

Summer Holiday Homework 2026-27

Sub: English

“Reading gives us wings to imagination.”

General Instructions:

Complete the work neatly in a creative file/A4 sheets.

Use colours, drawings, pictures, and headings wherever needed.

Original work will be appreciated.

Mention your name, class, and section on the cover page.

1. Literary Travel Journal

Read a story book of your choice. Imagine you are a character from that story and create a Travel Journal.

Include:

Date and place

Feelings and experiences

A sketch/doodle related to the chapter

One important lesson learned

(100–120 words each)

2. “If I Could Meet...” Activity

Choose any one character from the textbook and imagine you met them in real life.

Write:

What questions would you ask?

What advice would the character give you?

What would you learn from the meeting?

You may present it in:

interview format,

comic strip,

or dialogue form.

Sub: Science

Biology

- **Activities (To be done in science lab manual)**

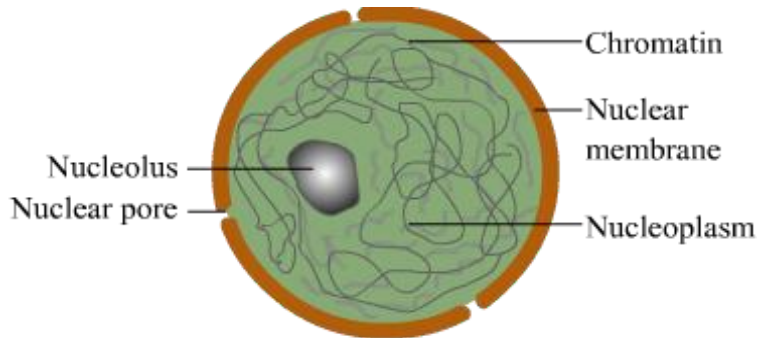
i) Preparation of stained temporary mounts of (a)onion peel), (b)human cheek cells & to record observations and their labelled diagram.

ii) Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, striped, smooth and cardiac muscle fibres and nerve cells in animals, from prepared slides. Draw their labelled diagrams.

- **Worksheet (Biology)**

1. In what two ways osmosis is different from diffusion.
2. What is the advantage of having deeply folded inner membrane in mitochondria?
3. State one feature that is similar and one feature that is dissimilar with respect to mitochondria and plastids.

4. In brief state what happens when :
- The plasma membrane of a cell breaks down.
 - A Red Blood Cell is kept in concentrated saline solution.
 - Golgi apparatus is removed from the cell.
5. Look at the diagram carefully



Structure of a Nucleus

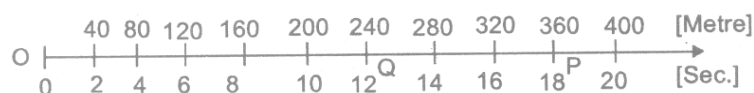
- Which part of the above diagram can carry the 'hereditary material'?
 - Who discovered the nucleus for the first time?
 - Why is it called the 'control centre' of the cell ?
6. Write the full form of DNA and ATP.
7. Why do the animal cells not have cell wall?
8. What is the significance of pores present on the nuclear membrane?
9. What is cell division? Give the types of cell division.
10. What are the functional differences between a plasma membrane and cell wall?

Physics

1. Define
(a) Acceleration (b) Rest (c) Motion (d) uniform motion (e) retardation?
2. Explain that rest and motion are relative terms.
3. A car starts from rest and acquires a velocity of 54 km/h in 2 minutes. Find
(i) the acceleration and
(ii) distance traveled by the car during this time. Assume, motion of the car is uniform.
4. A car travelling at 54 km/h is slow down to 36 km/h in 10 seconds. Find the retardation of the car.
5. A train starts from rest and accelerates uniformly at the rate of 5 m/s^2 for 5 s. Calculate the velocity of the train after 5 s.
6. A physical quantity measured is -10 m/s . Is it a speed or velocity?
7. A train traveling at 5 m/s speeds up to 10 m/s in 4 sec. Find the acceleration of the train.
8. A train is traveling at 36 km/hr speeds up to 72 km/hr in 10 sec. What is the acceleration of train?
9. When are distance and displacement equal in magnitude?
10. Differentiate between displacement and distance.
11. Give three examples of zero displacement.
12. Mark the following as motion in one dimension, two dimension and three dimension:
(i) Motion of queen on carom board.

- (ii) Motion of train along straight railway track.
- (iii) A bird flying in the sky (also kite).
- (iv) Motion of planets around the sun.
- (v) Random motion of gas molecules.
- (vi) Motion of an aeroplane in space.
- (vii) An object falling freely under gravity.
- (viii) An insect crawling on the floor of the room.
- (ix) Motion of queen on carom board.
- (x) Motion of object in horizontal and vertical circles etc.
- (xi) A car moving along a zigzag path on a level road.

13. A train covers 80 km in 2 hours. Find its average speed in kmh^{-1} , m min^{-1} and ms^{-1}



14. A car is moving along x-axis. As shown in figure it moves from O to P in 18 s and returns from P to Q in 6 second. What is the average velocity and average speed of the car in going from (i) O to P and (ii) from O to P and back to Q.

15. A car covers the 1st half of the distance between two places at a speed of 40 km h^{-1} and the 2nd half at 60 km h^{-1} . What is the average speed of the car?

16. A non-stop bus goes from one station to another station with a speed of 54 km/h , the same bus returns from the second station to the first station with a speed of 36 km/h . Find the average speed of the bus for the entire journey.

CHEMISTRY

1. Define:
 - a) Solute b) Solvent
2. Differentiate between a true solution and a suspension (any two points).
3. What is meant by concentration of a solution?
4. Name the separation technique used for:
 - a) Separating cream from milk b) Separating salt from seawater
5. State any three properties of colloids.
6. Explain the process of filtration with one suitable example.
7. Why is sedimentation followed by decantation useful in separating mixtures? Explain with an example.
8. Differentiate between: True solution, Colloid and Suspension on the basis of:
 - a) Particle size b) Visibility of particles c) Stability d) Tyndall effect
9. A mixture contains sand, salt, and water. Describe step-by-step how you would separate all three components.
10. Explain Coagulation with an example?

Sub: Hindi

1. यदि पशु बोल सकते विषय पर 100 शब्दों में निबंध लिखिए।
2. दो मित्रों के बीच पशुओं की सुरक्षा पर संवाद लिखिए।
3. पदुमलाल पुन्नालाल बख्शी का संक्षिप्त परिचय लिखिए एवं उनका चित्र चिपकाइए।

4. आज के जीवन में संत रविदास (रैदास) की शिक्षाओं का क्या महत्व है ? लिखिए ।
5. कवि रैदास जी का कोई एक दोहा सुंदर लेखन में लिखिए एवं उनका का चित्र चिपकाइए।

Sub: Sanskrit

1. अपनी दैनिक दिनचर्या संस्कृत में 10-12 वाक्यों में लिखिए।
2. निम्न विषयों में से किसी एक पर 10 पंक्तियों का संस्कृत संवाद लिखिए—
ग्रीष्मावकाशः
विद्यालयः
पर्यावरण संरक्षणम्
मित्रता
3. संस्कृत में दैनिक प्रयोग में आने वाले 20 शब्द लिखिए। (चित्र सहित)

Sub: French

File work

- 1) On A4 size sheet Make a collage of famous french things, food, culture, monuments, clothes etc
- 2) Make a mind map of « futur simple » on A4 size sheet
- 3) Make a list of any 15-20 common FRENCH words that are used in ENGLISH language also and write their meaning (for ex : Rendevous , à la carte , RSVP. Déjà vu ...etc)

Sub: Mathematics

● Activities (To be done in mathematics lab manual)

- Activity 2.
Square root
spiral
- Activity 10.
Coordinate
geometry
- Activity 11.
Graph of
linear
equation

Worksheet (To be done in Mathematics notebook)

1. Represent $\sqrt{2}$ on the number line.
2. Write three rational numbers between $\frac{2}{5}$ and $\frac{3}{5}$.
3. State whether $\sqrt{5}$ is rational or irrational. Give reason.
4. Find the degree of polynomial: $3x^3 - 5x + 7$.
5. Write the zero of the polynomial $f(x) = x - 4$.
6. Identify the coordinates of the origin.
7. Plot the point $(-2, 3)$ and mention its quadrant.
8. Find the value of x if $2x + 3 = 7$.
9. Prove that $\sqrt{3}$ is irrational.
10. Find four rational numbers between 1 and 2.
11. Find the coordinates of a point on x-axis and y-axis.

12. Evaluate polynomial $f(x) = 2x^2 - 3x + 1$ at $x = 2$.
13. Plot the points A(2,3), B(-1,4), C(-2,-3), D(3,-2) on Cartesian plane and identify their quadrants.
14. Find the zero of polynomial $f(x) = 2x - 6$ and verify it graphically.
15. Prove that there are infinitely many rational numbers between any two rational numbers.

Sub: Social Science

HISTORY

Civilization refers to an advanced stage of human society where people live in organized communities with developed systems of government, culture, religion, trade, and education. Ancient civilizations grew near rivers because rivers provided water for farming and daily life. These civilizations made great progress in architecture, writing, science, and art. The Egyptian, Chinese, and Vedic civilizations are among the oldest and most important civilizations in world history. Their ideas and inventions continue to influence our modern world.

Q 1. Prepare a comparative chart from Egyptian, Chinese and Vedic civilizations.

The first one is done for you.

Comparative Chart of Ancient Civilizations

Basis	Egyptian Civilization	Chinese Civilization	Vedic Civilization
Society	Highly structured; Pharaoh at top, followed by priests, nobles, scribes, soldiers, and peasants	Hierarchical; Emperor at top, then nobles, farmers, artisans, merchants	Initially tribal; later divided into Varna system (Brahmins, Kshatriyas, Vaishyas, Shudras)
Economy			Agriculture and cattle rearing; barter system; later trade developed
Religion	Polytheistic; believed in afterlife and mummification (e.g., Ra, Osiris)		Nature worship; many gods (e.g., Indra, Agni); rituals and sacrifices
Script		Chinese characters (logographic writing)	

Reason of Decline	Foreign invasions, weak rulers, economic problems		Social inequality, rigid caste system, internal conflicts
Architecture	Massive pyramids and temples		

Q 2. Make a descriptive flow chart on the following topics from Vedic civilization :

(Ref book pg 107&108)

- A. The four Varna system. B. The stages of life: The Ashram system
 C. Gurukul system of education.

Geography:

Topic: Climate Change 1. Climate Change Scrapbook

Make a scrapbook (8–10 pages) containing:

Causes of climate change Effects on Earth Global warming facts

Newspaper cuttings and pictures Solutions to reduce climate change

Add colourful charts, slogans, and drawings

Add a short conclusion on “How students can help fight climate change.”

Hints to Make the Project Colorful and Attractive

Use an A4 file/project notebook. * Include a cover page with name, class, and topic.

1. Use Different Theme Colors

- **Egyptian Civilization** → Golden yellow, sandy brown, black
- **Chinese Civilization** → Red, gold, dark green
- **Vedic Civilization** → Saffron, green, blue

2. Add Decorative Borders

- Draw:
 - Pyramid borders for Egypt
 - Dragon or cloud patterns for China
 - Lotus or rangoli designs for Vedic India

3. Paste or Draw Small Pictures

You can add:

- Pyramids and mummies for Egypt
- Great Wall and dragons for China
- Yajna fire altar and Vedic sages for Vedic civilization

4. Use Creative Headings

Write headings with:

- Sketch pens
- Glitter pens
- Bubble letters
- Shadow writing

Example: ★ “Ancient Civilizations Comparative Chart”

5. Use Symbols and Icons

Add tiny icons beside headings:

- 👑 Society
- 💰 Economy
- 🏛️ Religion
- 📜 Script
- 🏛️ Architecture

6. Make Mini Fact Boxes

Example: **Interesting Fact:** Egyptians built huge pyramids as tombs for kings.

📌 **Interesting Fact:** China gave the world silk and paper.

7. Use Charts and Shapes

Instead of plain writing:

- Use cloud shapes for facts
- Scroll-shaped boxes for information
- Arrows and flowcharts

8 Extra Decoration Ideas

- Use coloured sticky notes
- Add glitter stars
- Use washi tape

Make 3D pop-up pyramids or temples with paper folding.

Sub: Artificial Intelligence

Students must draw a neat and labeled diagram of the **AI Project Life Cycle**.

Problem Scoping → Data Acquisition → Data Exploration → Modelling → Evaluation

Explain Each Stage and give real world examples in Project File.

