

DDMS P OBUL REDDY PUBLIC SCHOOL

CLASS : IX 2024-25

SUBJECT ENRICHMENT ACTIVITIES (ART INTEGRATED) (HOLIDAY HOMEWORK)

Introduction:

"Welcome, Class 9, to an exciting journey through our holiday homework assignments! This holiday season, we embark on a captivating exploration of subject enrichment activities infused with the vibrant world of art integration. Prepare to unleash your creativity and dive into a realm where academic

subjects seamlessly blend with the colors, shapes, and expressions of art.

Throughout this enriching journey, will discover how serves as a powerful medium to deepen understanding of various subjects.



From history to science, mathematics to literature, each assignment is crafted to ignite your imagination and engage your intellect in innovative ways.

- As you delve into your holiday homework's, remember that art is not just about paint on canvas or sculptures in galleries—it is a dynamic tool that transcends boundaries and opens doors to new perspectives. So, let your imagination soar, your brushes dance, and your ideas flow freely as you embark on this interdisciplinary adventure.
- Get ready to unleash your inner artist and enrich your academic knowledge in ways you never thought possible. Let's dive in and make this holiday homework an unforgettable journey of discovery and creativity!"

<u>English</u>

Design an E-blog on any two Best Adventures / Experiences you had this Summer Vacation.

Instructions:

- ♦ Use Microsoft Word Document to design your E-blog.
- ♦ Your E-blog should contain a Title.
- ✤ The title should be Eye- catchy.
- Attach any two relevant photos as given in the sample.
- ♦ Follow a proper format (Title, Introduction, Body, Conclusion).
- Each narration should be in about 100 words.
- ✤ Title font should be in Calibri, Font-14.
- ♦ Write up should be in Calibri, Font-12.
- Design a cover page as well.
- ♦ Use A-4 size sheets to take a print out of your E-blog in 3 pages along with the cover page.

Rubrics:

- Organisation of ideas: 2 Marks
- Creativity & Analytical thinking 2 Marks
- Cover page Design-1 Mark
- Content (includes accurate spellings and grammatically correct sentences): 3 Marks
- Presentation:1 Mark
- Format: 1 Mark

Sample E-Blog for reference:



II LANGUAGE - TELUGU

మీ పరిసర ప్రాంతాలలోని వ్యవసాయ, విద్యా, పైద్య, పైజ్ఞానిక రంగాలలో విశేష ప్రతిభ కనపరచిన వ్యక్తులను ఇంటర్వ్యూ (ముఖాముఖి) చేయండి.

సూచనలు:

- 🛛 పరిచయం
- 🛽 పది నుండి పదిహేను ప్రశ్నలు తయారు చేయటం
- 🛽 ప్రశ్నలకు వారు ఇచ్చిన జవాబులు వ్రాయటం
- ఎవరిని ఇంటర్స్యూ చేసారో వారితో కరిసితీసుకున్న భోటో అతికించడం

RUBRICS:

REFERENCE:

ຈໍ່ດູ້ຮ	- 2 మా
వివరణ	- 4 మా
చిత్రం	- 2 మా
ప్రదర్శన	- 2 మా
మొత్తం	= 10 మా



దాశరథి రంగాచార్యతో ముఖాముఖీ పాఠం చదవండి. వీడియో చూడండి.

- 🛽 ప్రముఖుల జీవిత విశేషాలు తెలుసుకుంటారు.
- 🛛 విద్యార్థులలో ఆత్మవిశ్వాసం పెరుగుతుంది.
- 🛽 దాశరథి రంగాచార్యుల రచనలు మోదుగపూలు, చిల్లరదేవుళ్ళు నవలలు చదవండి.

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<u> विषय – हिंदी</u>

ग्रीष्मकालीन अवकाशीय परियोजना कार्य <u>विषय संवर्धन तथा कला समेकित परियोजना</u>

परियोजना का परिचय (Introduction)- कृषि की उत्पादकता पूरी तरह से मौसम, जलवायु और पानी की उपलब्धता पर निर्भर होती है, इनमें से किसी भी एक में परिवर्तन कृषि की उत्पादकता को सीधा प्रभावित करता है।जलवायु परिस्थितियाँ न केवल यह तय करती हैं कि कोई पौधा बढ़ेगा या नहीं, बल्कि यह भी तय करती है कि वह कैसे बढ़ेगा। पैदावार, उपज स्थिरता और गुणवत्ता का भी जलवायु से गहरा संबंध है।

<u> विषय– झारखंड और तेलंगाना की जलवाय, मुख्य फसलें तथा जीव</u>

झारखंड और तेलंगाना की जलवायु,मुख्य फसलों तथा जीवों (Flora & fauna) की संक्षिप्त जानकारी देते हुए एक सुंदर परियोजना तैयार कीजिए

सामान्य निर्देश – (Steps and instructions)

- आपको अपनी परियोजना पाठशाला के प्रथम दिवस पर जमा करानी है।
- यह कार्य सुंदर लिखावट में लिखा होना चाहिए। विषय संबंधी चित्र होने चाहिए।



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• परियोजना कार्य रंग-बिरंगा आकर्षक तथा A4 size कागज़ पर 5 या 6 पृष्ठों में किया जाना चाहिए |

• परियोजना का एक सुंदर आवरण पृष्ठ होना चाहिए, जिस पर हिंदी परियोजना, परियोजना का नाम,आपका नाम,आपकी कक्षा एवं वर्ग अवश्य लिखा होना चाहिए| **परियोजनाका उद्देश्य (Learning Objectives)**–

 छात्रों को भिन्न-भिन्न जलवायु तथा उपज की जानकारी देना। उनको यह जानकारी देना कि जलवायु किस प्रकार कृषि को प्रभावित करती है।

परियोजना का प्रतिफल – (Learning Outcome) इस परियोजना से छात्रों का बहुमुखी विकास होगा, जैसे -तेलंगाना और झारखंड की जलवायु तथा वहाँ उगने वाली फसल के बारे में छात्रों को ज्ञान होगा। उनकी भाषा,सृजनात्मकता तथा कला-कौशल का विकास होगा।

परियोजना के मूल्यांकन के आधार – Rubrics

कुलांक	सृजनात्मकता	भाषा	प्रस्तुतिकरण	जानकारी	चित्र
10	2	2	2	2	2

Mathematics

TOPIC: NUMBER SYSTEM

The Number System consists of different types of numbers like Natural numbers, Whole numbers, Integers, Rational numbers , Irrational numbers ,Real numbers etc.

Real numbers consist of Rational numbers and Irrational numbers. Every real number is unique.

I Activity:

Model making of types of numbers including definitions, examples, symbols.

Objective: To enable the students to explore and differentiate between the types of numbers.

Instructions to be followed:

- Students need to use the colour sheets accordingly.
- Cutting and pasting work should be neat.
- ♦ Content must be written with colour pens.

Link: https://youtu.be/A4zDec4knlQ

Learning Outcome: Students will be able to understand the different types of numbers in the Number System.

II Write about any two Indian Mathematicians and their contributions in the field of Mathematics. Also paste the pictures of these mathematicians,

RUBRICS:

- 1. Content : 4M
- 2. Presentation with Art : 5M
- 3. Punctuality : 1M

NOTE: Solve the given worksheets in a worksheet notebook.

PHYSICS (10m)

INSTRUCTIONS: Physics & Chemistry are to be done separately and submitted on the reopening day.

<u>ACTIVITY:</u> Holiday Homework: Newton's Laws of Motion - Foldable Wheel Learning Objective:

To deepen understanding of Newton's laws of motion through a creative project involving the construction of a

foldable wheel.

Learning Outcomes:

- Students will demonstrate knowledge of Newton's three laws of motion.
- Students will apply these laws to design and construct a foldable wheel.
- Students will articulate the relationship between Newton's laws and the motion of the foldable wheel.

Materials Needed:

Cardstock or construction paper, Scissors, Glue or tape, Markers or colored pencils

Instructions:

Research Newton's Laws of Motion:

Use textbooks, online resources, or other reference materials to review and understand Newton's three laws of

motion: the Law of Inertia, the Law of Acceleration, and the Action-Reaction Law.

Design and Plan:

- Sketch out a design for your foldable wheel, considering its size, shape, and structure.
- Think about how you can incorporate elements of Newton's laws into your design and decoration.

Create the Foldable Wheel:

- Using the materials provided (cardstock or construction paper, scissors, glue/tape, markers), construct your foldable wheel according to your design.
- Cut out the template provided and fold along the dashed lines to create the wheel structure.



• Decorate the wheel with colors, drawings, and labels that represent Newton's laws of motion.

Reference image:

Reflect and Connect:

Make connections to real-world examples where Newton's laws are evident.

Assessment Criteria

- Creativity and effort demonstrated in the design and construction **3m**
- Accuracy in incorporating elements of Newton's laws into the decoration and labeling of the wheel. **3m**
- Thoughtfulness and clarity in the written explanation of how Newton's laws apply to the motion of the foldable wheel.
 2m
- Completion of the assignment according to the given instructions and deadline. **2m**

CHEMISTRY (10 MARKS)

<u>ACTIVITY:</u> Holiday homework: States of matter - collage

Learning Objective:

- To deepen students' understanding of the characteristics and properties of solids, liquids, and gases.
- To encourage creativity and visual representation of scientific concepts through art.

Learning Outcomes:

- Students will be able to identify examples of solids, liquids, and gases.
- Students will demonstrate understanding of the properties and behaviors associated with each state of matter.
- Students will develop artistic skills by creating a visually appealing collage.

Materials Needed:

- Poster board or large paper
- Magazines, newspapers, or printed images
- Scissors
- Glue or tape
- Markers or colored pencils (optional)

Research:

- Students will research the characteristics and properties of solids, liquids, and gases, including particle arrangement and movement.
- They will gather images from magazines, newspapers, or online sources that represent examples of each state of matter.

Design and Plan:

- Students will plan the layout of their collage, dividing it into three sections for solids, liquids, and gases.
- They will select and organize images that accurately depict examples of each state of matter.
- Students may sketch a rough design or layout before beginning the collage.

Create:

- Using the materials provided, students will cut out images from magazines or newspapers that represent solids, liquids, and gases.
- They will arrange the images in the corresponding sections of their collage, considering factors such as shape, volume, and particle arrangement.
- Students may use glue or tape to secure the images in place and add labels or annotations to identify each state of matter.

Reflect and Connect:

- After completing the collage, students will reflect on the process and connections between art and science.
- They will discuss how creating the collage deepened their understanding of the states of matter and enhanced their artistic skills.
- Students may also make connections between the examples depicted in their collage and real-world applications of solids, liquids, and gases.

Assessment Criteria:

- Accuracy: The collage accurately represents examples of solids, liquids, and gases, with appropriate labeling and organization.
 3m
- Creativity: The collage demonstrates creativity in the selection and arrangement of images, as well as in the overall presentation.
 3m
- Understanding: Students demonstrate understanding of the properties and behaviors associated with each state of matter through their choices and explanations.
 2m
- Craftsmanship: The collage is neatly constructed, with images securely attached and any labels or annotations legible and well-placed.
 2m

BIOLOGY

Fundamental unit of life:

S.NO: 4.1.1.1.7

Cell Model Construction :

• Construct a 3D model of a plant or animal cell using materials of your choice (e.g., clay, styrofoam, cadrboard)

- Label and color-code the key structures within the cell (e.g., nucleus, mitochondria, cell membrane and endoplasmic reticulum).
- Provide a brief explanation for each labeled structure, highlighting its function.

Learning Objectives:

Students will be able to:

- understand the differences between a plant and animal cell.
- describe the major components of a cell, including the cell membrane, mitochondria nucleus, endoplasmic reticulum etc.

Learning Outcomes:

Could understand the difference between plant and animal cells , and describe major components of a cell. **RUBRICS:**

Model- 5mChoose Any one natural disaster or man-made disaster

SOCIAL SCIENCE (5 Marks)

A project on (Disaster Management) – Mitigation

Choose Any one natural disaster or man-made disaster and write down the rescue measures of the topic chosen.

Eg : Earthquake , Cyclones , Landslides, Hazardous material spills, Rail accidents. Cyclone Hudhud

Case study Hudhud caused extensive damage to the city of Visakhapatnam and the neighbouring districts of Vizianagaram and Srikakulam of Andhra Pradesh. Damages were estimated to be ₹219 billion (US\$3.58 billion) by the Andhra state government. At least 124 deaths have been confirmed, a majority of them from Andhra Pradesh and Nepal, with the latter experiencing an avalanche due to the cyclone.

Preparations and impact Andhra Pradesh

An alert was sounded in nine out of thirteen districts of Andhra Pradesh where standing crops including paddy, groundnut, sugarcane, and pulses were yet to be harvested. Over 700,000 people, including 500,000 people in Andhra Pradesh, were evacuated and put up in relief camps & emergency bunkers. The local government made arrangements to shift half a million people in all.

Central government has mobilised the Army, Navy, and the National Disaster Response Force to provide relief to over 2,80,000 people in 44 mandals across four districts. Chandrababu Naidu the then Chief Minister of Andhra Pradesh shifted base from Hyderabad to Visakhapatnam after the cyclone made landfall. To monitor the disaster relief work that was being undertaken, he stayed in a bus parked outside the city collectorate. He also undertook visits to districts bordering Odisha such as Srikakulam which were badly hit by the cyclone. Post the disaster, he vowed to rebuild Vizag which was badly affected by it. https://en.wikipedia.org/wiki/Cyclone_Hudhud#/media/File:Hudhud_2014-10-12_0510Z.jpg

The above write up and the link will give an idea about Hudhud Cyclone to the students to further work with their chosen topic.

The following link is towards a pledge for disaster preparedness which everyone should participate and download the certificate.

The certificate should be attached to your project while you submit your activity.

https://pledge.mygov.in/disaster-preparedness/

Objective :

- To create awareness in Students' about different disasters, their consequences and management.
- The project work helps in enhancing the Life skills of the students.

Instructions :

The focus points of the Project are :

- 1. To work with any one disaster that occurred in any part of India.
- 2. Causes
- 3. Risk Identification/Assessment
- 4. Main Mitigation Strategies

The project of Disaster Management - Mitigation should be Handwritten in A4 size sheets

(3 -5 pages, with relevant pictures pasted to the left side of A4 size sheet)

The last page should have Conclusion and Bibliography.

Rubrics :

Content accuracy and originality	2m
Presentation and creativity	1m
Process of project completion	2m

Learning Outcomes :

- i. The students were able to identify the various causes & phenomenon of natural disasters.
- ii. The students were able to thoroughly understand the chemical reactions behind certain disasters..
- iii. Date of submission : 12th of June 2024.

ARTIFICIAL INTELLIGENCE (10M)

Activity 1: Write a letter/ an email to future self.

1. Imagine your future in the 2050 year (related to AI).

2. Type a letter or an email to your future self about what you want to see in the future or what you want to remind to your future.

3M

3M

- 3. The following points can be included in letter/email:
 - a) Start with your interests, hobbies, and skills.
 - b) Relate how AI can help you
 - c) Write about your career you want to pursue and how AI will make an impact on that.
- 4. Save the letter/ email in PDF format and print / write, submit hard copy

Activity 2: Write Pros and Cons of Artificial Intelligence 2M

Activity 3: MCQs

- 1. Artificial Intelligence is about_____.
- a) Playing a game on Computer
- b) Making a machine Intelligent
- c) Programming on Machine with your Own Intelligence
- d) Putting your intelligence in Machine

2. Who is known as the -Father of AI"?

- a) Fisher Ada c) Alan Turing
- b) John McCarthy d) Allen Newell
- 3. Select the most appropriate situation for that a blind search can be used.
- a) Real-life situation c) Small Search Space
- b) Complex game d) All of the above
- a) Mobile c) Non-Servo
- b) Open Loop d) Intelligent
- 5. Which of the given language is not commonly used for AI?
- a) LISP

b)

Python

c) PROLOG d) Perl

- 6. A technique that was developed to determine whether a machine could or could not demonstrate the artificial intelligence known as the
 - a) Boolean Algebra c)Turing Test
 - b) Logarithm d) Algorithm
