

# Air Force School, Jaipur

# SUMMER HOLIDAY HOMEWORK

Class: IX

### **SCIENCE**

## Chemistry:-

- 1. Compare in tabular form the properties of solids, liquids and gases with respect to (i) Shape (ii) Volume (iii) Compressibility (iv) Diffusion (v) Fluidity (A4 Size Sheet)
- 2. Art integrated activity:
  Lakshadweep,, Andaman and Nicobar islands are exotic and beautiful locations, providing perfect inspiration for Chemists. Write a short article about the types of mineral resources forced in these islands on an A-4 Sheet and paste relevant pictures.
- 3. Do the assignment of Chapter-1 Attached in Chemistry Notebook.

### Physics-

- 1. Investigate the motion of a Pendulum. Study the factors affecting the time period of a pendulum, such as length, mass and amplitude, and present your finding in a creative way.
- 2. Design a model of a Transportation system. Create a model of transportation either by train or by a car and study its motion, speed and acceleration.
- 3. Plan to go to a place by a vehicle. Take readings of odometer and speedometer after every 5 minutes till you reach your destination, record three observations in the tabular form. Plot graph between distance-time and speed-time. State whether this motion is uniform or non-uniform.
- 5. Do the given assignment in your physics notebook which is attached with your physics notebook.

## **Edogy:-**

1. Draw a cell and cell organelles in a scrap book or loose sheets; add dialogue and text to explain their functions. Present it in a comic form.

#### What to include:-

- (a) Characters:- Represent different organelles as characters with personalities.
- (b) Dialogue:- Show how organelles interact and perform their tasks.
- (c) Visuals:- Use vibrant colours and engaging art styles.

- (d) Informative text:- Provide clear explanations of cell processes.
- 2. Observe the process of osmosis in daily life and list your observations.

### SOCIAL SCIENCE

#### 1. Economics

- a. Research and write about the Indian economy or a specific economic issue (e.g., poverty, unemployment).
- b. Create a project on the role of entrepreneurship in economic

#### 2. History

- a. Mark all the countries of Europe and Asia.
- b. Read newspapers and write an essay on "Democracy and poverty" with examples from INDIA.

#### **Art Integration**

Make a picture collage of pairing States Rajasthan and Nagaland on the basis of food, Dresses, Festivals, and Places etc.

#### **ENGLISH**

- 1. Learn all the chapters done in class.
- Write three diary entries on your special experiences during summer break.
- 3. Write an article on each of the topic given below:
  - a. Eve teasing
  - b. Mental Health of the teen age students.
- 4. Write descriptive paragraph on any two topics given below:
  - a. My favorite person
  - b. My favorite book
  - c. Indian wedding
  - d. School's Sports day
- 5. Write a story in your wards in about 120 words.

# हिन्दी

- 1. किसी भी विषय पर 80-100 में एक अनुच्छेद।
- 2. एक औपचारिक तथा एक अनौपचारिक पत्र
- 3. सूचना एवं ईमेल लिखिए (किसी भी विषय पर)

# A.I. (ARTIFICIAL INTELLIGENCE)

Write a letter to your future self in the word file and save it as pdf. The following points can be included in a letter/e-mail:-

- 1. Start with your interests, hobbies and skills.
- 2. Relate how AI can help you.
- 3. Write about your career you want to pursue and how AI will make an impact on that.

## **Mathematics**

## **Creative Holiday Homework**

#### **Theme: Real-Life Math Applications**

- 1. **Statistics Project** Survey 10 people (family/friends) and make bar graphs/pie charts from their responses (e.g., favorite fruit, screen time).
- 2. **Math in Sports** Explain how math is used in scoring, angles, speed, or timing in any 2 sports.
- 3. **Design a Dream House** Draw a floor plan of a house using scale (1 cm = 1 m) and calculate area/perimeter of each room.