

PM SHRI KENDRIYA VIDYALAYA KARGIL

HOLIDAYS HOMEWORK

Class-IX

CHEMISTRY

SUBJECT ENRICHMENT:

Matter-Nature and Behaviour

Definition of matter; solid, liquid and gas;
characteristics - shape, volume, density;
change of state- melting (absorption of heat), freezing,
evaporation (cooling by evaporation),
condensation, sublimation.

Nature of matter:

Elements, compounds and mixtures.

Heterogeneous and homogenous mixtures.

colloids and suspensions.

Physical and chemical changes (excluding separating the components of a mixture).

Particle nature and their basic units:

Atoms and molecules

Law of Chemical Combination.

Chemical formula of common compounds.

Atomic and molecular masses.

Structure of atoms:

Electrons, protons and neutrons.

Valency, Atomic Number and Mass Number.

Isotopes and Isobars.

PROJECT:

Read about at least five scientists and their contribution in chemistry and write at least 50 words on each scientist.

ACTIVITY:

I. Draw 3D Charts on any one of the following topics: Fractional distillation , Chromatography , Sublimation , Evaporation , Separation funnel , Distillation , Interconversion of states of matter

II. Answer the following questions:

1. Why do the doctors advise to put strips of wet cloth on forehead of a person having high fever?
2. The melting points of three solids X,Y,Z are 298K, 314K and 398K, respectively .Arrange these in increasing order of their inter-particle force of attraction.
3. Why do we feel comfortable under a fan when we are perspiring?
4. Why do solids have a regular geometrical shape?
5. Water as ice has cooling effect , whereas water as steam may cause severe burns. Explain these observations.
6. How does evaporation differ from boiling?
7. Why do we see water droplets on the outer surface of a glass containing ice cold water?
8. When 50g of sugar is dissolved in 100 m L of water ,there is no increase in volume .What characteristic of matter is illustrated by this observation?
9. Why do wet clothes dry quickly in sun than in shade?
10. Describe an activity to determine the boiling point of water.

PHYSICS

Solve these important previous year CBSE questions in your class notebook and ask for doubts in online classes during vacations.

Prepare a notebook and write this homework in that notebook

BY KARAN KINDRA

70-days holiday homework plan for Physics, covering the specified chapters with questions and numericals:

Days 1-10: Chapter 1 - Motion

Days 1-2: Read the chapter thoroughly and understand the basics of motion.

Days 3-4: Solve Example Problems 1.1 to 1.5 from your textbook.

Days 5-6: Work on Exercise 1.1 (Questions 1-5) and Exercise 1.2 (Questions 1-5).

Days 7-8: Explore practical examples of uniform and non-uniform motion.

Days 9-10: Solve Exercise 1.3 (Numericals 1-5) and revise the entire chapter.

Days 11-20: Chapter 2 - Force and Laws of Motion

Days 11-12: Understand the concept of force and Newton's laws of motion.

Days 13-15: Work on Exercise 2.1 (Questions 1-5) and Exercise 2.2 (Questions 1-5).

Days 16-18: Solve Numericals from Exercise 2.3 (Numericals 1-5).

Days 19-20: Investigate and write a short report on practical applications of Newton's laws in everyday life.

Days 21-35: Chapter 3 - Gravitation

Days 21-23: Study the basics of gravitational force and its effects.

Days 24-27: Solve numerical problems related to gravitation (Exercise 11.1).

Days 28-30: Explore the concept of acceleration due to gravity, solve problems from Exercise 11.2.

Days 31-33: Understand Kepler's laws and their significance (Exercise 11.3).

Days 34-35: Conduct a small experiment to demonstrate the effects of gravitational force.

Days 36-50: Chapter 4 - Work and Energy

Days 36-38: Review the concepts of work, energy, and power.

Days 39-42: Solve numerical problems related to work and energy (Exercise 11.1).

Days 43-45: Explore different forms of energy, solve problems from Exercise 11.2.

Days 46-50: Understand the law of conservation of energy, solve problems from Exercise 11.3.

Conduct a small experiment to demonstrate the conversion of potential energy into kinetic energy.

Days 51-65: Chapter 5 - Sound

Days 51-53: Study the basics of sound waves and their properties.

Days 54-57: Work on Exercise 12.1 (Questions 1-5) and Exercise 12.2 (Questions 1-5).

Days 58-60: Solve Numericals from Exercise 12.3 (Numericals 1-5).

Days 61-65: Research on the applications of sound waves in various fields.

Days 66-70: Revision and Practice

Days 66-68: Review all chapters, solve additional practice problems, and clarify doubts.

Days 69-70: Take mock tests for each chapter and analyse your performance.

Adjust the schedule as per your syllabus, and make sure to balance your study schedule, take breaks when needed, and seek help from me anytime during vacation on message or call if you encounter difficulties. Good luck with your studies!

BIOLOGY

1. Revise and re-write all Biology chapters for the Exams.
2. Solve any 4 sample question papers.
3. Complete Practical Record
4. Revision Schedule

4 th December 2023- 9 th December 2023	1. Cell- Basic Unit of Life: Cell as a basic unit of life; prokaryotic and eukaryotic cells, multicellular organisms, cell membrane and cell wall, cell organelles and cell inclusions; chloroplast, mitochondria
10 th December 2023- 16 th December 2023	2. Cell- Basic Unit of Life: vacuoles, endoplasmic reticulum, golgi apparatus, nucleus, chromosomes- basic structure and number
17 th December 2023- 23 rd December 2023	3. Tissues, Organs, Organ system, Organism
24 th December 2023- 30 th December 2023	4. Tissues, Organs, Organ system, Organism
31 st December 2023- 6 th January 2024	5. Food Production
7 th January 2024 – 13 th January 2024	6. Food Production
14 th January 2024- 20 th January 2024	Diagram Practice for all chapters
21 st January 2024- 27 th January 2024	Diagram Practice for all chapters
28 th January 2024- 3 rd February 2024	Sample Ques Paper 1 & 2
4 th February 2024- 10 th February 2024	Sample Ques Paper 3 & 4

ENGLISH

1. Read a book of your choice and write a review including:

- i. Title, ii. Main characters, iii. Plot, iv. Theme

2. Prepare a cover page of a Magazine entitled "Father of the Year" on Father's day, dedicating yours .

3. Read all lesson thoroughly and write the gist and character sketch of the main characters

5. Revise full syllabus of final exam.

6. Read all poems and write poetic devices ,theme and central idea.

7. solve atleast 3 passage in a week.

8. VOCABULARY ENHANCEMENT: find the meanings of the following words and write one synonym and one antonym each.

S.NO. WORD S.NO. WORD

1 abrupt 16 amicable

2 brazen 17 anguish

3 smash	18 jovial
4 impeccable	19 stubborn
5 indomitable	20 umpteen
6 cue	21 pessimistic
7 terse	22 feeble
8 lure	23 hideous
9 admonish	24 perplexed
10 privy	25 miser
11 vulnerable	26 jinx
12 horrid	27 glutton
13 terrific	28 commence
14 terrible	28 babble
15 tremble	30 whims

MATHS

- (1) Do all holiday homework in a separate notebook .
- (2) Write all theorems of chapter 7-Triangle.
- (3) Write all the formulas of chapter 12 -heroines formula and chapter 13 -surface area and volume.
- (4) Make a mathematical newspaper write in it application of maths in daily life with pictures.
- (5) Verify some of angles of a quadrilateral is 360 degree by a paper cutting and pasting.
- (6) Prepare a bar graph the literacy rate of two countries (India -China) for the last 5 years.
- (7) Revise all the chapters for final year examination.

हिन्दी

1. पाठ्यक्रम की कोई भी एक कविता याद करके तथा उसका वीडियो बनाकर मुझे व्यक्तिगत प्रेषित करें। (कविता डेढ़ मिनट से पाँच मिनट)
2. कोई दो लघुकथा लिखें। (शब्द-सीमा 150-200 शब्द)
(संकेत :— चूहा और मोर, केदारनाथ यात्रा और आयुष, मेरे दोस्त का बैग, चालाक बंदर आदि।)
3. बर्फ और पानी में संवाद लिखिए ।
4. लद्दाख की सुंदरता के विषय में बताते हुए राजस्थान बसे अपने मित्र को पत्र लिखिए ।
5. अभी तक जो भी पढ़ाया गया है, उसको कम-से कम पाँच बार दोहराएँ। आते ही उसी से प्रश्न पूछे जाएँगे।
6. 'मेरा लक्ष्य और उसे प्राप्त करने की योजना' विषय पर अनुच्छेद लिखिए ।
7. पढ़ाये गए सभी पाठों से प्रत्येक पाठ से 10 -10 बहुविकल्पीय प्रश्नोत्तर तैयार करना।
8. दो पत्र लेखन (औपचारिक पत्र व अनौपचारिक पत्र)
9. दिए गए प्रतिदर्श प्रश्न पत्रों में से कोई दो प्रश्न पत्र के उत्तर लिखकर आना।
 1. क्षितिज पुस्तक से सभी पाठों से पाँच – पाँच प्रश्न तैयार करना
 2. किसी एक विषय पर दो अनुच्छेद लेखन करना।

SOCIAL SCIENCE

- 1: Complete your SST notebook .
- 2: Make a project on forest society and colonization.
- 3: Do any 15 MCQ from each chapter.
- 4: Practice all map work given in your geography and history book .
- 5: Re-write and practice full syllabus for final exam.

ARTIFICIAL INTELIGENCE

Revise all topics

Unit 1 INTRODUCTION TO AI

Unit 2 AI PROJECT CYCLE

Unit 3 NATURAL LANGUAGE PROCESSING

Unit 4 EVALUATION

Unit 5 ADVANCE PYTHON

Unit 6 DATA SCIENCES

Unit 7 COMPUTER VISION

Unit 8 Employability Skills

- 1: Communication Skills-II*
- 2: Self-Management Skills-II
- 3: ICT Skills-II
- 4: Entrepreneurial Skills-II
- 5: Green Skills-II*

Write answers of the following questions

- What is artificial intelligence? Artificial intelligence is the ability of a computer or computer-controlled robot to perform tasks that are commonly associated with the intellectual processes characteristic of humans, such as the ability to reason.
- Write a Python program to print 5 lines about yourself using print() function.
- Write a Python program to print the following string in a specific format.
- Write a program to make a simple calculator
- What is NATURAL LANGUAGE PROCESSING. Explain it in 200 words with example and its uses.

Write a short notes on with examples.

- Identifiers
- Variables
- Keywords (Reserved Words)
- Datatypes
- Python Operators
- Conditional Statements
- Types of Loop
- Evaluation
- Data Exploration