असतो मा सद्गमय, तमसो मा ज्योतिर्गमय।।

HALLMARK PUBLIC SCHOOL
www.hallmarkpublicschool.com

Summer Vacation Assignment 2025

CLASS-IX

Summer VACATION

Summer's warmth descends upon the land,
School's out, and freedom's in hand.
Long days stretch, and sunshine bright,
A time for fun, for play, for delight.

So, let's bask in summer's golden glow,
And make the most of this break's sweet flow.
For summer vacation's a treasured time,
To relax, recharge, and shine!

JUNE 01, 2025 TO JULY 06, 2025

The School Reopens on
JULY 07, 2025.

Dearest Hallmarkite

Greetings from Hallmark!

As we head into the sunny days ahead, we're excited to challenge your minds and keep your learning momentum going. Kickstart your summer with a splash of learning and fun. The Summer Vacation Assignment is designed to help you retain key concepts, explore new ideas, and return to school refreshed and ready to rock! Let's make this break both relaxing and rewarding! Dive in, explore, and come back stronger!

SUMMER BUZZ FOR SUPER PARENTS

- **Make sure your child has a quiet, well-lit place to do homework.**
  Avoid having your child do homework with the television on or in places with other distractions, such as people coming and going.
- **Make sure the materials your child needs, such as paper, pencils and a dictionary, are available.**
  Ask your child if special materials will be needed for some projects and get them in advance.
- **Help your child with time management.**
  Establish a set time each day for doing homework. Don't let your child leave homework until just before bedtime.
- **Be positive about homework.**
  Tell your child how important school is. The attitude you express about homework will be the attitude your child acquires.
- **When your child does homework, you too do homework.**
  Show your child that the skills they are learning are related to things you do as an adult. If your child is reading, you read too.
- **When your child asks for help, provide guidance, not answers.**
  Giving answers means your child will not learn the material. Too much help teaches your child that when the going gets rough, someone will do the work for him or her.
- **If homework is meant to be done by your child alone, stay away.**
  Too much parent involvement can prevent homework from having some positive effects. Homework is a great way for kids to develop independent, lifelong learning skills.
- **Help your child figure out what is hard homework and what is easy homework.**
  Have your child do the hard work first. This will mean he will be most alert when facing the biggest challenges. Easy material will seem to go fast when fatigue begins to set in.
- **Reward progress in homework.**
  If your child has been successful in homework completion and is working hard, celebrate that success with a special event (e.g., pizza, a walk, a trip to the park) to, reinforce the positive effort.

Warmest wishes

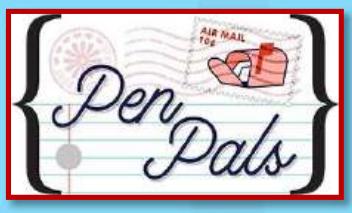
Hallmark Team

ENGLISH

1. Poetry in Motion, A Language Ocean

Write short poems based on theme 'Expectations' and 'Social Barriers' using at least two poetic devices. Use A-4 size pastel sheets

2. Secret Pen Pal



Write a secret message (without name) to your Pen Pal on an Inland Letter.

3. Words and Expressions

Do Unit 1 to 5 in the book.

नीचे दिए गए रचनात्मक कार्य को हिंदी की कार्यपुस्तिका में करें।

अनुच्छेद लेखन

- गर्मी की छुट्टियाँ और मेरा अनुभव'
- डिजिटल दुनिया और आज का विद्यार्थी

पत्र लेखन

- अपने मित्र को पढ़ाई और खेल के संतुलन पर पत्र लिखिए।

पुस्तक समीक्षा

- कोई एक हिंदी कहानी या उपन्यास पढ़ें और उसकी 100 शब्दों में समीक्षा करें।

रचनात्मक लेखन

- "काश! मैं एक पक्षी होता ....." विषय पर एक छोटी कल्पनात्मक कहानी या कविता लिखिए।

MATHEMATICS

1. EXEMPLAR PROBLEMS

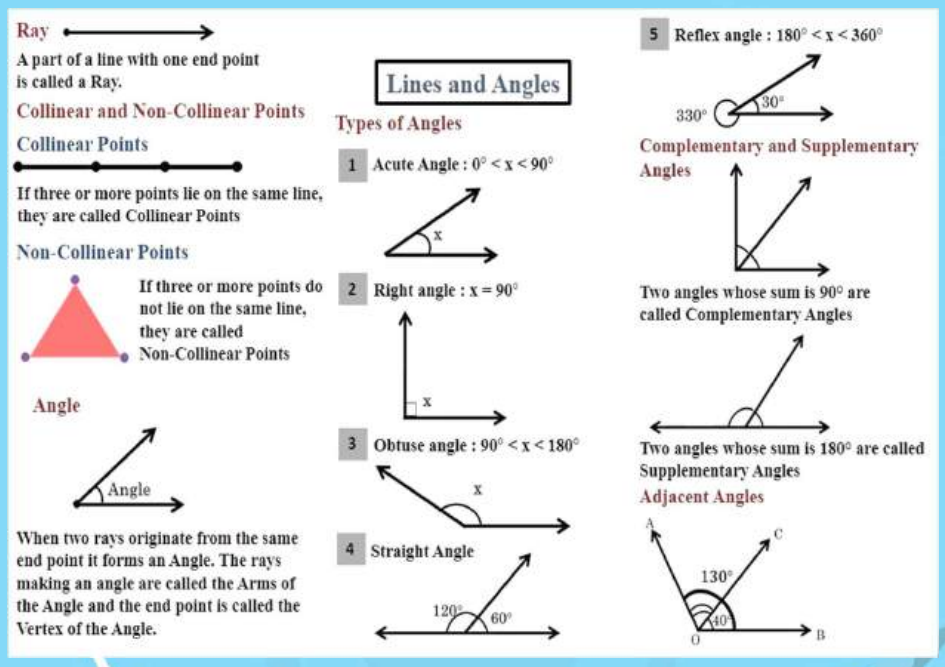
Solve all the exercises of Chapters 1, 2 and 3 in your mathematics notebook. Do the questions from the prescribed syllabus only.

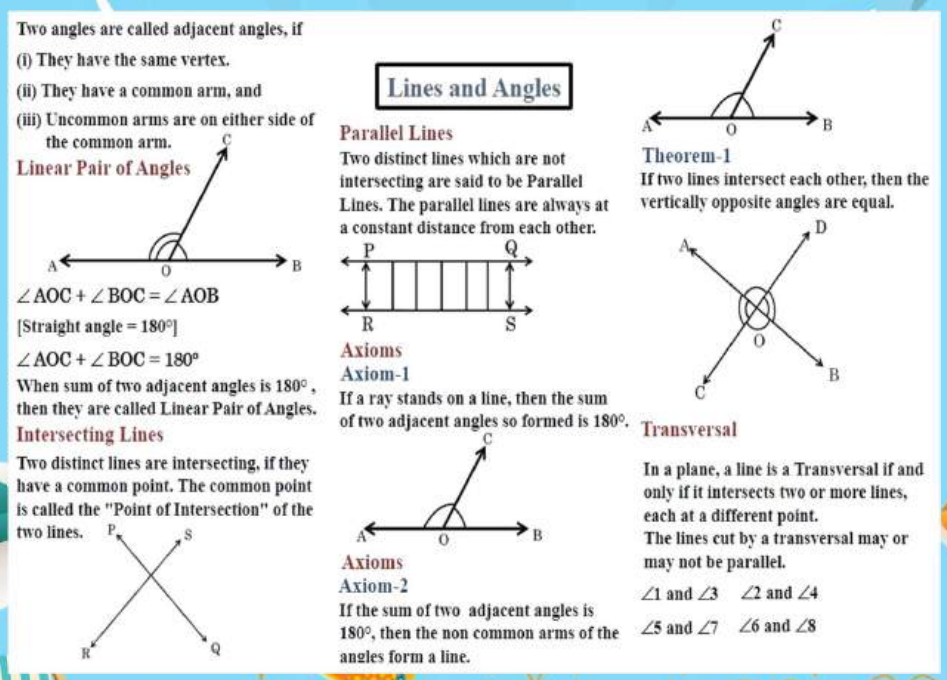
2. LAB MANUAL

Do **Activity- 2, 3, 5, 7 and 9** in the Practical File.

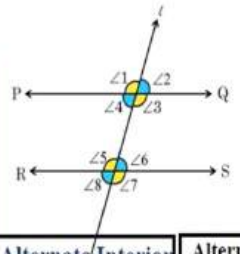
3. STUDENT PORTFOLIO ENRICHMENT ACTIVITY

- Make a Mind Map of any one of the following topics of Lines and Angle. Chapter-6 Lines and Angles





Lines and Angles



Alternate Interior Angles ∠3 and ∠5, ∠4 and ∠6

Alternate Exterior Angles ∠1 and ∠7, ∠2 and ∠8

Corresponding Angles
∠1 and ∠5, ∠2 and ∠6
∠3 and ∠7, ∠4 and ∠8

Interior Angles on the same side of Transversal ∠3 and ∠6, ∠4 and ∠5

Interior angles on the same side of the transversal are also referred to as Consecutive Interior Angles or Allied Angles or Co-interior Angles.

Axiom -3 Corresponding Angle Axiom
If a transversal intersects two parallel lines, then each pair of Corresponding Angles is Equal.

Axiom-4 Corresponding Angle Axiom
If a transversal intersects two lines such that a pair of corresponding angles is equal, then the two lines are parallel to each other.

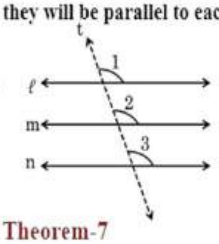
Theorem-2
If a transversal intersects two parallel lines, then each pair of alternate interior angles is equal.

Theorem-3
If a transversal intersects two lines such that a pair of alternate interior angles is equal, then the two lines are parallel.

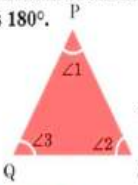
Theorem-4
If a transversal intersects two parallel lines, then each pair of interior angles on the same side of the transversal is supplementary.

Theorem-5
If a transversal intersects two lines such that a pair of interior angles on the same side of the transversal is supplementary, then the two lines are parallel.

Theorem-6
If two lines are parallel to the same line, they will be parallel to each other.

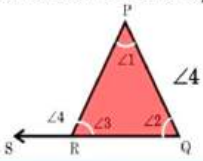


Theorem-7
The sum of all the angles of a triangle is 180°.



∠1 + ∠2 + ∠3 = 180°

Theorem-8
If a side of a triangle is produced, then the exterior angle so formed is equal to the sum of the two interior opposite angles.



∠4 = ∠1 + ∠2

4. GAME OF COORDINATE PLANE

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)
(-4 , -5)
(-3 , -7)
(-3 , -6)
(-2 , -4)
(-1 , 0)
LINE ENDS

2. (-7 , 1)
(-8 , 4)
(-9 , 7)
(-8 , 10)
(-7 , 10)
(-5 , 9)
(-3 , 7)
(-2 , 6)
(0 , 7)
(2 , 6)
(3 , 7)
(5 , 9)
(7 , 10)
(8 , 10)
(9 , 7)
(8 , 4)
(7 , 1)
(3 , 4)
(0 , 1)
(-3 , 4)
(-7 , 1)
LINE ENDS

3. (-5 , 0)
(-4 , 0)
(-2 , -1)
(-4 , -1)
(-5 , 0)
LINE ENDS

4. (5 , -3)
(4 , -5)
(3 , -7)
LINE ENDS

5. (7 , 1)
(8 , -3)
(9 , -7)
(8 , -7)
(7 , -6)
(4 , -9)
(1 , -10)
(-1 , -10)
(-4 , -9)
(-7 , -6)
(-8 , -7)
(-9 , -6)
(-8 , -2)
(-7 , 1)
LINE ENDS

6. (5 , 0)
(4 , -1)
(2 , -1)
(4 , 0)
(5 , 0)
LINE ENDS

7. (1 , 0)
(2 , -4)
(3 , -6)
(3 , -7)
(1 , -8)
LINE ENDS

8. (-4 , -1)
(-4 , 0)
(-3 , -1)
SHADE IN
LINE ENDS

9. (-3 , -7)
(-1 , -8)
(1 , -8)
(2 , -6)
(1 , -5)
(-1 , -5)
(-2 , -6)
(-1 , -8)
SHADE IN
LINE ENDS

10. (4 , 6)
(7 , 9)
(7 , 5)
(6 , 4)
(4 , 5)
(4 , 6)
SHADE IN
LINE ENDS

11. (4 , -1)
(4 , 0)
(3 , -1)
SHADE IN
LINE ENDS

12. (-7 , 4)
(-7 , 9)
(-4 , 6)
(-4 , 5)
(-6 , 3)
(-7 , 4)
SHADE IN
LINE ENDS

SCIENCE

- Ch-1 Matter in Our Surroundings
- Ch-5 The Fundamental Unit of Life
- Ch-8 Motion

General Instructions:

1. Revise the above mentioned chapters and solve the following Revision Worksheet in your Science Notebook.
2. Section A has one mark questions comprising MCQ, Case Study-based and assertion-reason type questions. They are to be answered in one word or in one sentence.
3. Section B has short answer type questions. These are to be answered in about 50-60 words each.
4. Section C has long answer type questions.

SECTION-A

Q.1 What is the name of the metal which exists in liquid state at room temperature?

(A) Sodium (B) Potassium (C) Mercury (D) Bromine

Q.2 If we put camphor in an open container, its amount keeps on decreasing due to the phenomenon of:

(A) Evaporation (B) Precipitation (C) Condensation (D) Sublimation

Q.3 In tincture of iodine, find the solute and solvent:

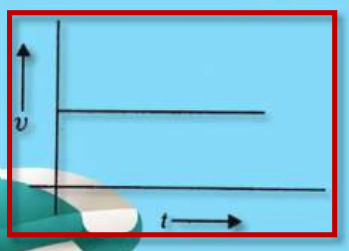
(A) Alcohol is the solute and iodine is the solvent.

(B) Iodine is the solute and alcohol is the solvent.

(C) Any component can be considered as solute or solvent.

(D) Tincture of iodine is not a solution.

Q.4 From the given v-t graph, it can be inferred that the object is:



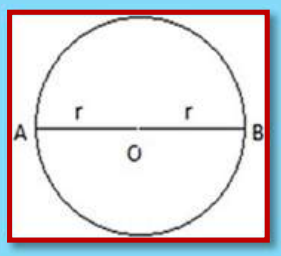
(A) At rest

(B) In uniform motion

(C) Moving with uniform acceleration

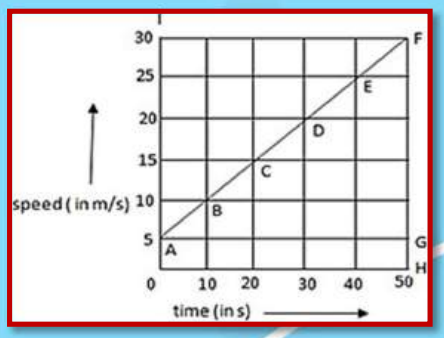
(D) In non-uniform motion

Q.5 A particle is moving in a circular path of radius r. The displacement after half a circle would be:



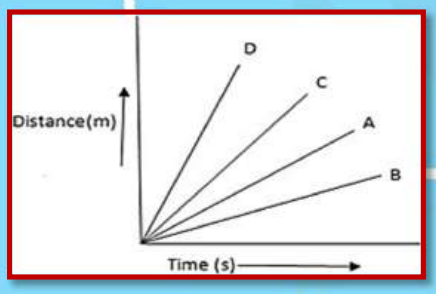
(A) Zero (B) πr (C) $2r$ (D) $2\pi r$

Q.6 The speed - time graph of a car is given here. Using the data in the graph calculate the total distance covered by the car.



(A) 1250 m (B) 875 m (C) 1500 m (D) 870 m

Q.7 Four cars A, B, C and D are moving on a levelled, straight road. Their distance time graphs are shown in the figure below. Which of the following is the correct statement regarding the motion of these cars?



(A) Car A is faster than car D. (B) Car B is the slowest.

(C) Car Cis faster than car D. (D) Car C is the slowest.

Q.8 In a water-sugar solution:

(A) Water is solute and sugar is solvent.

(B) Water is solvent and sugar is solute.

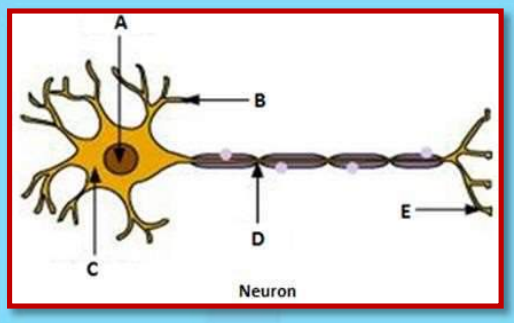
(C) Water is solute and water is also solvent.

(D) None of these

Q.9 Cell is the structural and functional unit of life. The word cell is derived from the Latinword 'cellula' which means "a little room". Name the scientist who coined the term cell.

(A) Robert Hooke
(B) Anton Von Leeuwenhoek
(C) Robert Brown
(D) Ernst Haeckel

Q.10 Given below is a diagram showing the structure of a neuron tissue.



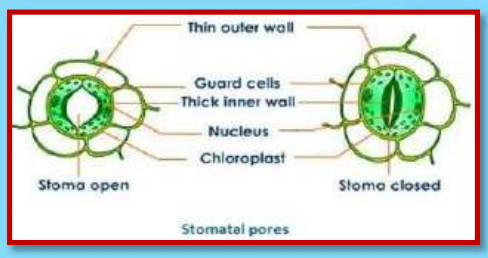
Choose the correct labelling for the parts A, B, C, D and E.

(A) A – Nucleus; B – Cell body; C – Dendrite; D – Axon; E – Nerve ending.
(B) A – Nucleus; B – Dendrite; C – Cell body; D – Nerve ending; E – Axon.
(C) A – Nucleus; B – Axon; C – Cell body; D – Dendrite; E –Nerve ending.
(D) A – Nucleus; B – Dendrite; C – Cell body; D – Axon; E – Nerve ending.

Q.11 Which of the following statements is not related to the endoplasmic reticulum?

(A) It behaves as transport channel for proteins between nucleus and cytoplasm.
(B) It transports materials between various regions in cytoplasm.
(C) It can be the site of energy generation.
(D) It can be the site of some biochemical activities of the cell.

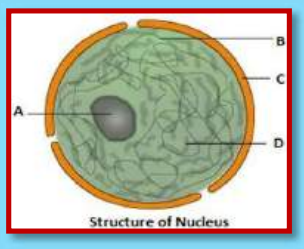
Q.12 Tiny pores are found on the surface of the leaves of plants. These pores are called stomata. These stomata surrounded by the kidney shaped guard cells provide many vital functions to the plants.



Which of the following functions is not served by the stomata for the plants?

(A) Exchange of gases, particularly CO_2 and O_2, with atmosphere
(B) Loss of water in the form of vapours during transpiration
(C) Helps to create pressure for the water to rise upward, by its process of transpiration.
(D) Helps the leaves to carry out the process of photosynthesis

Q.13 The nucleus controls all the activities of the cell and acts as a site of DNA material and protein synthesis. It is composed of some components which all together give the nucleus its functionality. Here is shown a figure of nucleus with some of its components labeled as A, B, C and D. Name these components correctly?



(A) A – Nucleons; B – Chromatin; C – Nuclear membrane; D – Nucleoplasm

(B) A – Nucleus; B – Chromatin; C – Nuclear membrane; D – Nucleoplasm

(C) A – Nucleolus; B – Chromatin; C – Nuclear membrane; D – Nucleoplasm

(D) A – Nucleolus; B – Chromatin; C – Nuclear membrane; D – Nuclear wall

Q.14 You must have observed that a fruit when unripe is green but it becomes beautifully coloured when ripe. According to you what is the reason behind this colour change?

(A) Chloroplasts change to chromoplasts.

(B) Chromoplasts change to chromosomes.

(C) Chloroplasts change to chromosomes.

(D) Chromoplasts change to chloroplasts.

Q.15 Rahul's mother was going to make pickle. For this she cut the vegetables into small pieces and put them in the Sun for few hours. Rahul was observing all her activities very curiously and asked his mother if why she had put the salted vegetables in the Sun. Among the following what might be the most appropriate answer for his question?

(A) So that the pickle may get extra flavour.

(B) So that the cut vegetables may absorb the vitamin D as a nutrient from the Sun rays.

(C) So that the vegetables may lose all the water by diffusion and evaporation and become dry.

(D) So that the salt may get evenly and properly absorbed by the vegetables.

Q.16 The table lists a few properties of substances:

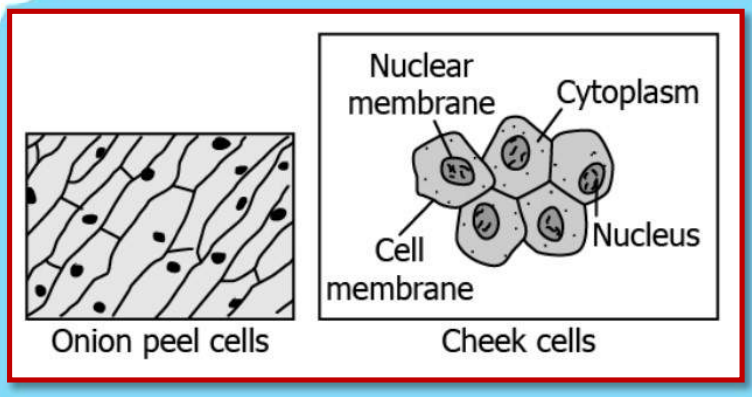
1. Density
2. Colour
3. Lustre

To apply the process of centrifugation in a mixture, which property of the substances should vary?

(A) only colour (B) only density

(C) both luster and colour (D) both colour and density

Q.17 The image shows cells in the onion peel and human cheek.



What can be understood by observing these cells?

(A) All living things made of cells that look similar.

(B) All living things made up of cells that are structurally similar but functionally different.

(C) All living things are made up of cells that are functionally similar but structurally different.

(D) All living things are made of cells that look different from each other.

Q.18 A student ties a stone to a thread of length 1 m and starts swinging it in a circular motion. The stone completes 20 rotations in 10 seconds. What is the speed of the moving stone?

(A) π m/ sec (B) 2π m/ sec (C) 4π m/ sec (D) 8π m/ sec

Question No. 19 to 20 consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

(A) Both the Assertion and the Reason are correct and the Reason is the correct explanation of the Assertion.

(B) Both the Assertion and the Reason are correct but the Reason is not the correct explanation of the Assertion.

(C) Assertion is true, but the Reason is false.

(D) The statement of the Assertion is false, but the Reason is true.

Q.19 **Assertion:** Specialization of cells is useful for organism.

Reason: It increases the operational efficiency of an organism.

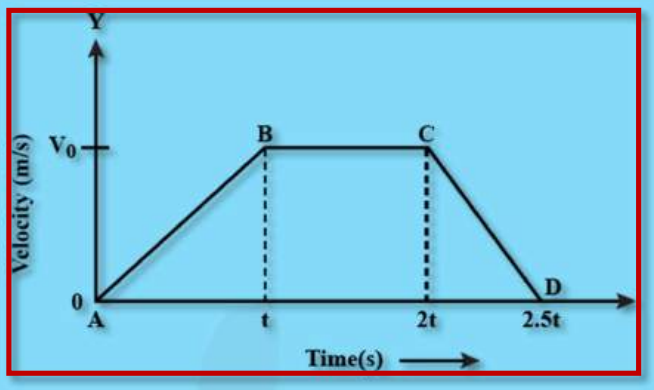
Q.20 **Assertion:** Displacement of an object may .be zero even if the distance covered is not zero.

Reason: Displacement is the shortest distance between the initial and final position.

SECTION-B

CASE-1

Figure below shows a velocity-time graph for a car starting from rest. The graph has three parts AB, BC and CD.



Q.21 Which part of graph shows motion with uniform velocity?

(A) BC (B) CD (C) AB (D) BD

Q.22 Which part of graph shows motion with uniform acceleration?

(A) AB (B) BC (C) CD (D) DC

Q.23 Which part of graph shows motion with uniform retardation?

(A) CD (B) CB (C) BA (D) BC

Q.24 The slope of velocity-time graph for particle moving with uniform velocity is equal to

(A) final velocity. (B) initial velocity. (C) zero. (D) none the above.

SECTION-C

Q.25 (a) What role vacuole play in a typical plant cell?

(b) What will happen if Golgi Apparatus is removed from the cell?

Q.26 (a) A sample of water under study was found to boil at 102°C at normal temperature. Is the water pure? Will this water freeze at 0°C? Explain.

(b) A driver is able to cut through water in a swimming pool. Which property of matter does the observation show?

Q.27 Draw velocity-time graphs for the following situations:

(a) When body is moving with a uniform velocity.

(b) When body is moving with a variable velocity but uniform retardation.

Q.28 A bus starting from rest moves with a uniform acceleration of 0.1 m/sec^2 for 2 minutes. Find the speed acquired and the distance travelled.

Q.29 (a) Draw a diagram of the epidermis of the leaf showing surface view and label stomata with guard cell and epidermal cell.

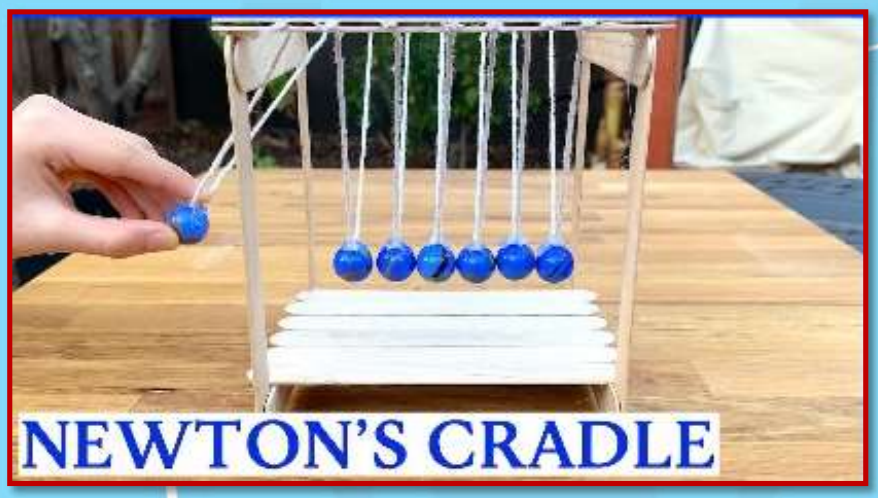
(b) Answer the following:

(i) How is the epidermis of the plant living in very dry habitats adapted?

(ii) Write the functions of guard cells of stomata in the leaf.

STUDENT PORTFOLIO ENRICHMENT ACTIVITIES:

1. Prepare a brief write up on '**Hydroponics**'. Use A4 size pastel sheets.
2. Newton's Cradle Working Model



https://youtu.be/vE8UeU7RNKk?si=DCLtk1iC_stlvSMf

SOCIAL SCIENCE

- Revise **Chapter-3 'Drainage' (Geography)** and **Chapter-3 'Electoral Politics' (Political Science)** and make Question Bank of each chapter. (50 Questions inclusive of MCQs, Short Answer Type & Long Answer Type Questions.)
- Make a Portfolio of Economics **Chapter-2 'People as a Resource'** on topic **'Market and Non- Market Activities'**. Use A4 size pastel sheets.

The given picture is for reference only. Use your own creativity.

- Make a Portfolio of History **Chapter-1 'French Revolution'** on topic **'Reign of terror'** or **'Three Estates of France'**. Use A4 size pastel sheets.

The given picture is for reference only. Use your own creativity.

Revise all the Syllabus done till date!

Happy Holidays!