

MPVM GANGA GURUKULAM
SUMMER VACATION HOMEWORK (2026-27)
CLASS IX

ENGLISH

Assignment 1 Read the novel 'The Adventures of Sherlock Holmes' by Arthur Conan Doyle and answer the following questions in a file sheet:

1. Make a mind map showing how Holmes connects clues to reach conclusions.
2. Write a newspaper report about a crime solved by Holmes
3. Create your own mystery story (100–150 words)

Assignment 2 Read The Last Leaf (Short story collection) by O Henry and answer the following questions:

1. Draw Behrman's masterpiece and write five lines on why it was so special? (The last leaf)
2. Write a letter from Jimmy to Bob explaining his decision. (After Twenty Years)
3. Create a poster on:
"Love is Sacrifice" (The Gift of the Magi)

Assignment 3

You lost your school ID card in the playground. Write a notice in not more than 40-50 words requesting students to return it.

Assignment 4

Read newspaper for 10 days and Paste cutting of one news for each day under the given headings: National, International and Sports and express your views on any one heading per day.

Assignment 5 *Art Integrated Project*

Collect information about the art and craft items of Arunachal Pradesh. Paste /Draw relevant pictures and write about them in about 200-250 words.

Assignment 6

Complete the exercises given on pages- 16-19 ,28 and 29 of the book 'Words and Expressions'

HINDI

'दो बैलों की कथा' पाठ के आधार पर बताइए कि पालतू पशुओं का हमारे जीवन में क्या महत्व है? आप उनकी सुरक्षा के लिए क्या उपाय करेंगे? वर्तमान में सड़क पर रह रहे कुत्तों को कांजीहौस में बंद करने का जो अभियान चलाया गया है उस पर अपने विचार भी व्यक्त कीजिए।

MATHEMATICS

1. Draw colourful square root spiral on A4 sheet.
2. Take a graph paper, assuming your house is located at origin. Now show any 5 landmarks (Shop, neighbour, Clinic etc) on graph paper. Also tell the quadrant and co-ordinates of the landmarks.
3. Create 3D geometric structures (e.g. cylinders, cones, Hemi-sphere) using coloured paper, or cardboard. Find its surface area and volume.

SCIENCE

CHEMISTRY

1. Design a simple water purifier using household materials.

Instructions:

- (ii) Test your model by filtering muddy/dirty water.

Answer the following questions:

- (i) List the materials required.
- (ii) Describe the procedure followed to make the purifier.
- (iii) Which processes are involved in this purification method?
- (iv) Suggest one improvement to make your purifier more effective.

OR

2. Perform an activity to distinguish between a true solution and a colloid on basis of Tyndall effect.

Your task includes:

1. Materials Required:

List the materials used (e.g., salt/sugar, starch/flour, water, glasses, torch, etc.).

2. Procedure:

3. Observations:

Record your observations based on:

- Visibility of light beam (Tyndall effect)
- Settling of particles over time (stability)

4. Result:

Write the differences observed between the two solutions.

Paste pictures while performing this test.

PHYSICS

"Simple Machines in the Kitchen /household"

Objective: To identify and classify mechanical advantages in a domestic setting.

Task: Interview 5 home makers or elders about the tools they use.

Data to Collect: * List 10 manual tools (e.g., nutcracker, tongs, rolling pin, knife).

Classify each tool into a category (Lever, Wedge, Screw, etc.).

For levers, identify the position of the Fulcrum, Effort, and Load.

Analysis: Draw diagrams for three tools and explain how they provide a "Mechanical Advantage" to make cooking/household easier.

Note: Do it on file pages.

BIOLOGY

1. Construct a small-scale model of a biogas digester using plastic bottles. Use organic waste (kitchen waste) to demonstrate how decomposition produces gas that can inflate a balloon attached to the digester.

OR

2. Seed Germination Activity: (Soil vs Paper vs Water)

Compare the growth rate of same seeds planted in:

- Soil (pot)
- Damp paper towel
- Water

Start recording your observation after 10 days of planting, measure height of the plants at the interval of three days and analyze which medium provides better anchorage and nutrient supply.

Contribute your plant to your class and help make your classroom green.

Note: Write your work in project file mentioning

Aim

Material required

Basic principle

Procedure

Observations

Result

Conclusion

Precaution.

Click pictures of your work and paste it in your file.

Submit your project in school.

SOCIAL SCIENCE

NOTE: Do the work in separate Project File.

POLITICAL SCIENCE

1. "If I Were the Leader..." Project

Write your own manifesto:

Educational reforms

Anti-corruption ideas

Environmental policies

GEOGRAPHY

GENERAL DISASTER PREPAREDNESS IN MY SCHOOL.

(Design a model plan for your school)

Select any possible hazard from the following mentioned topics

1. Earthquake Preparedness in School Buildings
2. Fire Safety Measures in Schools
3. Flood Preparedness Strategies for Schools in Vulnerable Area
4. Heatwave Safety Measures for Students

Project must include following topics

Role of Students in Disaster Preparedness

Importance of Mock Drills in Schools

Emergency Evacuation Planning and Exit Mapping

School Emergency Response Teams (ERTs): Roles and Responsibilities.

Early Warning Systems

First Aid Awareness and Training in Schools.

ECONOMICS

Field Inquiry: Understanding Scarcity Around Us

Objective: To observe how scarcity affects daily life in your local area.

What to Do (Field Visit / Experiential Learning):

1. Visit a local market or a grocery store in your area.
2. Observe and note:

Which goods seem limited in supply?

Are prices high for certain items? Why?

Is there any seasonal scarcity (e.g., certain vegetables, fruits)?

3. Interview one shopkeeper or resident and ask:

Have prices increased recently?

What causes shortages or surplus?

DESIGN THINKING & INNOVATION

Photography Project: Points of View

Objective: To explore different camera angles and understand the basic principles of photography.

Instructions:

- Click photos based on the 6 points of view given below
- Take at least 3 photos for each type
- Select the best 1 photo from each

- Final submission = 6 photos

Points of View:

1. Extreme Close-Up

Example: ants, leaf texture, eye, water drops

Focus: fine details and clarity

2. Close-Up (Black & White)

Example: portrait or facial expression

Focus: emotion and contrast

3. Mid Shot

Example: friends or family activity

Focus: balance between subject and background

4. Long Shot

Example: school building, house, street view

Focus: surroundings and space

5. Extreme Long Shot

Example: sunrise, sunset, landscape

Focus: wide view and depth

6. Unusual Angle

Example: top view or low angle

Focus: creative perspective

Photography Tips:

- Use light and shadow effectively
- Keep the subject clear and focused
- Avoid cluttered backgrounds
- Maintain good composition
- Prefer natural light

Submission Guidelines:

For each photo, write:

- Type of shot
- Location
- Reason for selecting the photo (1 line)

Paste or print neatly in your notebook or file. Make a creative cover page.

Bonus (Optional):

Choose your best photo and write a short description (4–5 lines) about it

PHYSICAL ACTIVITY TRAINER

Draw the communication channel on chart paper.

#ACTIVITIES TO BE PREPARED

@WRITE DOWN IN YOUR NOTEBOOK

Prepare a fun activity for early stage children.

Design an activity to develop passing or throwing skills for early stages children.

Prepare a schedule for any theme-based event assembly for 30 to 40 minutes.

List down the name of equipments and their uses in daily life or in sports activities.

CULTURE

भारत में स्थित चारों धाम का सचित्र वर्णन कीजिए।

ARTIFICIAL INTELLIGENCE

AI Around Me

Find 10 examples of AI in daily life + explain AI, ML, DL for 2 of them.

For each: Paste pic/printout / drawing and write about following :

1. Problem it solves
2. Data it uses
3. Is it AI or just a rule? Why?

Format : Use file page or A4 scrapbook (1 example per page) and submit that after vacation.

Examples: Google Maps ETA, Instagram filters, Alexa, Netflix recommendations, UPI fraud detection, Grammarly, DigiYatra at airport, AI teacher apps, Farming drones, Traffic signals

Or

Design a Chart on the topic "Communication Skills". Cover following topics:

- a) Pros and Cons of various types of Communication
- b) Meaning and importance of Feedback
- c) Types of Feedback

Note: Use chart paper for this and submit it to subject teacher.