K.V.M. PUBLIC SCHOOL, HALDWANI

Summer Vacation Assignment

CLASS: VII

SCIENCE AND TECHNOLOGY: INTELLECT IGNITE

Cross-Curricular Holiday Adventure

ENGLISH

1. Dialogue Writing: "A Talk Between a Student and an AI Assistant"

- •Write 6–8 line conversation.
- •The student asks questions about science or studies.
- •The AI replies with helpful facts or tips.

2. Vocabulary Activity: "Tech Talk – Words We Use Today"

List 10 words related to science and tech (e.g., algorithm, satellite, code, robot).

Write their meaning and use them in a sentence.

3. Creative Writing -"A Day in the Life of a Robot"

Imagine you are a robot living in the future. Write a story (150–200 words) about your day, duties, and thoughts. Use imaginative ideas and science terms.

4. Comic Strip: "Robot in My School"

A comic where a robot joins your class and helps students with learning.

- •Show how the robot helps, makes mistakes, and learns emotions.
- •Use bubbles and captions

HINDI

- 1-विज्ञान और प्रौद्योगिकी से संबंधित 10 नए शब्दों की सूची बनाइए और उनके अर्थ हिंदी में लिखिए।
- 2-दो मित्रों के संवाद के माध्यम (10 पंक्तियां) से बताइए की विज्ञान ने हमारे जीवन को कैसे आसान बनाया है?
- 3-यदि हमें ऊर्जा (बिजली) की बचत करनी है तो कौन-कौन से कार्य करने होंगे? 8 से 10 पंक्तियों में उत्तर दीजिए।

MATHEMATICS

O1. Cost Estimation – Build a Tech Lab

Task: Imagine you are designing a tech lab for your school. Create a cost estimation list including:

5 computers

1 smart board

1 printer

1WiFi router

Add GST (18%) and calculate the final bill.

Q2. Data Handling – Gadgets Survey

Task: Conduct a survey of 5 friends or family members:

How many hours a day they use mobile phones, computers, or tablets

Represent the data using bar graphs or tally marks.

O3. Word Problems:

1. Mobile Battery Life

A mobile phone is fully charged at 100%. It loses 12% battery every hour while in use.

Q: How much battery will be left after 5 hours of continuous usage?

2. Internet Speed

A student is downloading a science video file of 900 MB. His internet speed is 15 MB per minute.

Q: How many minutes will it take to download the full video?

3. Solar Panel Power

One solar panel generates 250 watts of power per hour.

Q: How much power will 8 such panels generate in 6 hours?

SCIENCE

1. Innovative Scientist Profile (Research-based Activity)

Choose any one Indian scientist from the field of science or technology.

Instructions:

- Mention his/her major contributions and inventions/discoveries.
- Add a picture/drawing of the scientist.
- Reflect: "How has their work impacted the world?"

2. Science in My Kitchen (Observation-based Activity)

Observe 3 examples of science at work in your kitchen/home.

Instructions:

- Write a short explanation of each (e.g., boiling, fermentation, pressure cooker, fridge).
- Mention the scientific principle involved.

3. Tech Around Us (Survey & Analysis)

Make a list of at least 5 gadgets or technologies used at home or school.

Instructions:

- Name the gadget.
- State its function.
- Write one advantage and one disadvantage of each.

4. Poster Making (Art-integrated Project)

Create a colorful and informative poster on any one topic:

- "Save Earth with Green Technology"
- "Technology and Students: A Double-Edged Sword"
- "Solar Power: A Bright Future"

SOCIAL SCIENCE

Question 1- Map work

(Label and Locate the scientific institute in Indian Map and paste in your notebook)

Question 2- Complete the following activity

ACTIVITY: 1 - COMPARATIVE STUDIES

Create a model or poster on how satellites help in weather forecasting, agriculture, and disaster management. Instructions:

- 1- Mention agencies like ISRO and their key missions.
- 2- Use real images from the internet or draw them.
- 3- Explain how this helps farmers and governments.

Or

Make a timeline chart of major scientific discoveries from ancient to medieval India (e.g., Aryabhata, Charaka, Sushruta, Bhaskaracharya).

Question 3- Prepare a 3d Model:

- a. Illustrate evolution display from bullock carts to bullet trains by putting colourful pictures.
- b. A working or static model of a park with solar panels, windmills, biogas plant, and rainwater harvesting.
- c. Display evolution from ancient messengers to satellites and smartphones.

Question 4-Prepare a colorful chart on any one of these topics:

- a) Role of Technology in Disaster Management (roll no. 1-12)
- b) Display India's space missions (like Chandrayaan, Mangalyaan).(roll no. 13-24)
- c) Green Revolution tools, IT industry, mobile banking, transport systems.(roll no. 25-36)

Instructions for Preparing the Holiday Homework File: "INTELLECT IGNITE"

- All work should be compiled in a file or folder and submitted after the vacation.
- Use ruled sheets for writing and plain sheets for drawings, wherever required.
- Complete assignments neatly: Use clean sheets, write legibly, and maintain organization.
- Follow instructions carefully: Read and understand each task before starting.
- Manage time effectively: Plan and prioritize tasks to complete homework within the given timeframe.
- Review and reflect: Go through completed work, identify areas for improvement, and learn from mistakes.
- Submit on time: Ensure timely submission on the designated date (02/07/2025, MONDAY).