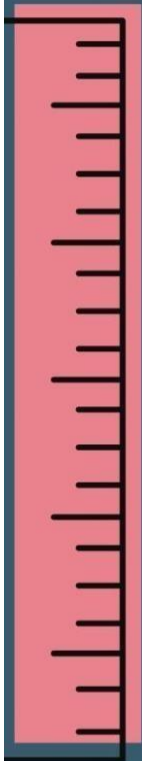




D.B N.VIDYA MANDIR
MUBARAK MANDI, JAMMU

Class -IX

HOLIDAYS
ENGAGEMENT



Principal's Message

Summer Vacation 2025-26

Dear Students,

Summer is here—a season of warmth, joy, and a well-earned break. As you step into these relaxing weeks, I encourage you to make the most of this precious time.

Vacations are not just for rest, but also for reflection and renewal. While the holiday homework is thoughtfully designed to keep your minds engaged, it is equally important to nurture your creativity, curiosity, and well-being. Learn something new, read a good book, spend time with your family, and don't forget to play and laugh wholeheartedly.

To our youngest learners—use this time to explore through play, colour your world, and listen to stories that feed your imagination.

To our senior students—balance relaxation with reflection. Use this time to revisit goals, sharpen your skills, and return with greater focus and energy.

Remember, learning never stops—it simply takes different forms. Stay active, stay safe, and take care of your health. Let's return after the break, refreshed and ready to grow even more—together.

Wishing you and your families a happy, healthy, and fulfilling summer break.

Warm regards,

Priya Singh

Principal

DBN Vidya Mandir, Mubarak Mandi

Dear Students,

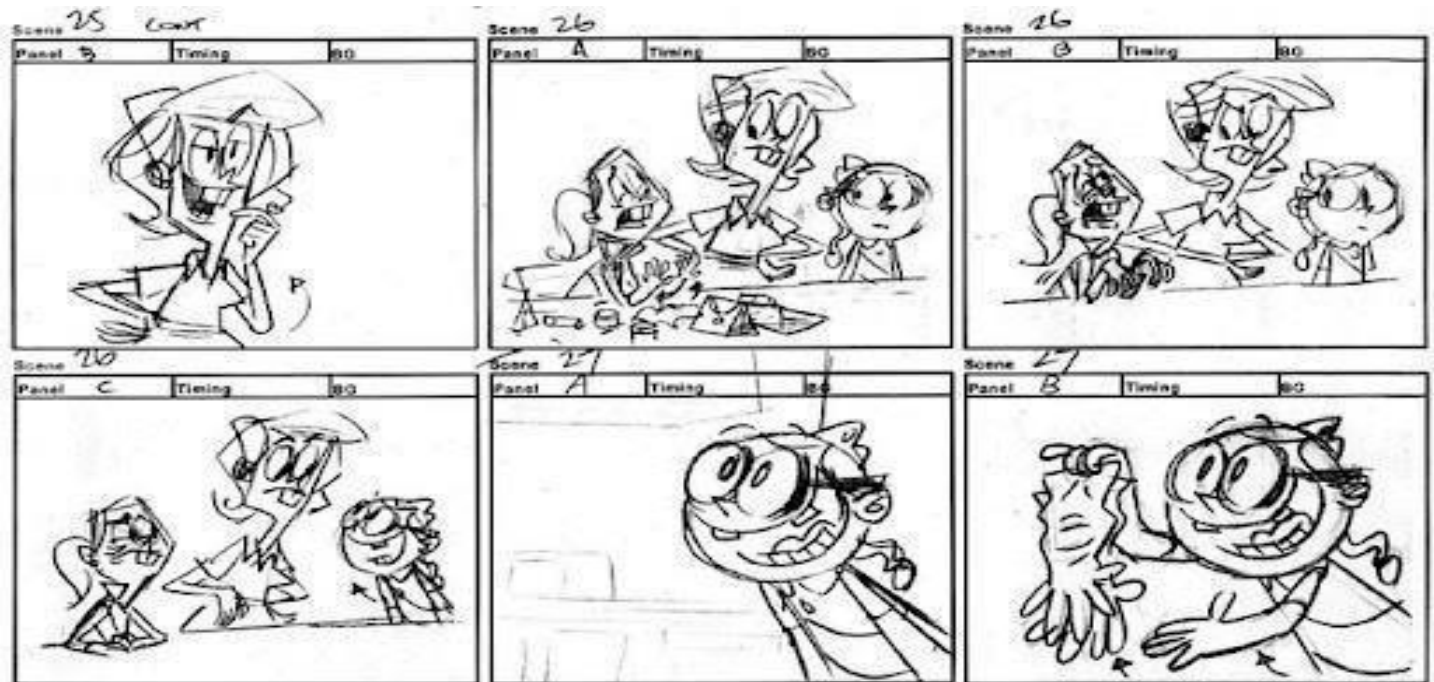
“Learn everything you can, anytime you can, from anyone you can; there always will come a time when you will be grateful you did.”

○ **Sarah Caldwell**

Vacation is the time that we all eagerly wait for. We all make plans to enjoy, relax and empower ourselves during these days. This summer vacation the Holidays Homework has been designed with the motto.

○ **“Have Fun as you Learn”.**

TO DOs



Note: This is important as the activity will be assessed for purposes of internal assessment. Credit will be given to the task which is original and authentic.

•TASK 3 (COMPULSORY TASK FOR ALL) - Draft a diary-entry in about 100-150 words on any one of the following questions. Describe a random act of kindness you witnessed or performed. Write about a time when you saw or did something kind without expecting anything in return. What was the act? Who was involved? How did it make you feel? How did it impact others?

OR

Describe an instance when a piece of art (poem, song, painting) changed your perspective. Think about a time when you interacted with art that profoundly affected you. What was the piece of art? What was its message or theme? How did it influence your thoughts or feelings about a particular topic or life in general?

Note: Diary Entry question to be done in the English notebook.



- 1) पुस्तक 'भास्कर भाग-1' में निहित संस्मरण 'सांवले सपनों की याद' का पठन करे तथा लेखक 'जाबिर हुसैन' के जीवन परिचय से संबंधित लघु प्रश्नोत्तर बनाएं।
- 2) कवयित्री 'ललदयद' द्वारा रचित 'वाख' कंठस्थ करें तथा उनकी सप्रसंग-व्याख्या लिखें।
- 3) कोई दो औपचारिक पत्र लिखें।
- प्रश्न 1 से 3 कार्यपुस्तक में लिखें।
- 4) परियोजना कार्य:- हिन्दी भाषा से संबंधित प्रभावशाली और प्रेरणादायक नारा लिख कर सुंदर और आकर्षक बुकमार्क बनाएं।
- 5) देवनागरी क्रम अनुसार रोजाना 5 शब्दार्थ लिखते हुए एक छोटा शब्दकोश तैयार करें।

नोट:- अपने हिंदी शब्दकोश प्रोजेक्ट को आकर्षक और रचनात्मक बनाने के लिए आप नीचे दिए गए सुझावों का इस्तेमाल कर सकते हैं:-

1. रंग-बिरंगे पृष्ठ और सजावट

- हर अक्षर (जैसे अ, आ, इ...) के लिए अलग-अलग रंग के पृष्ठ या बॉर्डर का प्रयोग करें।
- वर्ड बॉक्स को हाइलाइट करने के लिए स्केच पेन या मार्कर का प्रयोग करें।

2. चित्रों का प्रयोग

- हो सके तो कुछ शब्दों के साथ संबंधित चित्र लगाएँ (इंटरनेट से प्रिंट करके या खुद ड्राँ करके)।
- उदाहरण: "परिधान" के साथ वस्त्र का चित्र।

3. फ्लिप टैब या इंडेक्स बनाएं

- देवनागरी अक्षरों (अ से ह तक) के छोटे टैब्स पेज के किनारे लगाएं ताकि पेज फटाफट खोला जा सके – जैसे एक मिनी डिक्शनरी।

4. वर्ड कार्ड्स / पॉप-अप फ्लैप्स

- शब्दों को फ्लैप के नीचे छिपाकर रखें – जब फ्लैप उठाएं तो नीचे अर्थ और वाक्य दिखे।

5. कवर पेज को सुंदर बनाएं

- एक क्रिएटिव टाइटल लिखें: "मेरे शब्द – मेरी भाषा", "शब्दों की दुनिया", आदि।
- कवर पेज पर आकर्षक डिज़ाइन बनाएं – बुक, कलम, अक्षरों की माला आदि।

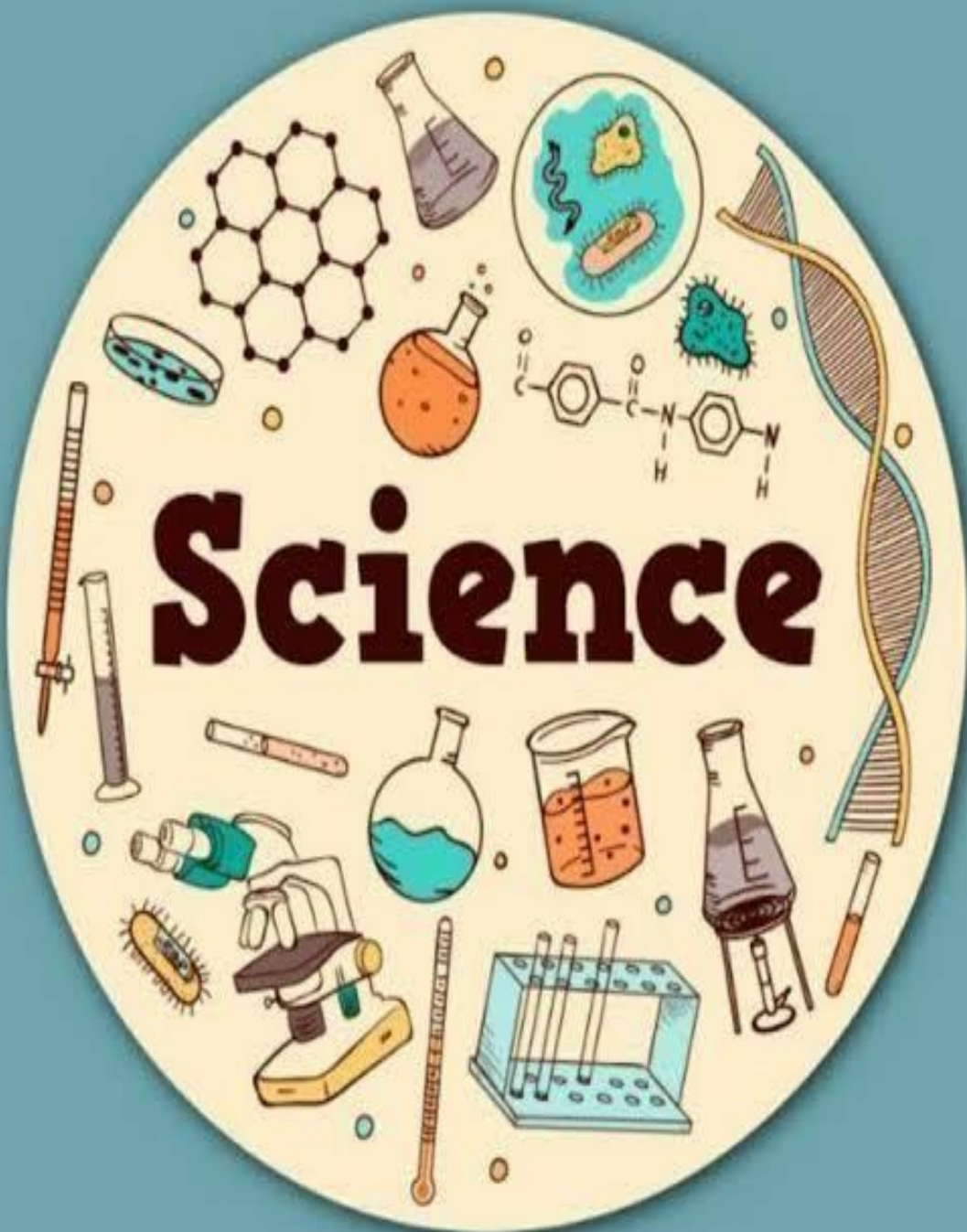
6. लेख (हैंडराइटिंग)

- अच्छे हस्तलेखन का इस्तेमाल करें।

- शीर्षकों (टाइटल्स) को बोल्ड और रंगीन रखें।

7. एक कोना “मजेदार शब्दों का”

- अंत में एक पेज रखें जिसमें मजेदार या कम सुने गए हिंदी शब्द हों जैसे:
- चतुरंग, गपशप, झंकार, धमाल आदि।



Biology

- Chapter: The Fundamental Unit of Life

- **Objective:**

- **To understand the structure and function of cells through hands-on activities, models, and research-based projects.**

- Part A: Research-Based Activities (Notebook Work)

- 1. Cell Theory Timeline**

- **Research and create a timeline of the discovery and development of cell theory.**
- **Include contributions of scientists like Robert Hooke, Anton van Leeuwenhoek, Schleiden, Schwann, and Virchow.**
- **Use pictures and dates to make it visually appealing.**

- **Comparative Table of Cell Types**

- **Create a comparative table between Prokaryotic and Eukaryotic Cells.**
- **Also compare Plant and Animal Cells with diagrams and labeled parts.**

- Part B: Activity-Based Projects (Creative Work)

- **3D Cell Model (Choose any one)**

- **Make a 3D model of a plant cell or animal cell using materials like thermocol, clay, cardboard, or eco-friendly materials. - Label all organelles clearly.**

- **Cell City Analogy Poster**

- **Create a poster where the cell is compared to a city (e.g., Nucleus as City Hall, Mitochondria as Power Plant, etc.).**
- **Explain the analogy creatively using drawings and labels.**

- **Microscopic World Drawing / Collage**

- **Create a drawing or collage of various types of cells seen under a microscope (e.g., onion peel, cheek cells, bacteria).**

- **Add labels and write a short note about each.**

Part C: Project Report (Portfolio)

● **Title: “The Cell – A Fundamental Unit of Life”**

● **Students must prepare a mini-project report (4–6 pages) including:**

- **Introduction to cells**
- **Structure and functions of major cell organelles**
- **Difference between plant and animal cells**
- **Pictures of models and activities done**
- **Conclusion: Why cells are called the fundamental unit of life**

● **Instructions:**

- **All work must be done neatly and creatively.**
- **Originality and effort will be appreciated.**
- **Submit the project as a file/folder with a cover page, index, and acknowledgment.**

Physics

- 1. Define uniform and non-uniform motion with one example each.**
- 2. Differentiate between speed and velocity.**
- 3. What does negative acceleration (retardation) mean?**
- 4. Can the speed of an object be zero while its acceleration is not? Explain.**
- 5. Why is the motion of a car around a circular track at constant speed considered accelerated motion?**
- 6. Derive three equations of motion graphically.**
- 7. Differentiate between distance and displacement.**
- 8. Define scalar quantity and vector quantity.**
- 9. Define uniform and non-uniform acceleration.**
- 10. Explain the concept of uniform circular motion with an example.**
- 11. Why do we consider velocity a vector quantity and speed a scalar?**

Numerical Problems:

12. A car starts from rest and accelerates uniformly at 4 m/s^2 for 5 seconds. Calculate:

- **Final velocity**
- **Distance covered**

13. A body travels 300 m in 3 minutes. Calculate its speed in m/s.

14. A train is moving at 72 km/h. Convert this speed to m/s.

15. A scooter decreases its velocity from 30 m/s to 10 m/s in 4 seconds. Find its acceleration.

16. Using the equation $v^2 = u^2 + 2as$, find the distance covered when:

- **Initial velocity (u) = 0**
- **Final velocity (v) = 20 m/s**
- **acceleration (a) = 2 m/s^2**

Project Work

- **To study the motion of the body along an inclined plane.**

Chemistry

1. State any two characteristics of particles of matter.

2. Define boiling and mention its boiling point for water.

3. Why does the temperature remain constant during the change of state?

4. What is the difference between evaporation and boiling?

5. Name and define the two types of latent heat.

6. Why do we feel cool when we apply alcohol on our skin?

7. Why is it advisable to wear cotton clothes in summer?

8. A substance directly changes from solid to gas on heating and gas to solid on cooling. Name the process and give one example.

9. Convert the following temperature to Kelvin:

- a) 25°C
- b) -10°C

10. Draw a diagram showing the interconversion of three states of matter (solid, liquid, gas) and label all the processes involved.

11. Why is steam more dangerous than boiling water at the same temperature?

12. Explain why ice floats on water.

13. What is diffusion? Give one daily life example.

14. What is meant by boiling point and melting point?

15. State three differences between solids, liquids, and gases.

Project Work

-To study the solubility of three different available substances in water at different temperatures and determine

- **Effect of temperature on solubility**
- **Magnitude of solubility at different temperatures and**
- **Orders of solubility**



Part A: History

- **Chapter: Socialism in Europe and the Russian Revolution**

-Activities:

- **Timeline Chart (Art Integrated):** Create a colorful timeline of key events from the French Revolution to the Russian Revolution (1789–1917). Include sketches or symbols representing each major event.
- **Role Play Script (Subject Enrichment):** Write a short play/dialogue between Karl Marx and a Russian peasant discussing socialism and revolution. You can act it out or record a short video.

- **Project File: Make a project file covering:**

- **Causes of Russian Revolution**
- **Major figures (Lenin, Stalin)**
- **Impact on the world**

-YouTube Resources:

- **Socialism in Europe & Russian Revolution - Animated Explanation:**
 - https://www.youtube.com/watch?v=0D7o2P_GfYg
- **Socialism in Europe and the Russian Revolution - Full Chapter:**
 - <https://www.youtube.com/watch?v=0cBq7qCUz7Y>

Part B: Geography

- **Chapter: Physical Divisions of India**

Activities:

- **Map Activity (Art Integrated): Make a 3D map of India's physical features using clay, paper, or cardboard.**
- **Photo Collage: Create a collage of photos showing landforms from each division: Himalayas, Northern Plains, Plateau, Coastal Plains, Islands, etc.**
- **Project File: Write a brief note on each division:**
 - **Features**
 - **States covered**
 - **Importance**

YouTube Resources:

- **Physical Features of India | Class 9 Geography:**
- <https://www.youtube.com/watch?v=ntHyi1eJcE0>
- **3D Map Model of India - Physical Features:**
- <https://www.youtube.com/watch?v=F7b3hOeH7y0>

Part C: Civics

- **Chapter: Electoral Politics**

Activities:

- **Poster Making (Art Integrated): Create a campaign poster for a fictional election candidate. Highlight party symbol, slogan, and**

promises.

● **Mock Election Project: Organize a mock election at home or school. Include:**

- **Voter list**
- **Ballot papers**
- **Counting process**

• **Project File: Cover:**

- **Steps of election process in India**
- **Role of Election Commission**
- **Case study: 2014 or 2019 General Elections**

YouTube Resources:

● **Electoral Politics - Class 9 Civics:**

<https://www.youtube.com/watch?v=UYcN5GZovC4>

● **How Elections Work in India - Explained:**

<https://www.youtube.com/watch?v=E0B66M4XtxI>

General Guidelines:

- **Use A4 sheets or a spiral file.**
- **Decorate with drawings, stickers, or borders.**
- **Submit the homework on the first day after vacation.**
- **Be original – no copying from the internet directly.**



1. Express 0.777... as a rational number in the form of p/q .
2. Find two irrational numbers between 3 and 4.
3. Express $5/8$ as a terminating decimal.
4. Simplify: $(3^4 \times 3^{-2})/3$
5. Convert the following decimal into a rational number: 0.6363...
6. Find two rational numbers between $1/3$ and $1/2$.
7. Express $7/16$ as a decimal. Is it terminating or non-terminating?
8. Write three irrational numbers between 1 and 2.
9. Simplify: $(2^5 \times 2^{-3})/2^2$.
10. Express the following in the form $a+b\sqrt{c}$: $[(\sqrt{3}+\sqrt{2})]^2$
11. Rationalise the denominator: $5/\sqrt{2}$.
12. Find the value of: $[(1/8)]^{(-2)/3}$
13. State whether the following number is rational or irrational:
0.101001000100001...
14. Rationalise the denominator: $1/\sqrt{2}$
15. Rationalise the denominator and simplify $3/\sqrt{2}$.
16. Rationalise the denominator of $1/(\sqrt{7}+2)$.
17. Rationalise and simplify $5/(\sqrt{3}-\sqrt{2})$
18. Rationalise the denominator of the following expression $4/(\sqrt{2}+\sqrt{3})$.
19. Rationalise and simplify $2/(\sqrt{3}-1)$
20. Rationalise the denominator of: $1/(3-\sqrt{2})$.
21. Simplify the following:
 - $(5+\sqrt{7})(2+\sqrt{5})$
 - $(5+\sqrt{7})(5-\sqrt{7})$
 - $(5+\sqrt{7})^2$
 - $(9-\sqrt{7})^2$
22. Represent $\sqrt{8.3}$ on the number line.
23. Represent $\sqrt{3}$ on the number line.
24. Using Euclid's axioms, prove that:
25. Things which are double of the same things are equal to one another.
26. Using Euclid's axioms, prove:
 - If equals are added to equals, the wholes are equal.
27. Which of Euclid's postulates is used in the construction of a circle?
28. Define a point and a line as per Euclid's definitions.
29. State and explain Euclid's first postulate.
30. What is the difference between a postulate and an axiom?
31. Represent $\sqrt{5}$ on the number line.

PROJECT WORK:

Write all formulas of surface area volume of cube, cuboid, cone, cylinder along with diagrams on chart.



موسم سرما کی تعطیلات کا کام جماعت : نویں

1-مضمون نویسی -مندردیل میں کسی ایک مضمون پر تقریباً 300 الفاظ میں مضمون لکھے -

1-کسی صحت افزا مقام کی سیر

2-سائنس اور انسان

3-علم کے فائدے

2-اپنی دوست کو خط لکھیں کی آپ نے موسم سرما کی چھٹیوں کیسے گزاری -

اپنے والد صاحب کو امتحان کے نتائج کے بارے میں اطلاع دینے والا خط لکھیں -

3-اردو کہاں پیدا ہوئی پر ایک مکمل نوٹ لکھیں -

4-پورجیک ورک ،اردو کی کتاب میں شامل کسی ایک غزل کا انتخاب کرکے شاعر کی حالات زندگی اور اشعاروں کی تشریح کریں -

5۲-اردو کی کتاب سے ایک پیراگراف منتخب کریں اور املا کی مشق کریں -



