SAINIK SCHOOL, BHUBANESWAR

Autumn vacation task

Session: 2025-26

Subject: History and Civics **Class: 6**

1. Write a short essay (150 words) on “Why India is called Bharat”. Mention its cultural and historical roots.
2. Why is cooperation important in family and community life? Write 6–7 sentences.
3. Collect a picture of any one historical monument (from a newspaper, magazine, or printout). Paste it and write 10 lines about what it tells us about the past.
4. Explain the importance of making a timeline in history.
5. Describe three ways archaeological sources help us understand the past.
6. Activity: Collect pictures from newspapers, magazines, or printouts showing:
    - Elections, voting, debates, and citizen participation
    - Make a collage and write 1 sentence under each picture explaining its importance in governance.

AUTUMN VACATION TASK- 2025-26
GEOGRAPHY AND ECONOMICS
CLASS 6

1) Differentiate between latitudes and longitudes.

2) Why do we need standard time for a country?

3) If the time at 0° (Greenwich Mean Time) is 12:00 noon, what will be the time at 120°E? (Show calculation).

4) If the Earth did not rotate, how would it affect?

5) On an outline world map locate continents (add colours to different continents) and oceans.

6) List a few famous pilgrimage spots in India(mini.5) along with the landforms in which they are found.

7) Explain about the major landforms.

8) On an outline map of India, mark and colour-

Major mountain ranges
Coastal regions
Plateaus
Deserts

9) Poster on *"Save Our Oceans"* – pollution, marine life, conservation.

OR

Collage on *"Unity in Diversity of Continents"* – cultures, flags, foods, clothes.

10) These images depict a few challenges that people living in the mountains may face. Write one paragraph on each disaster. Why despite many such challenges, people still choose to live in the mountains

SAINIK SCHOOL BHUBANESWAR

LIBRARY VACATION TASK –CLASS VI

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1. The Hindu young world invites students to send in drawings, prose and poems to be featured in its Scrapbook pages.Send entries to youngworld@thehindu.co.in along with your Name, class, school, city and a passport size photograph.

Note: 1. Drawing must be in JPG format only.

2. Text contribution should not be more than 200 words and be sent as Word document.

3. Cadets should retain the hard copy of his/her original work and submit in the school library.

A cadet can use one of these topics for their creative work of drawing, poem or prose. The topics are given only for reference; cadets are free to choose any other topic of their choice.

All contribution must be the original work of the cadet.

Ser No	Topic	Ser No	Topic
1	My Garden	19	Deepawali
2	MY School Library	20	Indian festivals
3	Friendship	21	Importance of trees
4	My family	22	New Year
5	My school Life	23	Christmas
6	India of My dreams	24	Children's Day
7	Independence Day	25	World book day
8	My dream	26	World heritage day
9	The missile man of India	27	World Sparrow Day
10	My village	28	World Water day
11	MY FAVOURITE TEACHER	29	Republic Day
12	My best friend	30	Martyrs'Day
13	My Mother	31	World WETLAND DAY 2 Feb
14	Nature	32	National Science Day
15	Climate change	33	Holi
16	Save water	34	World Wildlife day
17	Rainy season	35	Unity in Diversity
18	Dusshera	36	Cleanliness

2. The children Magazine Champak invites students to send in **drawings, prose ,poems,Jokes , Riddles ,Stories** to be featured in its Magazine. Send entries with **your Name, age, school, and Address To:**

Delhi Press 703, B Wing, INS Tower,
Opp. Trident Hotel , G Block, BKC, Bandra (East) Mumbai-400051

NOTE:----------

1. Cadets should retain the hard copy of his/her original work and submit in the school library.

2. All contribution must be the original work of the cadet.

3. A cadet can use one of the topics given in activity 1 above for their creative work of drawing, poem or prose. The topics are given only for reference; cadets are free to choose any other topic of their choice.

Sainik School Bhubaneswar
Autumn Vacation Task

Class-VI Subject-Physics

1. Write one example each of **rectilinear motion** and **circular motion**.
2. Write two differences between **uniform motion** and **non-uniform motion**.
3. Give two examples of **periodic motion** from daily life.
4. What precautions should we take while measuring the length of a curved line with a thread?
5. The length of a classroom is 12 m and breadth is 8 m. Find its perimeter.
6. Explain why a bicycle moving on a straight road shows both rectilinear and circular motion.
7. Write three characteristics of a good unit of measurement.
8. A student takes 4 steps to cover a distance of 3 m. What is the average length of one step?
9. Why can a footstep or hand span not be used as a standard unit of length? Explain with an example.
10. Explain the various types of motion with examples (rectilinear, circular, periodic, and rotational).
11. Describe how you will measure the length of a curved line using a thread and a ruler.
12. A train travels 180 km in 3 hours. Find its speed. If it continues at the same speed, how far will it go in 5 hours?
13. Draw neat diagrams of the following:
    (a) A simple pendulum
    (b) Circular motion of Earth around the Sun
    (c) Uniform rectilinear motion of a car on a straight road
14. The blades of a ceiling fan show which type(s) of motion? Explain.
15. Why the Earth's motion around the Sun is called periodic motion?

Project / Assignment Work (Any one)

- Prepare a **project** on *"Types of Motion in Our Daily Life"*.
- Write a **short report** on *"Evolution of Measurement Units from Ancient Times to Modern SI System"*.

SAINIK SCHOOL BHUBANESWAR

CLASS VI (CHEMISTRY)

AUTUMN VACATION TASK FOR 2025

1. Make a list of the objects you see around you by pasting pictures and name the materials they are made up of.
2. List any four properties of materials that help in their identification.
3. Differentiate between natural and synthetic materials with examples.
4. Why do we prefer cotton clothes in summer and woollen clothes in winter?
5. What are the uses of metals and non-metals in daily life? Provide two examples of each.
6. Define matter and list its three states.
7. Explain the process of evaporation and its importance in daily life.
8. Why does a wet cloth dry faster in the sun than in the shade? Explain with reference to evaporation.
9. What is filtration? Give an example where it is used.
10. Describe the process of sedimentation and decantation with an example.
11. Explain the method of handpicking and its application in daily life.
12. How is the separation of cream from milk an example of centrifugation? Explain the process.
13. Differentiate between evaporation, filtration, and decantation with suitable examples.

BIOLOGY

1. What are the good practices for maintaining oral hygiene? Try to gather information from newspapers/ conversation with elders. Prepare a report.

2. Find out the different ways to maintain a healthy digestive system.

3. Suggest some food items that help to maintain good digestive health.

4. What is air quality and AQI? Find out the effect of air quality on the respiratory systems of people working in various fields- farmers, factory workers and street vendors.

5. Birds can fly at high altitudes where oxygen levels are low. How might their respiratory system be adapted to help them survive in such conditions?

6. Write down the contribution of the Scientist “Kamala Sohonie” from your science book CURIOSITY.

7. Imagine a situation where all the organisms that carry out photosynthesis on the earth have disappeared. What would be the impact of this on living organisms?

8. Write down the contribution of Indian Plant Scientist Rustom Hormusji Dastur in the field of photosynthesis.

9. How did scientists learn about digestion in human body?

10.Poster- Making:***‘Healthy Habits for Healthy Life’***

AUTUMN VACATION TASK CLASS – 6
MATHEMATICS

(2025-26)

SECTION – A (1 mark)

1. What comes next in the pattern: 2, 8, 18, 32, 50, _?

(a) 60 (b) 70 (c) 72 (d) 80

2. If a pattern starts as □, □□, □□□, □□□□, how many symbols will the next step have?

(a) 4 (b) 5 (c) 6 (d) 8

3. Find the missing term in: 1, 4, 9, 16, , 36.

(a) 20 (b) 24 (c) 25 (d) 30

4. Total sides in 15 hexagons?

(a) 75 (b) 80 (c) 85 (d) 90

5. Pattern rule in 64, 32, 16, 8, _?

(a) Subtract 8 (b) Divide by 4 (c) Divide by 2 (d) Subtract 16

6. In a pattern, each term is the previous term multiplied by 5. First term is 2. Find 4th term.

   (a) 50 (b) 100 (c) 125 (d) 250

7. Find the next number: 3, 7, 15, 31, _

(a) 47 (b) 53 (c) 63 (d) 65

8. A pattern starts with 100 and halves each time. What is 4th term?

(a) 20 (b) 25 (c) 12.5 (d) 10

In the following questions 9 and 10, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true but R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

9. **Assertion (A):** A pattern of 3, 6, 12, 24, ... has constant differences between terms.

Reason (R): Multiplying by 2 at each step does not create constant differences.

10. **Assertion (A):** A pattern with 1, 4, 9, 16 is a multiplication pattern.

Reason (R): Squaring is a form of multiplication.

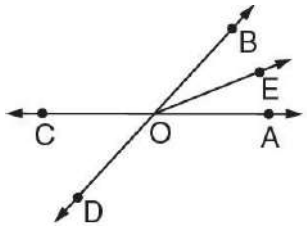
11.A ray divides a straight angle into two angles measuring 110° and _____. What is the missing angle?

(a) 70° (b) 90° (c) 60°(d) 100°

12.Which of the following names the vertex of ∠*PQR*?

(a) *P* (b) *Q* (c) *R* (d) None of these

13.Which of the following rays are the arms of ∠*BOA*?



(a) *OB*, *OE* (b) *OE*, *OA* (c) *OB*, *OA* (d) *OC*, *OA*

14.Two angles at a point are 130° and 95°. What is the measure of the third angle at the point?

(a) 135° (b) 95° (c) 120° (d) 135°

15.Which angle is formed between the hour and minute hand of a clock at 6 o'clock?

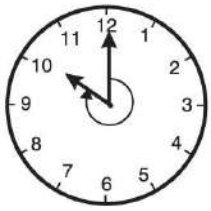
(a) 90° (b) 180° (c) 45°(d) 60°

16.If one angle is 85°, what is the measure of the adjacent angle on the same straight line?

(a) 95° (b) 85° (c) 180° (d) 75°

17.Which angle is shown by the hands of the clock in the given figure?

(a) acute (b) right (c) obtuse (d) reflex



18.The hands of a clock form a right angle twice in an hour. Which of the following times shows a right angle?

(a) 3:00 (b) 12:00 (c) 4:00 (d) 5:30

In the following questions 19 and 20, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true but R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

19.Assertion (A): A straight angle equals two right angles.

Reason (R): Each right angle measures 90°.

20.Assertion (A): The sum of angles at a point is always 360°.

Reason (R): The arms of the angles make a complete turn around the point.

21.In a row of 6 children, the sequence of "taller neighbour counts" is 0, 1, 2, 0, 1, 0. Which is correct?

(a) Possible

(b) Impossible because two 0's cannot be separated by a 2

(c) Impossible because ends cannot be both 0

(d) Possible only if heights repeat

22.The centre of a 3×3 grid has neighbours 5320 (up), 5200 (down), 5100 (left), and 5300 (right). Which value makes it a supercell?

	5320	
5100	???	5300
	5200	

(a) 5201 (b) 5310 (c) 5299 (d) 5400

23.Which of these is not a palindromic time in HH:MM 12-hour format?

(a) 03:30 (b) 04:40 (c) 11:22 (d) 05:50

24.What is the digit sum of the smallest 5-digit number divisible by 9?

(a) 3 (b) 9 (c) 18 (d) 27

25.How many times does the digit '0' appear in the numbers from 1 to 50?

(a) 5 (b) 6 (c) 4 (d) 1

26.The largest 4-digit palindrome divisible by 9 is:

(a) 9889 (b) 9779 (c) 9669 (d) 9999

27.Which digit appears most often in the hundreds place from 100 to 999?

(a) 1 (b) 2 (c) 9 (d) All appear equally often

28.In the game “first to 60 wins”, moves allowed are 1 to 6, starting at 0. To win, your first move should be:

(a) 4 (b) 5 (c) 6 (d) 3

In the following questions 29 and 30, a statement of assertion (A) is followed by a statement of Reason (R). Choose the correct answer out of the following choices.

(a) Both A and R are true and R is the correct explanation of A.

(b) Both A and R are true but R is not the correct explanation of A.

(c) A is true but R is false.

(d) A is false but R is true.

29.Assertion (A): Every 4-digit number with all digits equal does not reach 6174 by Kaprekar’s process.

Reason (R): When all digits are equal, subtracting the largest and smallest numbers gives 0, so the process stops immediately.

30.Assertion (A): In the Collatz sequence, if the starting number is a power of 2, it takes a certain number of steps to reach 1 by repeatedly dividing by 2.

Reason (R): Each step divides the number by 2, making it smaller until it reaches 1.

SECTION – B(2 marks)

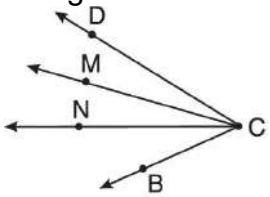
31.Complete and explain: 5000, 2500, 1250, _, _____.

32.Pattern: □ ● □□ ●● □□□. Predict next two terms with explanation.

33.If 20 pentagons are arranged, find total sides. Explain.

34.Fill missing numbers: 4, 12, 36, ____, 324, _.

35.Name the six angles in the given diagram that have *C* as a vertex.



36.Three rays originate from a point forming three angles. If two of the angles measure 85° and 95°, find the third angle. Also state whether it is acute, right, obtuse, or straight.

37.Two adjacent angles on a straight line are in the ratio 3:2. Find their measures.

38.The hands of a clock show 9 O'clock. Find the angle between the hands. Is it acute, right, obtuse, or straight?

39.Find the smallest and largest 4-digit number whose digit sum is 9.

40.Identify all supercells in the 3×3 table:

5600	5550	5700
5580	5720	5590
5500	5650	5540

41.Write the smallest 5-digit number whose digit sum is **23**.

42.List all 3-digit palindromes made from digits 4, 6, and 9 (repetition allowed).

SECTION – C(3 Marks)

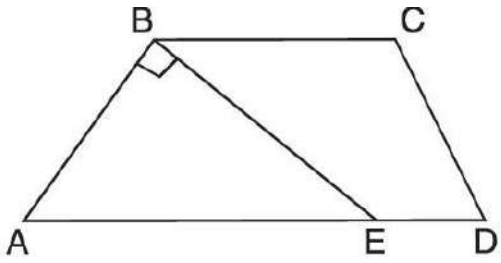
43.A tile pattern uses 4 black tiles and 5 white tiles in repetition.

If 270 tiles are used, how many black tiles and white tiles were used?

44.Multiply by 2, subtract 2. Starting at 6. Find first 6 terms.

45.Multiply by 3, subtract 1 pattern, starting from 2.

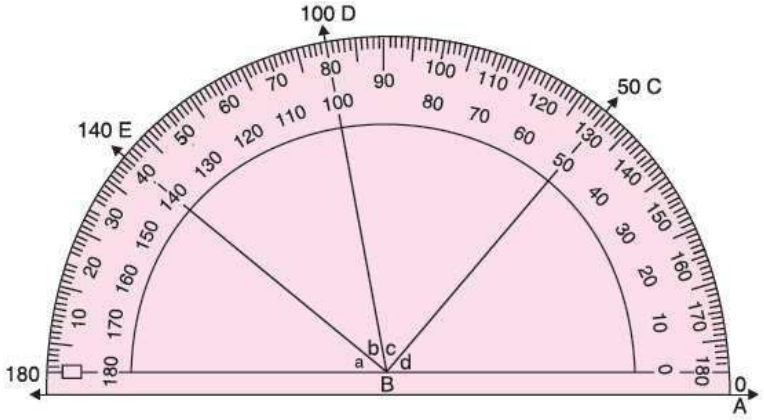
46.In the figure name the following angles:



(a) an acute angle at B (b) an acute angle at E (c) a right angle
(d) three obtuse angles (e) a straight angle

47.Using the inner (anticlockwise) scale of the protractor in the below figure, find the measures of

(1) $\angle a$, (2) $\angle b$, (3) $\angle c$, (4) $\angle d$, (5) $\angle ABD$, (6) $\angle CBE$.



48.A straight angle is divided into two angles such that one angle is 40° more than the other. Find the two angles.

49.Perform the Kaprekar process for 9013 until 6174 is reached. State steps.

50.Start with the number 59. Reverse its digits and add it to the original number. If the result is not a palindrome, repeat the process with the new number. Find the palindrome number you get after this process.

51.A 4-digit number is formed using the digits 1, 2, 3, and 4 without repetition. What is the difference between the largest possible even number and the smallest possible odd number that can be formed?

SECTION – D(5 Marks)

52.A school builds a staircase using blocks:

1st step: 2 blocks, 2nd step: 6 blocks, 3rd step: 12 blocks 4th step: ? 5th step: ?

(a) Identify pattern rule.

(b) Find number of blocks in 4th and 5th steps.

(c) Find total blocks in first 5 steps.

(d) Explain how recognizing this pattern is helpful in planning.

(e) Write pattern in words.

53.A student is playing with a protractor. He places the center of the protractor on the vertex of an angle.

(e) The student measures an angle of 150°. What type of angle is this? What is the difference between this angle and a straight angle?

(f) The student then measures an angle of 30°. What type of angle is this? What is the sum of the 150° and 30° angles?

(g) If the student wants to create an angle of 22.5°, what fraction of a right angle would this be? Show your calculation.

54.Collatz sequence starting from 19 until reaching 1. Count total steps and state the maximum number reached in the sequence

SECTION – E (Case Study Based Questions)(4 Marks)

55.In a newly constructed hotel, a painter was assigned to decorate its 96 walls using a specific stripe pattern for aesthetic appeal. Each wall was to be painted in a repeating sequence of 2 blue stripes followed by 4 red stripes. The hotel owner wanted the pattern consistent throughout the building, making accurate pattern calculation essential for error-free decoration.

(a) How many blue stripes will be needed?

(b) How many red stripes will be needed?

(c) Which stripe color will be at 95th position?

(d) Why is pattern understanding important in such work?

56.During the annual school exhibition, coloured banners were arranged along the main walkway in a repeating sequence of **5 blue banners** followed by **3 yellow banners**. A total of 128 banners were used to decorate the area. Accurate pattern planning was important to maintain the sequence and aesthetic appeal of the event without any mismatch or confusion.

(e) How many blue banners were used in total?

(f) How many yellow banners were used in total?

(g) What colour banner will be at the 125th position?

(h) Why is pattern planning important in such decorations?

57.Case Study 1: In a bustling city park, three friends, Alice, Ben, and Chloe, were discussing their afternoon plans. They were standing at a central intersection where three paved walking paths met. Alice pointed to the paths, noting the angles they formed. "Look," she said, "the path to the cafe and the one to the playground form a **120°** angle. And the path to the playground and the one to the rose garden form a **95°** angle."

(h) Find the measure of the third angle.

(i) What is the type of the third angle?

(j) What is the sum of the three angles?
(k) Why is it important that these three paths meet such that their angles add up to this sum?

58.Case Study 2: While staring at the old grandfather clock in Grandma's study, Leo waited for her to finish a phone call. The steady ticking was the only sound in the room. Leo noticed the time was exactly 2 O'clock and the hands formed a sharp, **acute** angle. It was the perfect moment to sneak out and grab a cookie.

(l) Find the measure of this angle.
(m)What type of angle is it?
(n) How will the angle change if the time is 2:30?
(o) Why do clock hands form different types of angles during the day?

59.Supercell Upgrade:

In a strategy game, players manage a 4×4 grid of supercells, each represented by a five-digit number. The current grid contains some supercells with special properties. The challenge is to analyze the existing grid, identify all current supercells, and then improve the setup by changing exactly one digit in two different cells to create at least two additional supercells. This task tests your observation and problem-solving skills to optimize the grid layout effectively.

61000	**60800**	**61500**	**61200**
60600	61800	60700	60500
60300	60400	62000	60200
60000	60100	59900	59800

Tasks:
(a) Identify all current supercells.
(b) Change exactly one digit in two cells to create at least 2 more supercells.

60.Kaprekar Contest

Three friends—A, B, and C—decided to challenge themselves with a fascinating number puzzle called Kaprekar's routine. Each picked a different four-digit number: A chose 8640, B selected 7032, and C took 5421. Their goal was to apply the Kaprekar steps repeatedly and see how many iterations it takes for each number to reach the mysterious constant 6174. They also wanted to find out who among them would reach 6174 first in this exciting mathematical race.
(c) How many steps for each?
(d) Who reaches 6174 first?

Sainik School Bhubaneswar

AUTUMN VACATION TASK 2025-26

Class VI (Lower Odia)

୧. ତଳେ ଦିଆଯାଇଥିବା ବିଷୟ ଗୁଡିକୁ ଦେଖି ଲେଖ ।

କ) ମନ ବଦଳି ଗଲା।

ଖ) ଶଂଖୀ ବିଲେଇର ଶଙ୍ଖା।

ଗ) ନେଉଳର ଘରତୋଳା।

ଘ) ହନୁର କଦଳୀଖିଆ।

ଙ) ମୂଷିକରାଜା।

୨. ତୁମ ବହିରେ ଥିବା ପାଠ ଗୁଡିକୁ ପଢି ସେଥିରେ ଥିବା **କାର/ମାତ୍ରା** ଲାଗିଥିବା ଶବ୍ଦ ଗୁଡିକ ବାଛି ଲେଖ ।

୩. ତୁମ ବହିରେ ଥିବା ନଈବଢି ପାଠଟିକୁ ଦେଖି ଛବି ଆଙ୍କ ।

୪. ନିଜ ମନରୁ ଭାବି **୧୦ଟି** ଫୁଲ, ଫଳ, ପରିବାର ନାମ ଲେଖ ।

୫. ୧ - ୧୦୦ ଯାଏ ସଂଖ୍ୟା ଓ ଅକ୍ଷରରେ ଲେଖ ।

AUTUMN VACATION TASK

SAINIK SCHOOL,BHUBANESWAR

CLASS – VI A

SUBJECT – HIGHER ODIA

1) ନିମ୍ନ ବିଷୟ ଗୁଡିକର ପ୍ରଶ୍ନୋତ୍ତର ଲେଖ ।

କ) ବର୍ଷା

ଖ) ପ୍ରଭାତ ଅବକାଶ

ଗ) ଜନ୍ମଭୂମି

ଘ) ବଣବାଣୀ

ଙ) ମୋ ଜୀବନର ଅଭୁଲା କଥା

ଚ) କିଏ ଭାସେ କିଏ ବୁଡ଼େ

ଛ) ନ୍ୟାୟ ବିଚାର

3. ମନରୁ ଭାବି 20ଟି ଯୁଗ୍ମଶବ୍ଦ ଲେଖ ।

4. ମନରୁ ଭାବି 20ଟି ଶବ୍ଦର ବିପରୀତ ଶବ୍ଦ ଲେଖ ।

5. ମନରୁ ଭାବି 20ଟି ଶବ୍ଦର ପ୍ରତିଶବ୍ଦ ଲେଖ ।

4) ଯେ କୌଣସି 5ଟି ବିଷୟରେ ପ୍ରବନ୍ଧ ଲେଖ ।

ଛାତ୍ର ଓ ସମାଜ ସେବା ,ଅରଣ୍ୟ ସଂପଦର ସୁରକ୍ଷା ,ନାରୀ ଶିକ୍ଷା,ବିଜ୍ଞାନର ସଦୁପଯୋଗ , ମୋ ପ୍ରିୟ ଶିକ୍ଷକ/ଶିକ୍ଷୟିତ୍ରୀ, ପରିବେଶ ପ୍ରଦୂଷଣ ,ଦୁର୍ଗାପୂଜା ,ଦୀପାବଳି

VACATION TASK

CLASS-VI

LOWER HINDI

1.अनुच्छेद लिखिए-(10 वाक्यों में)

क. मेरी माँ

ख. मेरे दादा-दादी

ग. स्व-परिचय

घ. मेरा मित्र

ङ. तिरंगा

2. चार चने कविता को लिखिए। (सचित्र)
3. बंदर और गिलहरी पाठ से 10 MCQ प्रश्न बनाकर लिखिए।
4. आप बिल्ली के बारे में क्या जानते हैं लिखिए।
5. पचास से सौ तक गिनती अक्षरों में लिखिए।
6. स्वरचित लेख लिखें।(For school magazine)
7. पढ़ाए गए पाठों में से कोई 25 शब्द तीन-तीन बार लिखिए।
8. गेंद-बल्ला कहानी को चित्रकथा रूप में लिखिए ।

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VACATION TASK

CLASS-VI

HIGHER HINDI

1.अनुच्छेद लिखिए-(15 वाक्यों में)

क. मेरा देश

ख. मेरे दादा-दादी

ग. स्व-परिचय

घ. मेरा मित्र

ड. तिरंगा

2. चेतक की वीरता कविता को लिखिए।

3. मेरी माँ पाठ से 15 MCQ प्रश्न बनाकर लिखिए।

4. आप घोड़े के बारे में क्या जानते हैं लिखिए।

5. परीक्षा कहानी को पढ़कर उसे संक्षेप में लिखिए।

6. स्वरचित लेख लिखें।(For school magazine)

7. पढ़ाए गए पाठों में से कोई 25 शब्द तीन-तीन बार लिखिए।

8. हर घर तिरंगा पर 2 नारा लिखिए।

9. किसी कहानी को चित्रकथा रूप में लिखिए ।

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INFORMATION TECHNOLOGY

Project Work:

- Make a chart with pictures of different types of computers.
- Prepare a comparison table of languages (Machine vs Assembly vs High-Level).
- Add a timeline of language evolution (1st to 5th generation).
- Make a chart with shortcut keys and paste it as a poster in your notebook.
- Computer Terminology (with table & explanation).

Suggested Submission Format

- Use chart paper/ A4 size paper.
- Cover Page: Title, Name, Class, School.
- Part A: Make a chart with pictures of different types of computers.
- Part B: Prepare a comparison table of languages (Machine vs Assembly vs High-Level).
- Part C: Add a timeline of language evolution (1st to 5th generation).
- Part D: Shortcut Keys (with table & practice activity).
- Part E: Computer Terminology (with table & explanation).
- Conclusion: For each concepts