

# D.A.V CENTENARY PUBLIC SCHOOL, CHANDER NAGAR,

**GHAZIABAD** 





## Dear Children,

Summer vacations are meant for lots of fun and enjoyment with family and friends. We have planned some interesting activities for you to enrich your learning experience.

We believe completion of assigned work is worth when we integrate discipline and good values with it. Set a time table, spend some time in physical exercises like yoga, dancing, aerobics or pursue any of your hobbies passionately, nurture some plants, help your elders and youngers.

Do remember, Good- books are your best friends in all times.



# Multidisciplinary Project

Design a beautiful handmade multidisciplinary project file on the topic: "THE FOUNDATION OF LIFE: EXPLORING THE WORLD OF SOIL"

General Instructions:

- Page 1: Cover page
- Page 2 should contain School name, Session, Heading, submitted by --(student name), roll no, class & Section
- Page 3 Index
- > Page 4 Introduction / basic information about the topic
- Subject wise activities
- Last page: References
- Prepare a single file consisting of all the activities given in different subjects
- Complete & submit your work as per instructions given by your respective subject teachers. Also make sure to keep your work neat & tidy for evaluation
- The work must be done on A4 size ruled / plain sheets as per the requirement of the activity.

## 1.English:

Interview Script – "Talking to a Farmer"

Write a dialogue (10–12 lines) as if you are interviewing a farmer about soil. Ask about: types of soil, soil care, how farming depends on it, threats to soil, etc. Make it realistic and respectful.

Example starter:

You: Hello Uncle, can you tell me why soil is important for your crops? Farmer: Of course! Soil is our lifeline. Without it, we have nothing to grow...

## HINDI:

## SANSKRIT:

1.किन्ही पांच प्रकार मिट्टियों के बारे में सप्रमाण बताइए। 2.पृथ्वी की उर्वरा शक्ति के विषय में कोई दो श्लोक लिखिए।

## MATHS:

## **Soil Fertility Analysis**

**Context:** A student is analysing the nutrient content (in grams) of three soil samples. The nitrogen (N) content in each sample is as follows:

- Sample A: 3.75 g
- Sample B: 4.60 g
- Sample C: 2.85 g

The recommended nitrogen content for healthy plant growth is **10.5 grams**.

## Question:

a) What is the total nitrogen content in the three samples combined?

#### **Comparing Two Soil Plots**

**Context:** Plot A has a sand-to-clay ratio of 7:3, while Plot B has a sand-to-clay ratio of 5:2. **Question:** 

Which plot has a higher proportion of sand?

### **Fertilizer Application**

**Context:** A farmer uses a fertilizer mix where the ratio of nitrogen to phosphorus is **3:1**. **Question:** 

If the farmer uses 60 kg of nitrogen, how much phosphorus should be used?

## **SCIENCE:**

Make a comic strip on soil pollution.

### **Instructions:**

- 1. Take an A3 size sheet
- 2. Using cartoons and dialogues make innovative, creative, and original comic strip on factors that cause soil pollution and ways to prevent soil pollution.

## SOCIAL SCIENCE:

Q1. Which are the major soil types found in India? Mention one characteristic of each. (You may refer to chapter 2 of your textbook)

Q2. On the given map of India, locate and colour the different soil types.

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B. Alluvial Soil				
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Q3. Soil is an important resource-

- a) Mention two practices that should be followed to maintain the fertility of the soil.
- b) Mention four ways by which we can prevent soil erosion.

### **COMPUTER:**

Prepare a presentation on the topic: "Soil Secrets" in Open Office Impress and send it to - <u>sandeepa@davcpscn.com</u>

Mention your name, class and Roll No. in Subject line.



#### Q. Answer the following questions in English PNB :

#### Lesson 1: Monkey Trouble

- Describe how Grandfather came to bring Tutu home. (What made him decide to buy her?)
- Explain why Grandmother agreed to let Tutu stay. (What reason did Grandfather give her?)
- List the pets already in the house before Tutu arrived. (Name at least three.)
- 4. Analyze why Aunt Ruby didn't like Tutu.(Give an example from the story.)
- Summarize what happened when Tutu ran off with the pearl necklace. (Who chased her, and where did she go?)
- Infer what the fruit-seller and scooterist must have felt during the chase. (How did the monkey's mischief affect others?)
- 7. Explain how the necklace was finally recovered.(Who found it and what happened next?)
- Evaluate the role of Tutu in the engagement story. Was she helpful or disruptive? (Give your opinion with a reason.)

- Describe what happened to the wedding cake. (What ingredients did Tutu secretly add?)
- 10. Discuss what this story shows about the bond between animals and humans. (Use an example from the story.)

#### Lesson 2: Birdie, Will You Pet?

- 11.List the luxurious items the child offers to the bird. (Name at least three offers made.)
- 12.Compare the child's idea of comfort with the bird's idea of comfort. (What does each value more?)
- 13.Explain why the bird rejects the diamond necklace.(What does it say about its own feathers?)
- 14. Interpret the line: "The softest paths lie through the air." (What does the bird mean by this?)
- 15.Reflect on the theme of freedom vs comfort. What message does the poem give? (Give your own view in 2–3 sentences.)



## Task-1. Design a foldable for the following topics.

- a) Triangle and its properties (Roll no. 1 15)
- b) Operations on Rational numbers (Roll.no. 16-30)

Task-2. Activity Title: "Survey and Represent" (do it on an A-4 size sheet) Choose any one Topic for Survey:

- > Daily screen time of 15-20 friends/family members
- > Favourite sports or hobbies of 15-20 people

## Collect Data:

- > Ask at least 15-20 people based on your chosen topic.
- > Record their responses in a neat table/chart.

# Represent the Data:

- > Create a **bar graph** to show your collected data.
- > Use proper scale, labels, and title.

# Task-3 Solve the following Assignment in your Math's Register.

Q1) Verify:  $x \times (y+z) = x \times y + x \times z$  by taking  $z = \frac{5}{6}$ ,  $y = \frac{-7}{3}$ ,  $x = \frac{2}{7}$ Q2) Verify:  $(x \times y) \times z = x \times (y \times z)$  by taking  $z = \frac{3}{5}$ ,  $y = \frac{-7}{3}$ ,  $x = \frac{8}{11}$ Q3) Verify:  $(x \times y)^{-1} = x^{-1} \times y^{-1}$  for  $x = \frac{-2}{5}$ ,  $y = \frac{3}{5}$ Q4) With what number should we multiply  $\frac{-36}{35}$ , so that the product be  $\frac{-6}{5}$ ? Q5) Arrange in ascending order  $\frac{3}{-10}$ ,  $\frac{-2}{-5}$ ,  $\frac{7}{-15}$ ,  $\frac{12}{30}$ Q6) Find x if a)  $\frac{15}{-x} = \frac{-1}{7}$  b)  $\frac{x}{23} = \frac{-8}{2}$ Q7) Compare: a)  $\frac{-5}{7}$  &  $\frac{9}{-13}$  b)  $\frac{-3}{-5}$  &  $\frac{12}{20}$ Q8) Represent t on the number line: a)  $5\frac{1}{3}$  b)  $\frac{7}{-5}$ Q9) Simplify: a)  $\frac{-11}{30} - 2\frac{7}{6} + \frac{-3}{4}$  b)  $\left[\frac{-4}{3} + \frac{5}{7}\right] \times \frac{7}{-9}$ Q10) The sum of two numbers is  $\frac{3}{-10}$  if one of the number is  $\frac{7}{5}$  find the other. Note: Revise chapter 1,2 & 3 with examples and Brain Teasers for Periodic Test-1

- Use **A4 size ruled sheets** for task 4 & 5 questions given below.
- Write the task (i.e., the question) at the top of the sheet.
- Then, write your answers neatly below the task.

# Task-4 CASE STUDY

# CH-1 RATIONAL NUMBERS

# CH-2 OPERATIONS ON RATIONAL NUMBERS

Arjun, a curious young boy, visited Okhla Bird Sanctuary for the first time during his winter holidays. As he wandered through the lush trails, he marveled at the vibrantcolors and varied songs of the migratory birds. He spotted majestic albatross soaring high above,

elegant seagull wading through shallow water and tiny blue jay flitting among the branches and many others. Each bird seemed to tell a story of distant lands and long journeys. Arjun felt a deep sense of wonder and joy, realizing the incredible diversity and beauty of nature's winged travelers. He also noticed the wingspan of different birds.

The diagram shows the wingspans of different species of birds. Use the diagram to answer the questions given below:



- a) Find the sum of the highest and the lowest wingspan of the given birds.
- b) Find the average of the wingspans of Blue Jay and Seagull
- c) Verify the commutative property of addition for seagull and golden eagle

### OR

Verify the closure property of addition for the wingspans of all the birds.

## Task-5 SDG GOAL-2: ZERO HUNGER

Once upon a time, in a small village, lived a 12-year-old girl named Pawani. Every day, she walked to school with an empty stomach because her family didn't have enough food. She felt tired, couldn't concentrate, and often missed classes.

One day, her teacher told the class about a project: starting a small school garden. Everyone helped — they planted tomatoes, spinach, and carrots. Amina loved watering the plants and watching them grow.

After a few weeks, the garden had plenty of vegetables. The school started cooking meals using what they grew. Amina and her classmates now had a healthy lunch every day!

Pawani became more energetic, started doing better in school, and even helped teach her neighbours how to grow food at home. The whole village learned that even a small garden could make a big difference. 券 Moral of the Story:

Even small actions, like growing food or sharing meals, can help fight hunger. That's what Goal 2: Zero Hunger is all about — making sure no one goes to bed hungry.

## Questions for discussion

- 1. Is zero a rational number?
- 2. ----- added to any number is the number itself
- 3. For any rational number  $\frac{p}{q}$  ,  $q \neq$  -----
- 4. Zero is invented by the great Indian mathematician ------
- 5. Identity element of addition is ------



#### <u>TASK: 1</u>

1. Go through these links of inspire awards manak <u>https://www.youtube.com/watch?v=IcqYVpqFJcg</u> and <u>www.inspireawards-dst.gov.in/UserP/index.aspx</u> then write about an innovative idea on the basis of which a model can be prepared. If idea got selected, you will get a certificate and a prize money of rupees 10,000/- to prepare the model. Write this idea on a plane A4 sheet/ruled sheet under the headings given below: <u>Heading:</u>

- (a) Title of the idea- Should be catchy and attractive but related to the idea
- (b) Project Summary- Write about the model: what is the problem, how your idea solves that problem and application in real life/how it is useful for others.

An example of how to write the idea summary is given below.

#### Example:

#### Title of the Project : Travelling bag with folding seats

**Project Summary** : Many a times travellers have to stand while waiting for a bus or train at the bus/train station as the number of seats available are few. The student has developed a travelling bag where a folding seat has been incorporated. This can be unfolded and used for sitting while waiting for the bus/train thereby eliminating the discomfort while standing for long time. It will be especially useful for ladies and elderly.

# **<u>NOTE</u>**: This idea should be innovative, original (not copied from the internet), should be applicable in real life and have attractive title/ name.

#### TASK 2-WORKSHEETS

#### Instruction: Solve worksheets on a ruled A4 Sheet.

#### **Chapter 1-Nutrition in Living Organisms-Plants**

Q1. Give reason for the following

- a) Plants with variegated leaves cannot perform photosynthesis.
- b) Pitcher plant feeds on insects
- c) When vaseline is applied on both sides of a leaf of a plant, it becomes yellow and falls off.

Q2. During crop rotation, farmers often grow leguminous plants like beans or peas before planting other crops. Explain how symbiotic relationship in roots of leguminous plants benefits the soil and subsequent crops.

Q3. A girl took a leaf peel and had put it under the microscope, she observed that there were some tiny pores on the surface of leaves

a) What is the name of these pores?

b) What is the function of these pores?

Q4. Identify me:

- a) I am a plant that feeds on dead and decaying matter.
- b) I am a bacterium that lives in leguminous roots and help in fixing nitrogen.
- c) I am a green colour pigment present in leaves and must for photosynthesis.
- d) I am carbohydrate and initial product of photosynthesis.

Q5. How are the water and minerals absorbed by roots transported to different parts of the plant?

#### **Chapter 5-Heat**

Q1. Correct the given statements:

- a) Heat is an indicator of the degree of hotness or coldness of an object.
- b) Radiation is mode of transfer of heat that requires solid medium.
- c) Sea breeze is the breeze that flows from land surface to sea surface during night.
- Q2. Give reasons for the following:
  - a) The metal rim of cart wheel has smaller diameter with wheel.
  - b) Ice boxes are often made as doubled walled containers.
  - c) We are able to feel the heat on the other end of a copper rod if one end of the rod is heated.
  - d) We prefer white or light coloured clothes in summer
  - e) Fire brigade men often use shining brass caps.
- Q3. Differentiate between sea breeze and land breeze.
- Q4. Why the tea and coffee pots are generally made shinning bright?

Q5. Differentiate between conductors and insulators of heat?

TASK 3

Revise CH 1 and 5 for upcoming exam.



#### Write the answers on A4 size ruled sheets .

Q1. Define the following terms

i) Seismic waves ii) Geologist

Q2. Explain the transition of igneous and sedimentary rocks into metamorphic rocks.

Q3. Imagine yourself to be a geologist, on which two bases do you collect data about the interior of the earth?

Q4. Write three statements about the interior of the earth.

Q5. List five literary sources of the Medieval Period. What type of information do we get from these sources?

Q6. Imagine a group of people from the thirteenth century.

- a) How do you think they were able to exchange ideas?
- b) Mention any five things they would exchange ideas on?

Q7. During the tenth century CE who did the Turks work for and as what?

Q8. List three reasons why the Turkish invaders were successful in establishing their rule in India? Q9. Define the term **Constitution.** Mention any two guarantees the Indian Constitution gives to its citizens.

Q10. What is meant by secularism? Why did India opt for it?

Q11. Which Fundamental Right promotes social justice, fairness and human dignity? Write two main provisions of that right.

Q12. Babli is a seven year old girl selling pens at a traffic signal. Her mother wants her to study.

- a) Which two government programmes can she benefit from?
- b) Describe two reasons why people like them are unable to enjoy the benefits of various government schemes?

Q13. Explain the role of the media in keeping the government alert. (Three points)

Q14. Highlight the contribution of cinema in affecting our views. (Three points)

Q15. Do the map skill exercise given on pg 174 of your textbook ( chapter 20).

Revise CH 3,9 and 20 for the upcoming exam.



नोट :- दिए गए सभी प्रश्न PNB उत्तरपुस्तिका में कीजिए। सभी प्रश्नों के उत्तर विस्तार पूर्वक (80-100 शब्दों में )

लिखिए।

- प्रश्न1. पाठ 'बारहमासों के आधार पर लिखिए कि ग्रीष्म ऋतु के 3 महीने कौन से होते हैं और अपने पसंदीदा मौसम से संबंधित स्वरचित कविता लिखिए।
- प्रश्न2.'बारहमासा' कविता के आधार पर एक पोस्टर तैयार कीजिए। (ए 3 शीट पर )
- प्रश्न3. ग्रीष्म ऋतु की समयावधि लंबी होती जा रही है। इसके कारण और प्रभाव लिखिए। (कोई दो)
- प्रश्न4. बच्चों ने मंच की व्यवस्था किस प्रकार की?पर्दे की आड़ में खड़े अन्य साथी मन ही मन राकेश की तुरंत बुद्धि की प्रशंसा क्यों कर रहे थे?
- प्रश्न5. राकेश को गुस्सा भी आ रहा था और रोना भी। क्यों ?राकेश की जगह यदि आप होते तो नाटक कैसे संभालते ?
- प्रश्न6. यदि सयाल निर्मला की मदद न करती तो निर्मला के साथ क्या होता?
- प्रश्न 7. सच्ची मित्रता आधारित स्वरचित कहानी लिखिए।
- प्रश्न8. पाठ 'बातूनी' के आधार पर लिखिए कि ज़रूरत से ज्यादा बोलने के क्य क्या दुष्परिणाम हो सकते हैं?
- प्रश्न 9. पाठ 'बातूनी' में आए किन्हीं दो हास्य-व्यंग्य की पंक्तियो के उदाहरण बताइए।
- प्रश्न10.सयाल और निर्मला में अंतर और समानता लिखिए। (कोई 2)
- प्रश्न11.पाठ 'बातूनी' में लेखक ने सज्जन व्यक्ति को फिर कभी भी 'सज्जन' क्यों नहीं कहा ?
- प्रश्न12.अपना कम किसी अन्य से करवाने के फायदे और नुकसान लिखिए। (कोई 2)
- प्रश्न13. 'समय का सदुपयोग' विषय पर अनुच्छेद लिखिए।
- प्रश्न14. अपने मित्र और स्वयं के बीच, अपनी नई कक्षा और उसकी पढ़ाई के विषय में हुई बातचीत को संवाद के रूप में लिखिए।
- प्रश्न15. विदेश में रहने वाले मित्र को भारतीय ऋतुओं के विषय में बताते हुए पत्र लिखिए।



कक्षा – सप्तमी विषय– संस्कृत ग्रीष्मावकाशीय गृह कार्यम् दीर्घ उत्तरीय प्रश्नावली

अभ्यासस्य महत्वं किम् अस्ति?
अभ्यासेन के गुणाः विकसिताः भवन्ति?
"बुद्धि एव उत्तमा" इति विषयं अधिकृत्य एकां अन्यां कथां लिखन्तु।
भवन्तः योग्यता प्राप्तुं किं किं कुर्वन्ति?
अभ्यासेन मनः केन प्रकारेण नियन्त्रितं भवति?
बुद्धेः विकसनं कथं भवितुं शक्नोति?
अभ्यासस्य अन्यानि उदाहरणानि लिखन्तु।
संस्कृत संख्या 1–30 पर्यन्तं लिखन्तु।
षरमो गुरुः कः? उदाहरणं दत्वा लिखन्तु।
बुद्धेः उपयोगेन समाजस्य विकासः कथं भवति?
अभ्यासेन मानवः आत्मविश्वासः कथं वर्धते?
अभ्यासेन मानवः आत्मविश्वासः कथं वर्धते?
पठ् गम् चल् वद् लिख् धातूनां रूपाणि लिखन्तु।



Kindly complete the 'Step by Step' Art Book up to page number 20. This will help you practice important art techniques like line control, shading, and coloring, and support the completion of our art syllabus.