



THE JAIN WORLD SCHOOL , MATI

WINTER HOLIDAY HOMEWORK (2024 – 2025)

CLASS – IX

“ Snowflakes of knowledge: Winter Break Challenges”



Dear Parents,

We hope this message finds you well. At **THE JAIN WORLD SCHOOL** , we believe that learning becomes most effective when it involves collaboration between teachers, students, and families. Assignments are a key part of your child's academic journey, designed to reinforce classroom learning, develop critical thinking, and cultivate independence.

To ensure your child gets the most out of their assignments, here are some ways you can encourage their active involvement:

- * **Create a Positive Learning Environment:** Provide a quiet, well-lit space where your child can focus without distractions.
- * **Set a Routine:** Help your child establish a consistent time for completing assignments, balancing it with leisure and other activities.
- * **Show Interest:** Ask about their assignments and listen as they explain what they're learning. This can boost their motivation and confidence.
- * **Offer Guidance, Not Answers:** Encourage your child to think critically and solve problems independently while being there for support when they need it.
- * **Celebrate Efforts and Progress:** Acknowledge your child's hard work and milestones, even when challenges arise.

ENGLISH (Reflective Writing/ Biographical Writing/ vocabulary building)

(1)PORTFOLIO- PREPARE A PORTFOLIO WITH THE FOLLOWING:

Introduction

My strengths

I need to improve on...

My achievements

I have participated in...

The books I have read

The book I wish to read

(2) Write down the Bio-sketch of A PJ Abdul Kalam.

Include following details :

- Personal life
- Educational background
- Notable works
- Achievements.

3. Write synonyms of the difficult words (15 at least) of the following chapters and poems:

The Fun they had

The Road not Taken

The Sound of Music

The Wind

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Mathematics (Representation/ Problem Solving/ Applied Maths)

WORKSHEET

Complete the following worksheet in your homework copy(Access the worksheet by the given link- https://drive.google.com/file/d/1XuIkfwLotOknj_sPIJ-bXE9oKrvuLIxW/view?usp=drivesdk)

SCIENCE (Understanding/ Experimental / Project/ Research)

PHYSICS

ACTIVITIES MUST BE DONE IN PRACTICAL FILE.

NUMERICALS MUST BE DONE IN HOMEWORK REGISTER.

Work, Power, and Energy

1. Assignment: List 10 activities from your daily life where work is done. Calculate the work done if the force applied is 10 N and displacement is 2 m for each action.

Extension:

Numerical exercises from Work and Energy: Odd numbered numerical questions to be done by odd roll numbers and even numbered numerical questions to be done by even roll numbers.

Page numbers (148, 160, 161, 165, 175, 176, 179) of Living Science Physics

CHEMISTRY

QUESTION 1 AND 2 TO BE DONE IN PRACTICAL NOTBOOK.

EXTENTION WORK TO BE DONE IN REGULAR REGISTER

1. Structure of the Atom

Activity:

i) Draw a model of an atom (Bohr's model) for any 10 elements ($Z = 1$ to 18). Include subatomic particles and label them.

ii) Write the electronic configuration for the chosen elements.

iii) Explain how valency is determined.

2. Atoms and Molecules

Calculate the percentage composition of the following compounds:

MgSO₄, C₁₁H₂₂O₁₁, Al(NO₃)₃, C₆H₅OH, Mg₃N₂, (NH₄)₂CO₃

Extension:

Exercises from Living Science Chemistry on topic: Structure of the Atom: from pg. 159 – 162: A(I, II, III, IV), from pg. 165-167 E(case based questions)

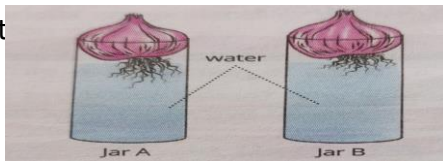
BIOLOGY

Note: Do the assignment in comment sheet

ENRICHMENT ACTIVITY -

A. The given diagram represents an experimental set-up to demonstrate a vital process. Jar A and jar B contain onion bulbs with root tips dipped in water. After 4 days the root tips of

t answer the following questions :



1. Which of the two onions has longer roots? Why?
2. Do the roots continue growing in jar B even after the root tips have been removed? Give reasons in support of your answer.
3. What inference can you draw from the above experiment?

Value based questions

1. Ranveer switched from traditional to modern farming practice in which he started using large amounts of chemical fertilizers and pesticides to increase the crop yield. In your opinion, is this practice correct? What are its effects on soil quality in the long run? What other alternative methods could be used by him for achieving good yield?
2. Mahmud is a farmer. He grows two or more crops simultaneously in the same field in a definite row pattern. What are the advantages or disadvantages of this practice?

SOCIAL SCIENCE (project Method/ Research)

Note: Do as instructed by the concern subject teacher

Collect information about Silk Route. Also find out the new developments, which are improving Communication routes in the regions of high altitude.

INFORMATION TECHNOLOGY (TECHNOLOGY,DIGITAL LITERACY AND EXPERIENTIAL LEARNING):-

1. Make a PPT of minimum 10 slides on “Cyber Threats”.
2. Make a PDF/document of the following:
 - a. Visit some India government websites, such as Department of School Education, MHRD, and Government of India. Make a list of all the valuable information and the services offered.
 - b. Visit 2-3 e-commerce websites and discuss their working.
3. Draw a keyboard on chart paper and use different colour codes to show which keys are reserved for which particular finger. At the bottom right corner of the chart mention your Name, SID and Roll Number.

Your involvement plays a vital role in making assignments a meaningful part of your child's education. If you have any questions or need further support, please don't hesitate to reach out to us.

Thank you for partnering with us in your child's learning journey!

Warm regards,

Principal

The Jain World School

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