			9
	3	2		4	9			
		1		6		9	5	
		8		1			6	
4		7			5			
5	1	6			7		2	3
8		3	4	2		6	7	

2. Tangram
   Tangram is a puzzle game that consists of a square cut into seven geometric shapes. Cut tangram pieces and rearrange them to form five different shapes like a dog, ship etc



3. Find out at least three riddles based on age and share them with your friends.
   Here is an example of a maths riddle: When my dad was 31 years old, I was 8 years old. Now he is twice my age. What is my age now?
   Answer: 23
4. Go through the following youtube link to choose any one puzzle project. Prepare it and present in class.
   https://www.youtube.com/playlist?list=PL37kVxuLUBb4lCvSGY6PDbx7FI5it0Lhl

5. Prepare a quiz worksheet on Polygons having at least 10 clues as questions.

1. Integers and Rational Numbers

Task:
Solve the following:

- Add: (-125) + 73 + (-52)
- Subtract: 345 - (-125)
- Multiply: (-12) × 25
- Divide: (-240) ÷ 12
  Also, write 5 rational numbers between -1 and 0.

2. Fractions and Decimals

Task:

- Simplify:
  - (3/4) + (5/6)
  - (7.25 × 4.1)
  - (2/5) ÷ (3/8)
- Convert 0.875 into a fraction in simplest form.

3. Algebraic Expressions

Task:

- Define terms: **Variable, Constant, Coefficient, Term, Expression**
- Simplify:
  - 5x + 3x - 7 + 2
  - 2(a + b) + 3(a - b)

4. Geometry: Basic Concepts **Task:**

Draw and label:

- Different types of angles (acute, obtuse, right, straight)
- Types of triangles based on sides and angles
- A pair of parallel lines and a transversal. Name all angles formed.

5. Mensuration

Task:

- Find the perimeter and area of:
  - A rectangle with length = 12 cm and breadth = 8 cm
  - A square with side = 15 cm
- A triangle with base = 10 cm and height = 6 cm

6. Math Around Me (Fun Activity)

Task:
Prepare a **math scrapbook page or poster** on the topic **"Mathematics in Daily Life"** showing where you see:

- Shapes (e.g., traffic signs, windows)
- Numbers (e.g., prices, clocks)
- Patterns (tiles, nature)
- Data (billboards, mobile usage, etc.)

Use drawings, printed pictures, or cut-outs.

7. Data Handling and Graphs

Task:

- Collect data on the number of hours you spend on various activities in one week (e.g., studying, playing, sleeping, screen time).
- Draw:
  - A **bar graph** to represent the data.
  - A **pie chart** (circle graph) showing time distribution in 24 hours.

8. Patterns and Sequences

Task:

- Identify and complete the following number patterns:
  - 2, 4, 8, 16, ___, ___
  - 1, 4, 9, 16, 25, ___, ___
- Create your own pattern using shapes or numbers and explain the rule behind it.

9. Word Problems

Task:
Solve the following:

- A person saves ₹250 every month. How much will they save in 2 years?
- A tank holds 10,000 liters of water. If it supplies 625 liters per day, how many days will it last?
- The cost of 1 kg of apples is ₹95. Find the cost of 3.5 kg of apples.

Science

1. Prepare a multi – disciplinary project (MDP) based on the topic – " CROP AND FACTORS AFFECTING CROP YIELD" .

2. Prepare a working model on any scientific principle.

3. Visit a nearby park and collect dry leaves . Classify them on the basis of leaf venation and paste then on A 4 size sheets.

4. Show the correlation between the leaf venation, type of root and types of seeds in a tabular form. Also paste them on A-4 size sheet.

5. Show the inter – conversion of the three states of matter i.e. solid , liquid and gas in the form of a flow chart on A 4 size sheet.

6. In the form of table , write the names of vitamins and minerals, diseases caused by their deficiency, symptoms and the food items which can reduce/ cure the symptoms.

7. Prepare a dish using any 3 Millets with the help of an elder at home. Click pictures and paste on A 4 size sheet.

8. Write a short note on renewable and non – renewable sources of energy.

9. Draw diagrams of solar and lunar eclipse.

10. Read first chapter of the book and prepare notes on A4 size sheet .

ENGLISH

ALL THESE QUESTIONS WILL BE

WRITTEN IN ENGLISH NOTEBOOK

Q.1. You are Samarth/Samantha who visited an orphanage of your city. Write a diary entry expressing all your feelings, emotions and few contributions that you did in support of humanity.

Q.2. You are Kartik/ Kiyara who had joined an Eco-club in your city where you were given insightful ideas for saving nature. Write an article on “Save planet, save lives”.

Q.3. Your school is going to organise a summer camp for various activities contributing towards holistic development.Being a Sports Captain of your school write a brief notice giving all necessary details.

Q.4. Solve ONLY READING and GRAMMAR portions from 3 sample papers.

HINDI

ग्रीष्मकालीन गृहकार्य

1) संज्ञा की परिभाषा एवं भेद उदाहरण सहित लिखो।
2) कारक एवं उनके चिन्ह लिखो एवं याद करो।
3) मेरा मनपसंद कार्य विषय पर सौ शब्दों में अनुच्छेद लिखो।
4) कोई पाँच श्रुतिसमभिन्नार्थ शब्द लिखो।
5) किन्ही पाँच शब्दों के अर्थ लिखो।
6) आप परिवार सहित देशाटन जा रहे हैं।विद्यालय के प्राचार्य को पाँच दिन की छुट्टी के लिए प्रार्थना पत्र लिखो।

उपर्युक्त समस्त कार्य A 4 शीट पर करना है।

DRAWING

Two A3 Size paintings (traditional, folk, modern, contemporary)

VOCATIONAL EDUCATION

Class 8 :- Learn about all tools, equipment and material for Gardening

activity.

SOCIAL SCIENCE

VIII C(SST)

Learn Themes

Theme A- Agriculture

Theme C- Government

SANSKRIT

सर्वप्रथम ग्रीष्मकालीन अवकाश में आपकी पुस्तक आ जाएगी तो उसे अवश्य खरीद लें l

1 संस्कृत छात्र प्रतिज्ञा लिखे और याद करें l

2 क्रीड़ धातु के पांचो लकार लिखे और याद करें।

3 आकारांत लता शब्द के रूप लिखें और याद करें

4 अकारान्त बालक और फल शब्द के रूप लिखें और याद करें ।

5 संस्कृत सुविचार के पांच श्लोक अर्थ सहित याद करें।

6 संस्कृत की कोई एक लघु कहानी लिखें और याद करें ।

7 संस्कृत का कोई एक चार्ट बनाएं

ARTIFICIAL INTELLIGENCE

Complete all this homework in your fair copy

1. **Define Artificial Intelligence. Give two real-life examples of where AI is used around you.**

2. **Write three differences between Human Intelligence and Artificial Intelligence.**

3. **What are the three domains of AI? Write one example of each.**

4. **Match the following:**

AI Tool	**Works Like**
Alexa	**a) Language Translator**
Google Maps	**b) Voice Assistant**
Google Translate	**c) Navigation Tool**