

असतो मा सद्गमय, तमसो मा ज्योतिर्गमय ।।



SUMMER VACATION ASSIGNMENT 2026 CLASS-IX

Time To Shine

Books are closed, the Sun is bright,
Summer calls with warm daylight.
So, chase the clouds, enjoy the sun,
But keep in mind- we are not yet done.

The tasks we give with love and care,
To keep your curious minds aware.
Read and write, create and play,
Come back stronger, come what may.

We'll wait for you, with doors open wide,
With stories of Summer and brighter pride.



**Summer
Vacation**

MAKE YOUR SUMMER COUNT!

Dearest Hallmarkite!

Summer break is your time to relax, but also to grow in ways textbooks don't teach. Here's how to make these 30+ days count:

1. REST WELL, RISE WELL

- Sleep 8-9 hours. No late-night scrolling!
- Start your day early at least 3 times a week. Morning energy is different!.

2. LEARN WITHOUT PRESSURE

Pick any 2 from this list:

- Read 2 books — story, comics, or GK. No school books!
- Learn 1 new skill — cooking a dish, cycling, origami, coding, guitar, calligraphy
- Help at home 20 mins daily — water plants, set the table, fold clothes. Real-life skills matter!
- Journal 3 lines daily — “Today I felt... I learned... I'm grateful for...” Builds self-awareness!

3. BODY & MIND FITNESS

- 60 mins physical activity daily — dance, badminton, skipping, walk with family. Do it before 9 am or after 6 pm. Beat the heat!
- Screen limit: 1.5 hours max for fun. Use the rest to create, not just consume.

4. FAMILY & ROOTS

- Talk to parents/grandparents. Ask them one story from their childhood each week.
- Learn one recipe or one song from your mother tongue/culture.

5. GIVE BACK

- Teach something to your younger sibling/cousin or house help's child.
- Do 1 act of kindness weekly — feed birds, save water, plant a sapling.

Come back with tan lines, new skills & stories and big smiles, not just completed notebooks.

A NOTE FOR THE PARENTS

Please support your child in following this without pressure. The goal is joyful learning and family bonding. Let them get bored sometimes — that's where creativity starts. Avoid over-scheduling with camps.

Thank you for partnering with us!

Best wishes

HALLMARK TEAM

NOTE: DO ALL THE WORK IN YOUR RESPECTIVE SUBJECT NOTEBOOKS OR AS DIRECTED.

ENGLISH

Q.1 Vocabulary Builder

- Create a mini-dictionary with 30 new words. (Alphabetical Order)
- Definitions and usage in sentences

Q.2 Creative Writing Tasks

- **Roll Nos. 1 to 10:** Story Writing: "I opened the old chest in my attic and discovered something unimaginable..."
- **Roll Nos. 11 to 20:** Diary Entry: Write as the character from a story you read this year, narrating a turning point.
- **Roll Nos. 21 to 30:** Article Writing: "Social Media – A Blessing or a Curse for Teenagers?"
- **Roll Nos. 31 to 41:** Poem Writing: Compose a poem (10-15 lines) on "My India of Dreams" or "The Power of Words"

Q.3 Book Review:

Read any one book:

- The Diary of a Young Girl – Anne Frank
- The Boy in the Striped Pajamas – John Boyne
- Malala – My Story of Standing Up for Girls' Rights

Write:

- Title & Author
- Summary in 150–200 words
- Characters
- Message/Moral
- What you liked/disliked

Q.4 Describe "A Rainy Day" (100–120 words)

Hints:

- How does the sky look? (dark clouds, thunder)
- How does the rain sound? (pitter-patter)
- Smells you notice? (wet earth, fresh air)
- How does the weather feel? (cool breeze, wet clothes)
- What do you do during a rainy day?

LISTENING ACTIVITY:

Listen to these talks of wonderful people every week.

<https://youtu.be/C5EG1-w7fYo>

- Josh talk by Arunimna Sinha No one can stop you if you are determined in your life.

https://youtu.be/7fIL5s_Kq68

- Dr. APJ Abdul Kalam's Life Advice Will Change Your Future (MUST WATCH) Motivational Speech

<https://youtu.be/xQjp8wPylFs>

- Sachin Tendulkar's farewell speech showing gratitude towards everyone who contributed in his life. Learn and practice the habit of Gratitude. It brings magical change in life.

<https://youtu.be/w1V3gZv0ebY>

Speech by Gaur Gopal Das. Avoid negativity. Stop complaining. Be happy for what you have.

हिंदी

व्याकरण: पाठ्यपुस्तक 'गंगा' के पाठ-1, 2, 3 से मुहावरे ढूँढकर अपनी कार्यपुस्तिका में लिखें और वाक्य निर्माण करें।

पाठ्यपुस्तक 'गंगा' के पाठ-1, 2, 3 से 30 समानार्थी शब्द ढूँढकर अपनी कार्यपुस्तिका में लिखें।

लेखन कौशल: अनुच्छेद लेखन करें: 'स्वच्छता में आम आदमी की भूमिका'

पत्र लेखन करें: आप 119, शील कुज़्ज, अशोक नगर, नई दिल्ली, निवासी पियूष। प्रिया हैं। अपने मित्र को आई.आई.टी. में दाखिला मिलने पर बधाई देते हुए पत्र लिखिए।

MATHEMATICS

Q.1 Solve the question paper of PT-1 in the separate notebook:

Q.2 Solve the following problems in the notebook.

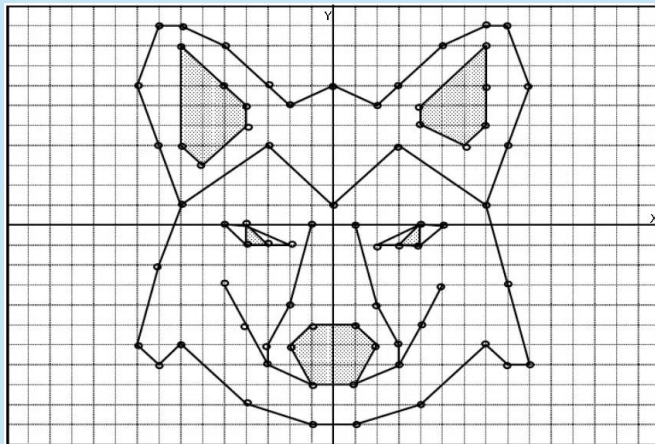
- If we add two irrational numbers, the resulting number
 - is always an irrational number
 - is always a rational number
 - may be a rational or an irrational number
 - always an integer
- Decimal expansion of a rational number is terminating if in its denominator there is:
 - 2 or 5
 - 3 or 5
 - 9 or 11
 - 3 or 7
- Rational number $\frac{3}{40}$ is equal to:
 - 0.75
 - 0.12
 - 0.012
 - 0.075
- Which of the following is true?
 - Every whole number is a natural number
 - Every integer is a rational number
 - Every rational number is an integer
 - Every integer is a whole number
- Point (5, 0) lies on the:
 - I quadrant
 - II quadrant
 - x – axis
 - y – axis
- Point (-1, 0) lies in the:
 - on the negative direction of x – axis
 - on the negative direction of y – axis
 - in the III quadrant
 - in the IV quadrant
- The perpendicular distance of the point P(3,4) from the y – axis is:
 - 3
 - 4
 - 5
 - 7
- The figure obtained by plotting the points (2, 3), (-2, 3), (-2, -3) and (2, -3) is a
 - trapezium
 - rectangle
 - square
 - rhombus
- If A (6, -1), B (1, 3) and C (k, 8) are three points such that AB= BC, find the value of k.
- Determine if the points (1, 5), (2, 3) and (-2, - 11) are collinear.
- The coordinates of two towns are A(3,5) and B(-1,9). A courier wants to go from A to B in a straight path. Find the distance between the two towns.
- Find the point on x-axis which is equidistant from (-2, 5) and (2, -3).

13. A park has two entrances at $(2, 1)$ and $(8, 5)$. A security guard walks along the straight path joining the entrances. Find the distance he walks.
14. Find the point on the x-axis which is equidistant from $(2, -5)$ and $(-2, 9)$.
15. Find the value(s) of k such that distance between $(2, -3)$ and $(10, k)$ is 10 units
16. Check whether the points A $(2, 3)$, B $(6, 7)$ and C $(10, 11)$ are collinear.
17. Show that the triangle with vertices A $(1, 2)$, B $(5, 2)$ and C $(5, 5)$ is right-angled.
18. Find the midpoint of A $(-2, 4)$ and B $(6, 10)$ and verify that the midpoint divides the line segment equally.
19. Show that the points A $(1, 1)$, B $(5, 1)$, C $(5, 5)$ and D $(1, 5)$ are the vertices of a square.
20. In which quadrant, will the point lies, if
 - (i) the ordinate is 2 and the abscissa is -3
 - (ii) the abscissa is -4 and the ordinate is -2
 - (iii) the ordinate is -3 and the abscissa is 4
 - (iv) the ordinate is 3 and the abscissa is -2
21. Find the distance of the following points from the y-axis: P $(3, 0)$, Q $(0, -3)$, R $(22, -5)$, S $(-3, -1)$.
22. Find the coordinates of a point:
 - (i) whose ordinate is 6 and lies on the y-axis
 - (ii) whose abscissa is -3 and lies on the x-axis.
23. In which quadrant the following points lie? $(3, 2)$, $(2, -3)$, $(-4, 4)$ and $(-2, -3)$
24. Show that the points A $(3, 5)$, B $(6, 0)$, C $(1, -3)$ and D $(-2, 2)$ are the vertices of a square ABCD
25. Show that points A $(7, 5)$, B $(2, 3)$ and C $(6, -7)$ are the vertices of a right triangle. Also find its area
26. Find the centre of a circle passing through $(5, -8)$, $(2, -9)$ and $(2, 1)$.
27. If the points $(10, 5)$, $(8, 4)$ and $(6, 6)$ are the mid-points of the sides of a triangle, find its vertices.
28. Show that the points A $(1, 2)$, B $(5, 4)$, C $(3, 8)$ and D $(-1, 6)$ are the vertices of a square.
29. Find the vertices of a triangle, the mid-points of whose sides are $(3, 1)$, $(5, 6)$ and $(-3, 2)$
30. Find the coordinates of the centre of a circle passing through the points A $(2, 1)$, B $(5, -8)$ and C $(2, -9)$. Also find the radius of this circle.
31. Find the coordinates of the centre of a circle passing through the points A $(-2, -3)$, B $(-1, 0)$ and C $(7, -6)$. Also find the radius of this circle.
32. Find the coordinates of the centre of a circle passing through the points A $(1, 2)$, B $(3, -4)$ and C $(5, -6)$. Also find the radius of this circle.
33. Check whether $(5, -2)$, $(6, 4)$ and $(7, -2)$ are the vertices of an isosceles triangle.
34. An equilateral triangle has two vertices at the points $(3, 4)$ and $(-2, 3)$, find the coordinates of the third vertex.
35. Find the coordinates of the points of trisection of the line segment joining the points A $(2, -2)$ and B $(-7, 4)$.
36. Find the coordinates of a point A, where AB is the diameter of a circle whose centre is $(2, -3)$ and B is $(1, 4)$.
37. Find the coordinates of the points which divide the line segment joining A $(-2, 2)$ and B $(2, 8)$ into four equal parts.
38. If the points $(10, 5)$, $(8, 4)$ and $(6, 6)$ are the midpoints of the sides of a triangle, find its vertices.

39. Represent the real number $\sqrt{7}$ on the number line.
40. Represent the real number $\sqrt{2}, \sqrt{3}, \sqrt{5}$ on a single number line.
41. Express the following in the form of $\frac{p}{q}$, where p and q are integers and $q \neq 0$.
- (a) $0.\bar{6}$ (b) $0.4\bar{7}$ (c) $0.\overline{001}$ (d) $0.2\bar{6}$
42. Find the decimal expansions of $\frac{10}{7}, \frac{7}{8}, \frac{1}{13}$
43. Prove that $\sqrt{5}$ is an irrational number.
44. Prove that $\sqrt{7}$ is an irrational number.
45. The coordinates of the three vertices of a rectangle ABCD are A(3, 2), B(-4, 2), C(-4, 5). Plot these points and write the coordinates of D.

Q.3 Activity of coordinate plane: (Do the following activity on graph and paste it on A4 sized sheet)

DIRECTION: Plot the points on the graph (origin should be at the centre of your graph). Connect the points with line segments as you plot them. Keep connecting the points until you see LINE ENDS. Then start the next group. Shade in when finished.



- | | | | | | |
|-------------|------------|------------|-------------|-------------|-------------|
| 1. (-5, -3) | (7, 10) | 4. (5, -3) | 6. (5, 0) | 9. (-3, -7) | 11. (4, -1) |
| (-4, -5) | (8, 10) | (4, -5) | (4, -1) | (-1, -8) | (4, 0) |
| (-3, -7) | (9, 7) | (3, -7) | (2, -1) | (1, -8) | (3, -1) |
| (-3, -6) | (8, 4) | LINE ENDS | (4, 0) | (2, -6) | SHADE IN |
| (-2, -4) | (7, 1) | | (5, 0) | (1, -5) | LINE ENDS |
| (-1, 0) | (3, 4) | 5. (7, 1) | LINE ENDS | (-1, -5) | |
| LINE ENDS | (0, 1) | (8, -3) | | (-2, -6) | 12. (-7, 4) |
| | (-3, 4) | (9, -7) | 7. (1, 0) | (-1, -8) | (-7, 9) |
| 2. (-7, 1) | (-7, 1) | (8, -7) | (2, -4) | SHADE IN | (-4, 6) |
| (-8, 4) | LINE ENDS | (7, -6) | (3, -6) | LINE ENDS | (-4, 5) |
| (-9, 7) | | (4, -9) | (3, -7) | | (-6, 3) |
| (-8, 10) | 3. (-5, 0) | (1, -10) | (1, -8) | 10. (4, 6) | (-7, 4) |
| (-7, 10) | (-4, 0) | (-1, -10) | LINE ENDS | (7, 9) | SHADE IN |
| (-5, 9) | (-2, -1) | (-4, -9) | | (7, 5) | LINE ENDS |
| (-3, 7) | (-4, -1) | (-7, -6) | 8. (-4, -1) | (6, 4) | |
| (-2, 6) | (-5, 0) | (-8, -7) | (-4, 0) | (4, 5) | |
| (0, 7) | LINE ENDS | (-9, -6) | (-3, -1) | (4, 6) | |
| (2, 6) | | (-8, -2) | SHADE IN | SHADE IN | |
| (3, 7) | | (-7, 1) | LINE ENDS | LINE ENDS | |
| (5, 9) | | LINE ENDS | | | |

SCIENCE

- Do the following worksheet in the Science Notebook:

Q.1 Multiple Choice Questions: (1 mark each)

- (i) Who discovered cells?
(a) Newton (b) Hooke (c) Darwin (d) Einstein
- (ii) Powerhouse of cell is:
(a) Nucleus (b) Mitochondria (c) Ribosome (d) ER
- (iii) Cell membrane is:
(a) Rigid (b) Permeable (c) Solid (d) Selectively permeable
- (iv) DNA is present in:
(a) Cytoplasm (b) ER (c) Ribosome (d) Nucleus
- (v) Plant cells have:
(a) Cell wall (b) Centrioles (c) Lysosomes (d) None
- (vi) Protein synthesis occurs in:
(a) Nucleus (b) Golgi (c) Ribosome (d) Vacuole
- (vii) Smallest cell is:
(a) Bacteria (b) Plant (c) Animal (d) Virus
- (viii) Osmosis is movement of:
(a) Solute (b) Water (c) Gas (d) Protein
- (ix) ER stands for:
(a) Energy Reticulum (b) Endoplasmic Reticulum
(c) External Region (d) None
- (x) Vacuole stores:
(a) Energy (b) Protein (c) DNA (d) Water & food

Q.2 True or False: (1 mark each)

- (a) Cell is basic unit of life
(b) Mitochondria produces energy
(c) Plant cells lack cell wall
(d) Nucleus stores DNA
(e) Osmosis involves solute movement
(f) Ribosomes make proteins
(g) Animal cells have plastids
(h) Golgi apparatus packages substances
(i) Prokaryotes have nucleus
(j) Vacuole is large in plant cells

Q.3 Very Short Answer Questions: (1 mark each)

- (a) What is a cell?
- (b) Who discovered the cell?
- (c) Define prokaryotic cells.
- (d) What is the function of the nucleus?
- (e) What is cytoplasm?
- (f) Define osmosis.
- (g) What are ribosomes?
- (h) What is the function of mitochondria?
- (i) What is cell membrane?
- (j) What are plastids?

Q.4 Short Answer Questions: (2–3 marks)

- (a) State the cell theory.
- (b) Differentiate between prokaryotic and eukaryotic cells.
- (c) Explain the role of mitochondria.
- (d) What is endoplasmic reticulum?
- (e) What are plastids? Name their types.
- (f) What is the function of Golgi apparatus?
- (g) Write two differences between plant and animal cells.

Q.5 Long Answer Questions (5 marks)

- (a) Describe the structure and functions of a cell.
- (b) Explain the structure and function of the nucleus.
- (c) Describe different cell organelles and their functions.
- (d) Explain diffusion and osmosis with suitable examples.
- (e) Describe mitosis and meiosis and their importance.
- (f) Draw and label the plant cell and answer the questions.

Q.6 Questions:

- (a) Label any five parts of the plant cell.
- (b) Which structure is responsible for photosynthesis?
- (c) Which part gives rigidity to the plant cell?

Q.7 Draw mitochondria and answer the questions.

- (a) Label parts of mitochondria.
- (b) Describe structure and functions of mitochondria.
- (c) Why is mitochondria called the powerhouse of the cell?

Q.8 Assertion – Reason Questions: (1 mark each)

- (a) A: Cell is basic unit of life
R: It performs all functions
- (b) A: Mitochondria called powerhouse
R: It produces ATP
- (c) A: Plant cells have vacuole
R: It stores materials
- (d) A: Prokaryotes have nucleus
R: They are simple
- (e) A: Ribosomes make proteins
R: They are present in cytoplasm

Q.9 Numerical

1. A body travels from A to B at 40 m/s and from B to A at 60 m/s. Calculate the average speed and average velocity.
2. A body travels the first half of the total distance with velocity V_1 and the second half with velocity V_2 . Calculate the average velocity.
3. A train moves with a speed of 30 km/hr in the first 15 minutes, with another speed of 40 km/hr the next 15 minutes, and then with speed of 60km/hr in the last 30 minutes. Calculate the average speed of the train for this journey.
4. A body travels a distance S_1 with velocity V_1 and distance S_2 with velocity V_2 in the same direction. Calculate the average velocity of the body.
5. A car travels along a straight line for the first half time with speed 50 km/hr and the second half time with speed 60 km/hr. Find the average speed of the car.
6. A jet plane starts from rest with an acceleration of 3 m/s^2 and makes a run for 35 sec before taking off. What is the minimum length of the runway and what is the velocity of the jet at the take off?
7. An electron travelling with a speed of $5 \times 10^3 \text{ m/s}$ passes through an electric field with an acceleration of 10^{12} m/s^2 . How long will it take for the electron to double its speed? What will be the distance covered by the electron in this time?
8. A car moving along a straight highway with a speed of 72 km/hr is brought to stop within a distance of 100 m. What is the retardation of the car and how long does it take for the car to stop?
9. A bullet travelling with velocity of 16m/s penetrates a tree trunk and comes to rest in 0.4 m. Find the time taken during the retardation.
10. A ball thrown vertically upwards with speed of 19.6 m/s from the top of a tower returns to the earth in 6 second. Find the height of the tower.
11. A cyclist travels a distance of 4 km from A to B and then moves a distance of 3 km at right angle to AB. Find his resultant displacement and total distance travelled.
12. A boy moves 3M towards east he then turns and moves 4 m towards north. Calculate the distance travelled by the boy and the displacement of the boy.
13. An athlete runs along a circular track of radius 100 m. Calculate the displacement of the athlete and the distance travelled by him, when he covers $\frac{3}{4}$ th of the track.

14. 14. Ram travels on a straight road. He goes from position A to position B. The distance between A and B is 4 km. Now from position B he turns back and travels a distance of 2 km to reach the position C. Find the total distance travelled by Ram during the whole journey and the magnitude of displacement.
15. 15. A taxi driver noted the reading on the odometer fitted in the vehicle as 1052 km when he started the journey. After 30 minutes drive, he noted that the odometer reading was 1088 km. Find the average speed of the taxi.
16. 16. A boy is running on a straight road. He runs 500 m towards north in 2 minutes 10 seconds and then turns back and runs 200 m in 1 minute. Calculate i) his average speed and magnitude of average velocity during first 2 minutes 10 seconds and ii) his average speed and magnitude of average velocity during the whole journey.
17. 17. A train travels 20 km at a uniform speed of 60 km/h and the next 20 km at a uniform speed of 80 km/hr. Calculate its average speed.
18. 18. An object dropped from a leaf false with a constant acceleration of 10 m/S². Find its Speed 2 second after it was dropped.
19. 19. A body starts from rest and moves with a unifrom acceleration of 2 m/S². What will be its velocity and displacement at the end of 10 seconds?
20. 20. A body moves with an initial velocity of 2m/s and uniform acceleration of 3 m/S². Calculate the velocity when it has traveled a distance of 77 m.
21. 21. An athlete completes one round of circular track of diameter 50 m in 10 second. What will be the distance cover and the displacement at the end of 45 second?
22. 22. An object moves with an initial velocity of 10m/s and uniform acceleration of 0.5 m/S². Calculate the velocity after 10 second and distance travelled in this time.
23. 23. An object is dropped from rest at a height of 150 m and simultaneously another object is dropped from rest at a height 100 m. What is the difference in their heights after 2 second if both objects drop with same acceleration, how does the difference in heights vary with time?
24. 24. An object starting from rest travels 20 m in first 2 second and 160 m in next 4 second. What will be the velocity after 7 second from the start?
25. 25. A ball is thrown upwards with a speed of 15 m/s. What is its maximum height reached?
26. 26. An object is projected upwards with an initial speed of 25 m/s. What is its velocity after 4 seconds? 27. A stone is dropped from a height of 80 meters. What is its speed just before it hits the ground? (Take $g = 9.8\text{m/s}^2$)
27. 28. A body moves upwards with a uniform velocity of 10 m/s. What is the distance travelled by it in 2 seconds?
28. 29. An object is thrown downwards with an initial speed of 12 m/s. What is its velocity after 3 seconds? (Take $g = 9.8\text{ m/s}^2$)
29. 30. A ball is thrown upwards with an initial speed of 18 m/s. What is its acceleration after 2 seconds?
30. 31. A body falls from rest and travels 49 meters in 3.1 seconds. What is its acceleration? (Take $g = 9.8\text{ m/s}^2$)
31. 32. An object is projected upwards with an initial speed of 30 m/s. What is its velocity after 5 seconds? (Take $g = 9.8\text{ m/s}^2$)

SOCIAL SCIENCE

Q.1 Revise all the chapters done in the Class thoroughly.

Q.2 PORTFOLIOS:

CH-Understanding Social Science

- Meaning and scope of Geography, History, Political Science, and Economics as disciplines and recognise their interconnections.

CH-Shaping of the Earth's Surface

- Describe the concept of plate tectonics and analyse its relevance in understanding Earth's dynamics.
- Locate major tectonic plates on a world map.
- Explain processes of weathering and erosion with suitable examples.
- Identify the prominent agents of gradation operating in a given region. Describe major landforms and explain the processes involved in their formation.
- Explain the causes of natural disasters and propose strategies for their mitigation.

CH-Early Humans and Beginning of Civilisation

- Describe how prehistoric time divisions are organised.
- Explain how humans lived before the invention of writing.
- Understand the beginning of the settled life with development of agriculture, and domestication of plants and animals
- Explore the factors of urban development and transformation through time.

CH-Democracy

- Roots of democracy in India
- Challenges to democracy in India
- Democratic systems in the world
- Differentiate between parliamentary and presidential systems.
- Identify examples of both systems across countries, such as India, USA, France, Russia, and Canada.

Summer
Vacation