

# NANKANA SAHIB PUBLIC SCHOOL, GILL PARK LDH

HOLIDAYS HOMEWORK-2026-27



## SUBJECT - ENGLISH

**Dear Students, Complete the following holidays homework neatly and creatively.**


  **BBC** -  Do worksheets of:

- Synonyms
- Antonyms
- Idioms and Phrases
- Homophones
- Analogies

 Do the first **12 Unseen Passages**.

 **CREATIVE ACTIVITY** 


*Recycle and reuse a plastic bottle to make anything creative of your choice.*


 (Page No. 63 – Level Up Vantage)

 PERIODIC TEST – 2 (Revise the following for P.T.2)

 Test to be held on: **15-07-2026**

 Syllabus

 **Unit 1 B** Today's Entertainment

 C. A Melodious Companion.

### **Unit – 2**

 A. Nature's Queen

 Determiners

 Alliteration

 Simile

 Diary Entry

**Art Integrated Project based on Punjab and Orisha**

**Dance Forms Representation**

**Depict and describe: Bhangra and Odissi**

 **HAPPY HOLIDAYS & HAPPY LEARNING** 

ननकाना साहिब पब्लिक स्कूल, गिल पार्क, लुधियाना

- ग्रीष्मावकाश गृहकार्य • कक्षा सातवीं • विषय हिंदी
- पाठ-1 से पाठ-4 तक के प्रश्नोत्तर, शब्दार्थ, अभ्यास कार्य और संपूर्ण व्याकरण कार्य की दोहराई करें।
- पाठ-4 'पानी रे पानी' के आधार पर विभिन्न कार्यों में प्रयोग किए जाने वाले पानी का चित्र सहित वर्णन करें।
- भारत की मुद्रा रुपए पर '₹' संकेत है, इसी प्रकार अन्य देशों की मुद्राएं और उनके संकेत (कोई दस देश) ए4 शीट पर बनाओ।
- मान लीजिए कि फूल और काँटे के बीच बातचीत हो रही है। उनकी बातचीत को अपनी कल्पना से संवाद रूप में लिखिए।
- आपके मित्र ने 'खिलौनों' की नई दुकान खोली है। उसके लिए विज्ञापन तैयार करें।
- कारक के भेदों की एक तालिका बनाकर A4 शीट पर लिखिए।
- अपठित गद्यांश: निम्नलिखित गद्यांश को पढ़कर नीचे दिए प्रश्नों के उत्तर लिखिए-

हर वर्ष विश्व में करोड़ों लोग भूखों मर रहे हैं। उनमें अधिकांश विकासशील देशों में हैं। वे ऐसे देशों में रहते हैं जहाँ लोगों को जीवन की न्यूनतम आवश्यकताएँ भी उपलब्ध नहीं हैं। भारत में भी ऐसी ही स्थिति है। जनसंख्या वृद्धि के कारण लोगों को जीवन की न्यूनतम आवश्यकताएँ भी उपलब्ध नहीं हो पा रही हैं। जनसंख्या नियंत्रण के लिए सरकार द्वारा चलाए गए कार्यक्रमों को जनता ने सेवा न मानकर नौकरी समझा। इसलिए वे कार्यक्रम असफल रहे। शिक्षा का अभाव, धार्मिक परंपराएँ, सामाजिक अंधविश्वास, बाल-विवाह तथा बहु-विवाह जनसंख्या नियंत्रण में बाधक हैं। इन कारणों से उत्पन्न बाधाओं को स्पष्ट रूप से समझकर उनका निराकरण करने पर ही जनसंख्या वृद्धि पर नियंत्रण किया जा सकता है।

प्रश्न:

- (क) करोड़ों लोगों के भूखों मरने के क्या-क्या कारण हो सकते हैं?
- (ख) जनसंख्या नियंत्रण से क्या लाभ होंगे?
- (ग) जनसंख्या नियंत्रण के कार्यक्रमों की असफलता के मुख्य कारण लिखो
- (घ) गद्यांश का उपयुक्त शीर्षक लिखिए-

- नीचे दी गई वर्ग पहेली में से संज्ञा शब्द छाँटकर , उनका भेद लिखिए।

भा	र	त	ग	गो	भी
लू	श	बु	रा	ई	इ
श	ह	द	गं	गा	हि
मि	र	वा	म	हि	मा
ठा	गु	ई	क	म	ल
स	छा	ग	क्षा	ग	य

- अनुच्छेद लेखन:

'विद्यार्थी जीवन' या 'विज्ञान : वरदान या अभिशाप' में से किसी एक विषय पर 100-120 शब्दों में अनुच्छेद लिखो।

- पत्र लेखन: (कोई एक)

अनुशासन का महत्व बताते हुए छोटे भाई को पत्र लिखो  
या

आपके पड़ोस में बिजली की दुकान से तेज आवाज में गाने बजने की शिकायत करते हुए थानाध्यक्ष को पत्र लिखो।

- कल्पना शक्ति के आधार पर लेखन: "अगर बिजली नहीं होगी तो जीवन कैसा होगा" विषय पर 100 शब्दों में अपने विचार लिखो।

- Art Integrated Project: कला एकीकृत परियोजना योजना

Roll no (1-20)पंजाब और ओडिशा की जलवायु, मिट्टी और भौगोलिक स्थिति को दर्शाती एक परियोजना (file)तैयार करें।

Roll no (21-40)पंजाब और ओडिशा की पारंपरिक वेशभूषा और खानपान को दर्शाती हुई परियोजना ( file)तैयार करें।

### 1. ਪਾਠ ਪੜ੍ਹਾਈ

👉 \*ਪੁਸਤਕ ਦੇ ਪਾਠ 1 ਤੋਂ 5 ਤੱਕ ਚੰਗੀ ਤਰ੍ਹਾਂ ਦੁਹਰਾਈ ਕਰੋ।

👉 ਰੋਜ਼ ਅਖ਼ਬਾਰ ਪੜ੍ਹੋ।

### 2. ਲਿਖਤੀ ਕਾਰਜ

👉 “ਮੇਰੀਆਂ ਗਰਮੀ ਦੀਆਂ ਛੁੱਟੀਆਂ” ਵਿਸ਼ੇ 'ਤੇ 150 ਸ਼ਬਦਾਂ ਦਾ ਲੇਖ ਲਿਖੋ।

👉 ਮੇਰੇ ਜੀਵਨ ਦਾ ਉਦੇਸ਼ ਵਿਸ਼ੇ 'ਤੇ 150 ਸ਼ਬਦਾਂ ਦਾ ਲੇਖ ਲਿਖੋ।

👉 ਪੜ੍ਹਾਈ ਵਿੱਚ ਖੇਡਾਂ ਦਾ ਮਹੱਤਵ ਵਿਸ਼ੇ 'ਤੇ 150 ਸ਼ਬਦਾਂ ਦਾ ਲੇਖ ਲਿਖੋ।

### 3. ਵਿਆਕਰਨ

👉 ਸੰਬੰਧਕ ਤੇ ਤਸਵੀਰਾਂ ਸਹਿਤ ਚਾਰਟ ਬਣਾਓ (ਰੋਲ ਨੰਬਰ 1-18)

👉 ਯੋਜਕ ਤੇ ਤਸਵੀਰਾਂ ਸਹਿਤ ਚਾਰਟ ਬਣਾਓ (ਰੋਲ ਨੰਬਰ 19-38)

### 4. ਰਚਨਾਤਮਕ ਕਾਰਜ

👉 ਪੰਜਾਬ ਦੇ ਕਿਸੇ ਇੱਕ ਲੋਕ ਮੇਲੇ ਬਾਰੇ ਜਾਣਕਾਰੀ ਇਕੱਠੀ ਕਰਕੇ ਚਾਰਟ ਬਣਾਓ।

👉 ਆਪਣੇ ਮਨਪਸੰਦ ਕਵੀ ਜਾਂ ਲੇਖਕ ਦੀ ਤਸਵੀਰ ਲਗਾ ਕੇ 10 ਲਾਈਨਾਂ ਲਿਖੋ।

### 5. ਪ੍ਰੋਜੈਕਟ ਕਾਰਜ

👉 ਉਡੀਸਾ ਅਤੇ ਪੰਜਾਬ ਦੀ ਤੁਲਨਾ ਕਰਦੇ ਹੋਏ (ਜਾਣ ਪਛਾਣ, ਬੋਲੀ, ਪਹਿਰਾਵਾ, ਪ੍ਰਸਿੱਧ ਲੇਖਕ, ਪ੍ਰਸਿੱਧ ਸਾਹਿਤ ਪ੍ਰਸਿੱਧ ਸਥਾਨ) ਪ੍ਰੋਜੈਕਟ ਬਣਾਓ।

👉 ਯੁੱਧ ਦੇ ਭੈੜੇ ਨਤੀਜਿਆਂ ਤੋਂ ਹੋਣ ਵਾਲੇ ਨੁਕਸਾਨਾਂ ਬਾਰੇ ਤਸਵੀਰਾਂ ਸਹਿਤ ਆਪਣੇ ਸ਼ਬਦਾਂ ਵਿੱਚ ਲਿਖੋ।

👉 ਆਪਣੀ ਕੋਈ ਵੀ ਸਵੈ ਰਚਨਾ (ਕਵਿਤਾ, ਕਹਾਣੀ, ਚੁਟਕਲੇ, ਲੇਖ) ਦੀ ਮੈਗਜ਼ੀਨ ਬਣਾਓ।

👉 ਅਪ੍ਰੈਲ ਅਤੇ ਮਈ ਮਹੀਨੇ ਵਿੱਚ ਕਰਵਾਏ ਪਾਠ ਪੁਸਤਕ ਅਤੇ ਵਿਆਕਰਨ ਦੇ ਸਿਲੇਬਸ ਦੀ ਦੁਹਰਾਈ ਕਰੋ।

### ਹਦਾਇਤਾਂ

📖 ਸਾਰਾ ਕੰਮ ਸਾਫ਼ ਅਤੇ ਸੁੰਦਰ ਲਿਖਾਈ ਵਿੱਚ ਕਰੋ।

🕒 ਸਮੇਂ 'ਤੇ ਕੰਮ ਪੂਰਾ ਕਰੋ।

🏠 ਸਕੂਲ ਖੁਲ੍ਹਣ ਵਾਲੇ ਪਹਿਲੇ ਦਿਨ ਕੰਮ ਜਮ੍ਹਾਂ ਕਰਵਾਓ।

## SUBJECT – MATHEMATICS

### 1. Prepare Chapter -1,2,3,6

Prepare Model according to assigned Roll Nos. for the particular Subject

For Model Making\*Maths\* → 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36, 39

### 2. PPT should also be in groups as assigned.

\*For PPT: Maths → 1, 4, 7, 10, 13, 16, 19, 22, 25, 28, 31, 34, 37, 40

### Assignment

1. Write 4 tenths and 7 hundredths as a decimal.
2. Convert 3.05 into a fraction.
3. Write the place value of 6 in 23.684.
4. Round off 5.678 to the nearest tenth.
5. Add:  $12.34 + 4.56$
6. Subtract:  $8.945 - 2.136$
7. Multiply:  $3.6 \times 1.2$
8. A litre of milk costs ₹23.75. Find the cost of litres of milk.
9. A ribbon of length 5.25 m is cut into 3 equal parts. What is the length of each part?
10. Write the decimal number 7.325 in expanded form and in words.
11. The length of a wall is 12.5 m and its height is 2.4 m. Find the area of the wall in square metres
12. What is the parity of sum of 4 odd numbers?
13. What is the result of adding two consecutive number?
14. What is the first number of Virahanka sequence?
15. What is the parity of product of an even and an odd number?
16. What is the parity of the number of small squares in the grid  $5 \times 4$ ?
17. Write any 4 consecutive numbers and find their sum. Is the sum even or odd? Also, find its parity.
18. What are the next 3 numbers of the Virahanka sequence after 610 and 987?
19. If we create a  $3 \times 3$  magic square using the set of numbers 3 to 11, then what will be number of centre of magic square
20. If each number of magic square increased by 5, then is the resulting grid also a magic square? How does the magic sum change in this case?
21. State whether the parity of the numbers or the expression is odd or even. Put a '✓' mark in appropriate box.

	Number or expression	Odd Parity	Even parity
(i)	$3n + 12$	(ii)	$2n + 8$
(iii)	300120	(iv)	$12n - 24$
(v)	$6n + 18$	(vi)	501

22. Fill the following table by placing commas and writing their number names according to Indian system: writing their number names according to Indian system:

Numbers	Insert commas	Number name
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- (i) 234567                      (ii) 987654321  
 (iii) 567890123              (iv) 12345678              (v) 10000001

23. A school is planning a trip for students. The total cost of the trip is ₹3,75,678 and the school has collected only ₹1,89,543.

- (i) Estimate the remaining amount needed to cover the trip costs by rounding each amount to nearest ten thousand.
- (ii) Is the actual needed greater than or less than 2,00,000? Why?
- (iii) What is the actual amount needed?

24. A company sold two products. The first product is sold for ₹6,89,345 and the second product is sold for ₹4,56,789.

- (i) Estimate the total revenue made by the company.
- (ii) Is the actual revenue greater than or less than 12,00,000? Why?
- (iii) What is the actual revenue made by the company?

25. The Thoughtful Thousands only has a +1000 button. How many times should it be pressed to show

- (i) Three thousand?                      (ii) 10,000?
- (iii) Fifty three thousand?              (iv) 90,000?
- (v) One lakh?                              (vi) .....? 153 times
- (vii) How many thousands are required to make one lakh?

26. For each number given below, write expressions for at least two different ways to obtain the number through button clicks. Think like Chitti and be creative.

- (i) 8,300              (ii) 40,678

27. Find quick ways to calculate these products.

- (i)  $2 \times 1768 \times 50$               (ii)  $72 \times 125$               (iii)  $125 \times 40 \times 8 \times 25$

28. What are the smallest and greatest 8-digit numbers?

29. Estimate the sum of 1,49,360 and 2,39,981 to the nearest lakh.

30. Which is greater  $500 + 150$  or  $510 + 100$  or Which is smaller  $250 - 100$  or  $250 - 90$ ?

31. Neha climbs 8 metres up a ladder and then goes down 3 metres. Write an expression to show how high she is from the ground. Further, check whether the commutative property of addition holds or not.

32. Find the value of the following expression

$$2 - 4 + 6 - 8 + 10 - 12 + 14 - 16 + 18 - 20$$

### Crossword Puzzle

Fill the crossword puzzle with the help of the following clues Across

33.  $13 + 5$ ,  $20 - 14$ ,  $16 \times 5$ , etc. are called.....expressions.

34. The process of exchanging the positions of two terms or numbers or elements.

35. Number of terms in expression  $24 - 3 \times 6$

36.. ..... of 36 and 45 can be 9.

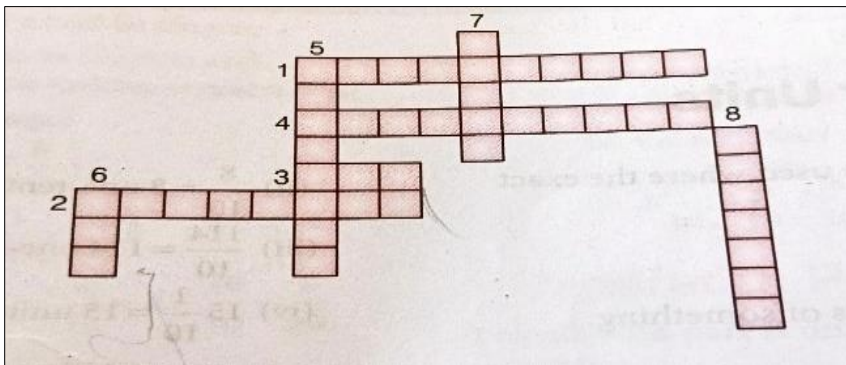
\*Down\*

37. The operator which is commutative and associative.

38. Grouping the terms together does not change the .....

39.. Number of terms in expression  $24 - 3 \times 6 + 5$

40. If ..... is preceded by a subtraction sign, then it changes all the signs of terms inside it.



## **SUBJECT - SOCIAL SCIENCE**

**Make the following PPTs and Models according to your Roll No.'s**

### **I. Models:**

<b>S.No.</b>	<b>Topics of Models</b>	<b>Roll No</b>
1	Types of market	2 and 5
2	Model on relief features of India	8 and 11
3	Weather station model	14 and 17
4	Barter system vs modern money system	20 and 23
5	Model of city government	26 and 29
6	Mini market scene	32 and 35
7	Model on Banking system	38 and 41

### **II. PPTS:**

<b>S.No.</b>	<b>Topics of PPTS</b>	<b>Roll No</b>
1	Natural Disasters (Cyclone, floods)	3 and 6
2	Different forms of Government.	9 and 12
3	Fundamental Rights and Duties	15 and 18
4	Mauryan Empire	21 and 24
5	Gupta Empire	27 and 30
6	Constitution of India	33 and 36
7	Different Markets	39

### **III. Prepare chart on A-4 size sheet**

<b>S.No.</b>	<b>Topic</b>	<b>Roll No</b>
1	Layers of the Earth	1-10
2	Natural vegetation of India	11-20
3	Preamble of our constitution	21-30
4	Important Rulers of India	31-40

### **IV. Learn and Do written practice of syllabus for weekly Test**

**Chapter-2** Understanding the Weather

**Chapter-5** The Rise of Empires

### **V. Complete notebooks with diagrams and activities.**

### **VI. Do the assignment also on separate notebook.**

#### **One Word Questions**

1. What instrument measures temperature?
2. What do we call moving air?
3. Which layer of air surrounds the Earth?
4. What is frozen rain called?
5. What is the process of water turning into vapor?
6. Who founded the Mauryan Empire?
7. Which emperor spread Buddhism widely?

8. What is the capital of the Mauryan Empire?
9. Which war changed Ashoka's life?
10. What is a ruler called in an empire?
11. What system involves exchange without money?
12. What do people exchange in barter?
13. Which modern item replaced barter in trade?
14. What is buying and selling called?
15. What do we call a place where goods are sold?
16. Which government is ruled by the people?
17. Who is the head of a monarchy?
18. What do citizens do during elections?
19. What is the group of people who make laws called?
20. Which system gives equal rights to citizens?

### **Case Study Question 1**

“Passage: Trade, Culture, and Power in the Sātavāhana Empire The Sātavāhanas ruled a vast region of the Deccan and were known for their strong trade networks, both inland and maritime. Their empire spanned areas like present-day Andhra Pradesh, Maharashtra, and Telangana. Coins with images of ships suggest advanced shipbuilding and international trade links with the Roman Empire. Agriculture flourished along the Krishna-Godavari basin, supporting economic stability. Inscriptions from the Naneghat caves mention Queen Gautamī Balaśhrī and her patronage of Vedic and Buddhist practices, land donations, and ritual performances like the aśhvamedha yajña. These inscriptions were in the Brahmi script and even contained early Indian numerals, showing cultural and mathematical advancements of the time.

- Q1. What does the depiction of ships on Sātavāhana coins primarily indicate?
- Q2. Why are the Naneghat inscriptions considered important historical sources?
- Q3. Queen Gautamī Balaśhrī's role in the empire highlights what unique tradition?
- Q4. Which factor did not contribute to the prosperity of the Sātavāhana empire?

### **Case Study Question 2**

Passage: Cultural Exchanges through Indo-Greeks and Kuṣhāṇas

After the Mauryas, the northwest of the Indian subcontinent saw the arrival of Indo-Greeks and later Kuṣhāṇas. These rulers, although foreign in origin, assimilated into Indian society, blending Greek and Indian elements in art, religion, and governance. Coins from the Indo-Greeks depicted Indian deities like Vāsudeva-Kṛiṣhṇa and Lakṣhmī, showing religious tolerance. The Heliodorus pillar, inscribed by an Indo-Greek ambassador, praised Indian values like self-restraint and charity. The Kuṣhāṇas, especially King Kaṇiṣhka, supported Buddhism and other faiths. Their contributions to art led to the development of Gāndhāra and Mathurā schools, which were renowned for fusing Greek and Indian artistic elements.

- Q1. What does the presence of Indian deities on Indo-Greek coins signify?
- Q2. What does the Heliodorus pillar tell us about Indo-Greek influence in India?
- Q3. Which school of art is associated with the Kuṣhāṇas and shows Greco-Roman influence?

## **SUBJECT :- SCIENCE**

**GENERAL INSTRUCTIONS:-** All the Holiday Homework must be completed by all students except Model Making and PPT Which will be done only by mentioned roll numbers

**Worksheet** (Lesson 5 and 12)

**Instructions:-** Solve and Paste the assignment in Science fair Notebook

### **OBJECTIVE TYPE QUESTIONS:**

1. Which of the following are indicators that a chemical change has occurred in a substance?
  - (a) Irreversibility of a substance after burning
  - (b) A substance breaking into smaller pieces of itself
  - (c) The expansion in size of a material upon being heated
  - (d) A substance not resuming its original shape after being pressed
2. Which of the following is/are true when milk changes into curd?
  - (i) Its state is changed from liquid to semi-solid.
  - (ii) It changes taste.
  - (iii) It changes colour.
  - (iv) The change cannot be reversed.
  - (a) (i) and (ii) are correct (b) (ii) and (iii) are correct
  - (c) (i), (iii) and (iv) are correct (d) (i), (ii) and (iv) are correct
3. Which of these pairs correctly matches the type of change?
  - (a) Rusting – Physical change (b) Melting – Chemical change
  - (c) Burning – Chemical change (d) Boiling – Chemical change
4. What is the minimum temperature at which a substance catches fire called?
  - (a) Boiling point (b) Ignition temperature
  - (c) Melting point (d) Freezing point
5. Divya observed that ice kept on a table melts into water and later turns into steam when heated. What type of changes are these?
  - (a) It is a chemical change (b) New substances are formed
  - (c) It is a physical and reversible change (d) It cannot be reversed
6. A student mixes vinegar with baking soda in a closed bottle. After a few seconds, the bottle's cap pops open. What can be concluded from this observation?
  - (a) Heat from the room expanded the air inside the bottle.
  - (b) The reaction produced a gas that increased the pressure inside the bottle.
  - (c) The vinegar evaporated and pushed the cap open.
  - (d) The baking soda melted and released air.

7. When food is cooked, the taste and smell change. What type of change has occurred?

- (a) Physical change
- (b) Chemical change
- (c) Temporary change
- (d) Reversible change

For the questions that follow, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i),(ii), (iii) and (iv) as given below:

- i) Both A and R are true, and R is the correct explanation of the assertion.
- ii) Both A and R are true, but R is not the correct explanation of the assertion.
- iii) A is true, but R is false.
- iv) A is false, but R is true.

8. Assertion (A): Freezing is the process in which water turns to ice at  $100^{\circ}\text{C}$ .

Reason(R): Freezing of water is a physical change because only the physical state of water is changed.

9. Assertion (A): Formation of rust is a chemical change.

Reason(R): For the formation of rust, iron must be exposed to air and water.

10. Assertion (A): Chemical change is always an irreversible change.

Reason(R): Heat, light or any other radiation like UV rays may be given off or absorbed during a physical change.

11. A city experiences longer days and shorter nights in June. This is mainly due to:

- (a) Faster rotation of the Earth
- (b) Earth being closer to the Sun
- (c) Tilt of the Earth's axis towards the Sun
- (d) Change in Earth's shape

12. A place near the Equator remains warm throughout the year mainly because:

- (a) It is closer to the Sun
- (b) It receives slanting rays
- (c) It receives direct rays of the Sun
- (d) The days are longer

13. A person standing near the poles sees the Sun very low in the sky. This is because:

- (a) The Sun is farther away
- (b) The Earth's rotation is slow there
- (c) The Sun's rays are highly slanting
- (d) None of these

14. A solar eclipse occurs when:

- (a) Earth comes between the Sun and the Moon
- (b) The Moon comes between the Sun and the Earth
- (c) The Sun comes between the Earth and the Moon
- (d) Earth's shadow falls on the Sun

15. Which of the following best explains why the seasons and length of daytime are reversed in the Southern Hemisphere compared to the Northern Hemisphere?

- (a) The Earth's axis is tilted, causing opposite hemispheres to receive different amounts of sunlight.
- (b) The Earth rotates in the opposite direction there.
- (c) The Southern Hemisphere is farther from the Sun.
- (d) The Sun moves from north to south during the year.

16. An observer notices that the Sun appears to set in the west every day and that the pattern of stars visible after sunset changes over the months. Which motions of the Earth are responsible for these observations?

- (a) Only the rotation of the Earth
- (b) Only the revolution of the Earth
- (c) Rotation of the Moon and revolution of the Earth
- (d) Both rotation and revolution of the Earth

17. The Earth's axis of rotation is an imaginary line that passes through:

- (a) The geographic North Pole and the geographic South Pole
- (b) The geographic East to geographic West
- (c) Equator
- (d) None of these

For the following questions, two statements are given- one labelled Assertion (A) and the other labelled Reason (R). Select the correct answer to these questions from the codes (i),(ii), (iii), and (iv) as given below:

- i) Both A and R are true, and R is the correct explanation of the assertion.
- ii) Both A and R are true, but R is not the correct explanation of the assertion.
- iii) A is true, but R is false.
- iv) A is false, but R is true

18) Assertion (A): The Northern Hemisphere experiences summer in June.

Reason (R): During June, the Northern Hemisphere is tilted towards the Sun and receives more direct sunlight for a longer duration.

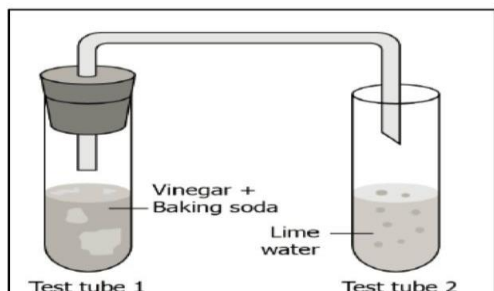
19). Assertion (A): A solar eclipse occurs every month.

Reason (R): The shadow of the Moon falls on a small area on the surface of the Earth during solar eclipse.

20)Assertion (A): When viewed from the top of the North Pole, the Earth is rotating in the anti- clockwise direction, that is, from West to East.

Reason (R): The Earth completes one rotation in about 24 hours.

### Case Study Type Questions



#### 1) Observe the given activity and answer the questions

- Name the acid present in vinegar used in this activity.
- Which gas is produced when baking soda reacts with vinegar?
- What change will you observe in lime water and why?
- Write word equations for both chemical changes

**2).** A chemical change results in a substance that was not there before. Chemical changes occur when a substance combines with another to form a new substance, or chemical decomposition into two or more different substances. These processes are called chemical reactions. Chemical changes are very important in our lives. All new substances are formed as a result of chemical changes. For example, if a metal is to be extracted from an ore, such as iron from iron ore, we need to carry out a series of chemical changes. A medicine is the end product of a chain of chemical reactions. Useful new materials, such as plastics and detergents, are produced by chemical reactions. Indeed, every new material is discovered by studying chemical changes.

- When does a chemical change occur?
- Why can't a chemical change be normally reversed?
- Jaskarn was a student of Class VII. His father purchased a new bicycle on his birthday. After a few months, he found that the cycle chain and even the handle were rusted. His father advised him to apply a coating of paint to the cycle and not to keep it in the open in future. Why does his cycle get rusted?

**3)** The Earth has two important motions—rotation and revolution. Rotation is the spinning of the Earth on its own axis from west to east. The Earth takes about 24 hours to complete one rotation, which causes the cycle of day and night. When a part of the Earth faces the Sun, it experiences day, and when it turns away from the Sun, it experiences night. The axis is an imaginary line passing through the North Pole and the South Pole, around which the Earth rotates. In addition to rotation, the Earth also moves around the Sun in a fixed path called revolution. The Earth takes about  $365\frac{1}{4}$  days to complete one revolution, which results in a year. The tilt, combined with revolution, causes the change of seasons and variation in the length of day and night at different times of the year. Without the tilt of the axis, all places on Earth would have nearly equal days and nights throughout the year.

- How does the tilt of the Earth's axis affect seasons and the length of day and night?
- What is the revolution of the Earth, and how much time does the Earth take to complete one revolution around the Sun?

iii) What is meant by the rotation of the Earth, and how long does the Earth take to complete one rotation?

**Model Making ( Science Exhibition) : 1,4,7,10,13,16,19,22,25,28,31,34,37,40**

**Students of the above-mentioned roll numbers are instructed to prepare a Science Model by selecting any one topic from following list.**

Waste Management System

Climate Change Awareness

Pollution control System

Solar Energy House

Green Energy

Smart farming

Hydroelectric Power Plant

Windmill Power Generator

**The following instructions must be followed:**

The model should be neat, creative, labelled and well-presented.

Avoid the use of thermocol.

Students should be able to explain their model clearly.

**Note:- Participation is mandatory for students as this activity carries weightage in the internal assessment.**

#### **PowerPoint Presentation**

<b>Roll No</b>	<b>Topic assigned</b>
2,23	Physical and Chemical Changes
5,26	Mode of Heat Transfer with activities
8,29	Photosynthesis Process in detail
11,32	Concept of xylem and phloem with an activity
14,35	Concept of Chemical Changes with Burning of magnesium ribbon , Reaction of vinegar and baking soda
17,38	Concept of Rotation, Revolution with an activity
20,41	Eclipse and it's types

#### **Life Skill Work:-**

**(Story Time with Puppets”)**

Prepare a creative project file including:

- Introduction about puppet shows
- A short moral story on any topic from following

(Save Earth, Save Future ,Science in Daily Life ,Green Planet Mission,Journey Through the Solar System

Healthy Body, Healthy Mind,Water Conservation Warriors,Wonders of Science,Reduce, Reuse, Recycle, Science Behind Nature,Protect Our Environment)

- Script writing with dialogues
- **Handmade puppet using waste/craft material**

Students are encouraged to use their creativity and present the work neatly with colourful illustrations and decorations.

Submit the completed project file along **with the handmade puppet after the holidays.**

ii) Students are to research any **one topic** from the following Science topics and prepare a creative 3-5 minutes blog/ video presentation

**Topics:-**

Eco friendly Product Making

Future Technology Presentation

Awareness Campaign on Environment

Home - based Science Experiment

Science Podcast recording

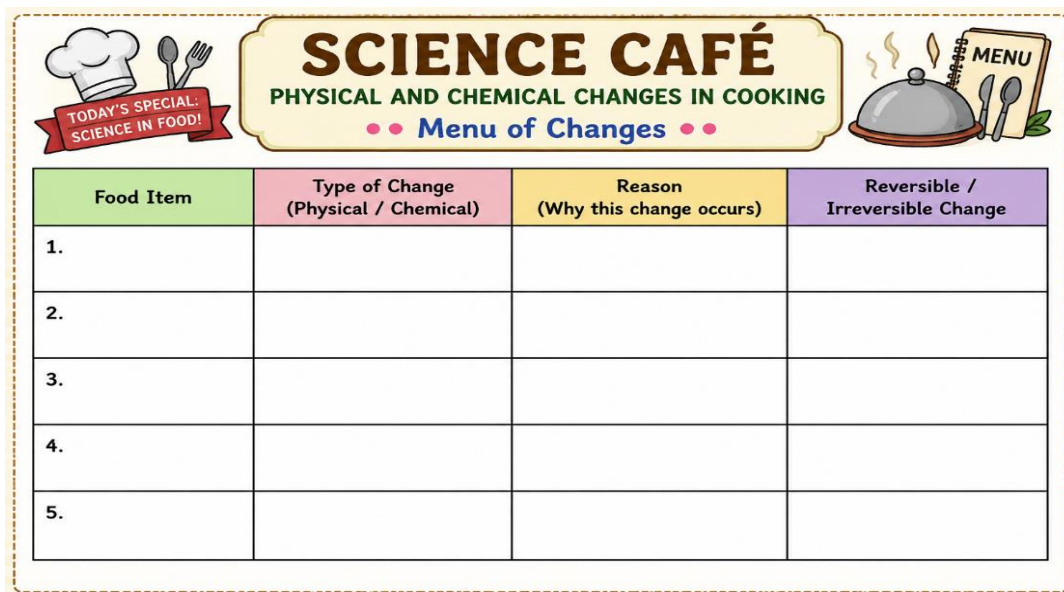
**Art integrated Project:-**

**“Science Café Menu” Activity**

Design a creative, restaurant-style menu titled “Science Café”. Include different food items and clearly show the physical and chemical changes involved in preparing and cooking each item.

Your menu should be neat, creative, and presented like a real restaurant menu. It must include the required table with columns as shown in the given picture.

Make sure to design your own unique menu and present the information in an attractive way..



The graphic features a central yellow banner with the text "SCIENCE CAFÉ" in large brown letters, "PHYSICAL AND CHEMICAL CHANGES IN COOKING" in smaller green letters, and "Menu of Changes" in blue letters with red dots on either side. To the left is a chef's hat icon with a red ribbon that says "TODAY'S SPECIAL: SCIENCE IN FOOD!". To the right is a silver dome lid on a stove with a menu card on top that says "MENU". Below the banner is a table with four columns and five rows.

Food Item	Type of Change (Physical / Chemical)	Reason (Why this change occurs)	Reversible / Irreversible Change
1.			
2.			
3.			
4.			
5.			

**Learning Task**

Lesson Keywords and Question Answer from **PT2 Syllabus ( L:-12 and 5)**

**Fair Notebook related Work**

Complete fair Notebook ( if pending) L :-1,10,7,5,12

## **SUBJECT- COMPUTER**

**Prepare A3 sheet for any one topic from the following topics:**

- \* Internet Ethics
- \* Safe use of Social Media
- \* Google Apps (Category wise)

Revise chapter number 4 and 5 for test after holidays.

## **SUBJECT- FINE ART**

All students are instructed to prepare one A3 size sheet painting based on “Madhubani Art” of Bihar.

Instructions: • Draw and colour a painting in Madhubani art style.

- \* Use an A3 size sheet only.
- \* The artwork should represent the traditional folk art of Bihar.
- \* Use bright colours and traditional Madhubani patterns neatly.
- \* Students may use sketch pens, crayons, pencil colours, or water colours.
- \* Write your name and class neatly on the sheet.
- \* Submit the homework after the holidays.

Make your artwork creative, colourful, and neat.

These are examples for reference below:



**HAPPY HOLIDAYS**

