## Lt. Col. Mehar Little Angels Sr. Sec. School

### Holiday Homework 2025-26

#### Class-IX

Holiday is the time that we all eagerly wait for. We all make plans to enjoy, to relax and to empower ourselves during these gala days. This summer vacation the Holiday Homework so designed by the mentors of the school is a medium for you all to achieve the motto of **"Fun and Learn"** The assignments are designed in a way to foster curiosity, develop creativity, enhance knowledge and instill the joy of learning among you all. They will certainly help you discover a new you who is more enriched and confident and performs every action to perfection.

### **GENERAL INSTRUCTIONS:-**

- Holiday Homework must be done in a very neat and presentable manner.
- Creativity and originality of work will be appreciated.
- Mention date and day when you do your work.
- Submit your holiday homework when the school reopens.

### Subject- English Language and Literature (184)

1) Depict the poem 'The Road Not Taken' from NCERT Book- Beehive in a creative manner as an artistic representation and present it in the class.

#### How to do-

Use your imagination to convert the poem in an artistic representation i.e collage making with pictures from magazine or newspapers to be presented in the class.

The presentation should be self- explanatory.

Where to do-

A3 Size sheets

Parameters for Assessment: Relevance to content, creativity and presentation

2) Design your own newspaper

### How to do-

The newspaper should have five sections

- 1. Facts and figures of English language
- 2. Creative Corner- Your classroom poetry or story
- 3. Quotes- By famous poets with their names
- 4. Entertainment

5. Games & Puzzle- based on tenses, verbs, prepositions or conjunctions. (Any one) For example Snakes & Ladder on prepositions.

### Where to do-

A3 Size sheets (5 pages)

Parameters for Assessment: Quality of content, originality and presentation

3) Read any one novel of your choice and write the review

### How to do-

The review is to be written in 250-300 words keeping in mind the given aspects:

- About the Writer
- Summary
- Favourite character
- Analysis

Where to do-

A4 Size sheets

Parameters for Assessment: Content, language and accuracy

4) Being innovative

### How to do-

Create your own diary in which you will write daily about one of your virtuous act which you will do like helping your mother, helping physically disable people or underprivileged. (80-100 words)

### Where to do-

Small handmade diary which should be properly decorated.

Parameters: Creativity, Content, Authentication

## हिन्दी

## <u>1) निम्नलिखित कार्य एक स्क्रैप फ़ाइल में कीजिए--</u>

(1) 'स्पर्श' पुस्तक के गद्य खंड के पाठ 'दुख का अधिकार' में से कोई 10-10 <u>संज्ञा, सर्वनाम,</u> <u>विशेषण तथा क्रिया शब्द</u> छांट कर उनकी सूची बनाएँ।

(2) समाचार-पत्रों या पत्रिकाओं में से 2 चित्र चिपकाकर चित्र-वर्णन कीजिए।

(3) निम्नलिखित विषयों में से **किसी एक विषय पर भाषण** लिखें तथा **प्रतियोगिता के लिए** कंठस्थ करें।

- क) छात्र शक्ति राष्ट्र शक्ति
- ख) भारतीय साहित्य दर्शन
- ग) प्रदूषण के अंत का मिल कर लें प्रण
- घ) यातायात के नियमों का पालन कितना ज़रूरी

 (4) एक लंबी कविता लिखें व उसे कविता-प्रतियोगिता के लिए कंठस्थ करें। (कविता स्वरचित भी हो सकती है।)

2) 'चंद्रशेखर वेंकट रामन्' पर एक फ़ाइल में आकर्षक पोर्टफोलियो (निवेश-पत्र) तैयार करें, जिसमें उनके जीवन से संबंधित निम्नलिखित चित्र सहित जानकारी हो।

```
प्रथम पृष्ठ पर - हिन्दी 'निवेश पत्र' तथा अपना नाम, कक्षा व अनुक्रमांक लिखें।
द्वितीय पृष्ठ पर - निवेश-पत्र का विषय लिखें।
तृतीय पृष्ठ पर - प्रमाण-पत्र लिखें।
चतुर्थ पृष्ठ पर - अनुक्रमणिका (विषय-सूची) लिखें।
अनुक्रमणिका (विषय-सूची) में निम्नलिखित विषय लिखें तथा उसी के अनुसार फ़ाइल में
आकर्षक कार्य करें--
1) व्यक्तिगत जानकारी
2) पारिवारिक जानकारी
3) शैक्षणिक जानकारी
```

- 5) विशिष्ट उपलब्धियाँ / पुरस्कार
- 6) रामन् का वैज्ञानिक प्रयोग 'रामन् प्रभाव' क्या है?
- 7) पाठ में आपको क्या अच्छा लगा और क्यों?

#### **Mathematics**

1. NCERT Exemplar-

Chapter 1 - Do exercises 1.1 to 1.4

Chapter 2 - Do exercises 2.1 to 2.4 inseparate thin register

- 2. Mathematic lab manual -Do activities 3 and 4 in lab manual file.
- 3. Make a portfolio based on the following topics
  - (a) 1 to 10 Quadrilaterals and its properties of various quadrilaterals.
  - (b) Roll no 11 to 20 Lines and Angles
  - (c) Roll no 21 to 30 Types of triangles and congruence of triangles.
  - (d) Roll nos 31 to 45 Circles and theorems based on it.

Note: Portfolio should have

- (a) Beautifully decorated cover page with topic
- (b) Second page having school name, student name, class, section, roll number and teachers name.
- (c) Third page as Index
- (d) Fourth page onwards explanation of topics comprising of properly drawn figures.

4. Make maths dictionary containing basic formulae of chapter 1 and chapter 2.

# **SCIENCE**

# (CHEMISTRY)

Prepare a project on – "<u>Chemical Preservatives as valuable tools for food</u> <u>preservation</u>"

# Project should include-

- Introduction
- Natural and Artificial Preservatives
- Common chemical preservatives and their uses
- Benefits of chemical preservatives
- Risk and considerations

Present the information in a folder with illustration & pictures.

# (Use A4 Size sheets)

# **Chapter 1 Matter in Our Surroundings**

# **Worksheet**

**Q1.** Which of the following does not impact the evaporation rate? (a) Insoluble heavy impurities

- (b) Wind speed
- (c ) Surface area

(d) None of the above

Q2. The kinetic energy of the molecule is directly proportional to the

- (a) Atmospheric pressure
- (b) Temperature
- (c) Both (a) and (b)
- (d) None of the above

**Q3.** The phenomenon in which solid directly converts to the vapour state is known as

- (a) Sublimation
- (b) Solidification
- (c) Vapourisation
- (d) None of the above
- **Q4.** Which of the following is the correct interpretation of dry ice?
- (a) It is water in a solid-state
- (b) It is water in the vapour state
- (c) It is carbon dioxide in a vapour state
- (d) It is carbon dioxide in a solid-state

**Q5.** What is the boiling point of water at sea level?

- (a) 0 K
- (b) 100 K
- (c) 373 K
- (d) None of the above

**Q6.** What was the foundation of the elements' classification in ancient times? Name them.

**Q7.** Fill in the blanks and give a suitable reason for your answer.

(i) With increase in temperature, particles move \_\_\_\_\_.

(ii) With the rising temperature, the kinetic energy \_\_\_\_\_.

**Q8.** Why can we split a piece of chalk into tiny particles on hammering but not iron?

**Q9.** Why is liquid classified as a fluid?

Q10. Solid ice float on water. Justify the statement.

Q11. By which physical phenomenon does the fragrance of a burning stick spread?

**Q12.** Name the physical phenomenon accountable for parching watery clothes. Why does the spreading of clothes increase the rate of drying?

Q13. Which characteristics of gases help in witnessing LPG gas leakage?

Q14. Convert the following to the Kelvin scale.

(i) 65 ° C

(ii) 300 ° C

**Q15.** Is dry ice same as the normal ice? If no, then differentiate between dry and ordinary ice.

(NOTE – use A4 size ruled sheets)

# > Write the following experiments in the science practical file

1. Preparation of:

(a) a true solution of common salt, sugar and alum

(b) a suspension of soil, chalk powder and fine sand in water

(c) a colloidal solution of starch in water and egg albumin/milk in water and distinguish between these on the basis of transparency, filtration criterion, stability.

2. Preparation of

(a) A mixture

(b) A compound using iron filings and sulphur powder and distinguishing between these on the basis of:

(i) appearance, i.e., homogeneity and heterogeneity

- (ii) behaviour towards a magnet
- (iii) behaviour towards carbon disulphide as a solvent

(iv) effect of heat

3. Perform the following reactions and classify them as physical or chemical changes: (a) Iron with copper sulphate solution in water

(b) Burning of magnesium ribbon in air

(c) Zinc with dilute sulphuric acid

(d) Heating of copper sulphate crystals

(e) Sodium sulphate with barium chloride in the form of their solutions in water

## PHYSICS

1. Solve the numericals done in CW in your HW copy.

2. Draw any concept related topics on following topics on A3 sheet.

Motion

Laws of motion

Gravitation

Work and energy

Sound

3. Make portfolio on any one of the topic in syllabus.

Motion

Laws of motion

Gravitation

Work and energy

Sound

4. Make your practical file with 4 practical's written.

i) Verification of the Laws of reflection of sound.

ii) Determination of the density of solid (denser than water) by using a spring balance and a measuring cylinder.

iii) Establishing the relation between the loss in weight of a solid when fully immersed in

a) Tap water

b) Strongly salty water with the weight of water displaced by it by taking at least two different solids.

iv)Determination of the speed of a pulse propagated through a stretched string/slinky (helical spring)

#### **MOTION**

1. Why circular motion is called as uniformly accelerated motion?

2. A Woman starts from her home at 9:00 am and reaches her office 5 km away with a speed of 5 km/hr. She stays in her office till 5:00 pm and then boards an auto and returns with 20 km/ hr. Plot her distance time graph for the entire journey.

3 Derive 3 equations of motion by graphical method.

4. Derive 3 equations of motion by general method.

5. What is the final velocity of a body which retards with 5m/sec sq. in time 10 sec if it is moving with 20 m/s initially?

6. What is the distance travelled by the body starting from rest if it accelerates with 10m/ sec sq. For 2 sec?

7. What is the acceleration of a body which increases its speed from 10m/s to 20m/s travelling a distance of 50 m?

8. A car starts initially from rest and gains a speed of 10m/s in 5 sec. Brakes are applied and it comes to rest in next 10 sec. Plot a v-t graph for the same and also calculate distance travelled by the car from the graph.

9. What does the slope of x-t graph indicate? Justify taking an example.

10. A car travels 1000km partly 600km by train and rest by car. If the speed of train is 60km/hr and car is 40km/hr. Find the average velocity of the journey?

#### LAWS OF MOTION

1. Why first law of motion is called as law of inertia?

2. State third law of motion.

3. Why does the boat move back in water when a man jumps from it?

4. Derive the expression between Force and Acceleration from the statement of second law of motion.

5. What do you mean by conservation of linear momentum? what is the linear momentum associated with a ball of 50g moving with 10 m/s?

6. A gun of mass 5Kg suffers a recoil 2m/s firing n bullet, if each bullet is of 50 g and move with 100 m/s. Calculate the number of bullets fired?

7. A ball of mass 5g move in with 20 m/s rebound from a wall and returns with same velocity calculate the impulse transferred to the wall?

8.A body increases its speed from 2m/s to 5m/s travelling a distance of 100 m if mass of the body is 10Kg .Find the force associated with the body?

9. Derive third law of motion using conservation of momentum.

10. What do you mean by centripetal force? Give its formula .How it changes when velocity of the body moving in a circular path is doubled?

11. Differentiate between balance and unbalanced forces giving examples for each.

12. i) what do you mean by linear momentum?

ii) Give SI unit of momentum.

ii) Define one Newton force

iv) Define impulse with respect to momentum.

v) How momentum of a body changes if its mass is doubled and velocity is halved

#### BIOLOGY

1. Do practice of diagrams given in chapter- The fundamental unit of life.

- 2. Do back exercise of chapter- the fundamental unit of life.
- Make the collage of different prokaryotic and eukaryotic organisms on A3 Sheet.

## SOCIAL SCIENCE

- 1. Make a project file on Disaster Management
- a) Meaning of Disaster Management
- b) Need to study Disaster Management
- c) Different types of Disasters
- d) From types of Disasters choose any one and write:
- e) Meaning
- f) Causes
- g) Dos and don'ts during disasters
- h) Measures taken by the government to overcome the disaster
- i) Example of any one recent disaster- name, place, causes, measures taken by government
- j) Conclusion
- k) Bibliography

## Presentation of file

- Cover page- name, class, and section, roll number, session.
- Topic
- Acknowledgment
- List of contents- S.No., topic, page no.
- Introduction
- Explanation
- Pictures to be pasted on the left side and writing part to be done on right side
- Label the pictures and diagrams.

Note: All the work to be done on A-4 size plain white sheet.

## 2. Complete any one of the following:

• Create a visual representation (e.g., map, infographic) illustrating the geographical layout and key features of village Palampur.

## OR

• Design a storyboard or comic strip depicting the daily life and economic activities of the villagers in Palampur.

## OR

- Write a short skit or play highlighting the socio-economic dynamics and challenges faced by the residents of Palampur.
- 2. Write a newspaper article on the French Revolution how it saw the rise of newspapers describing, the events of each day and week during the French Revolution. Collect pictures and information on any one event.

## OR

You could also conduct an imaginary interview with important personality like, F.A. Voltaire, J.J. Rousseau, Charles Montesquieu and their statements.

4. Revise all the chapters done in the class.

## **INFORMATION TECHNOLOGY (402)**

## DIGITAL DOCUMENTATION

1. Draft a leave application for 3 days to your class teacher.

2. Using a word processor, write a letter to the publisher house, requesting him/her to send you a set of books by speed post.

3. Create a timetable of your class in landscape mode and apply the following formatting effects in Libre Office Writer:

a. Merge cells

- b. Add image and colour to a cell
- c. Page colour and table border colour, designs.

4. Make a list of (8-10) **LATEST TECHNOLOGY GADGETS** using bullets and add few images accordingly

5. Make posters on (Add shapes, images, use different styles, page colour, borders etc)

a. Any top 5 Indian Entrepreneurs.

b. Any 2 - Independence Day or Diwali Festival or New Year Card Summer Camp or Birthday Party Invitation using any software with your own creative ideas. (Refer the following samples.)

c. Any 12 shortcut keys of Word Processor.



### **DIGITAL PRESENTATION**

- 1. Prepare a presentation on Artificial Intelligence.
- 2. Prepare a Presentation on
  - a. Roll No. 1 20: Entrepreneurial Skills Young Entrepreneur.
  - b. Roll No. 21 onwards: Cyber Crime and Cyber Safety.

Note: Make your presentation according to your roll numbers.

Make at least 12 -15 slides. Use the concept of Animation, Custom Animation, and Slide Transition, Insert Images, Insert table, use Word Art, Smart Art, Font Family, Charts etc.

## ART

- Make a Madhubani Painting on A3 size sheet.
- Draw Still Life on A3 size sheet with pencil shading.
- Draw Mandala Art on A4 size sheet. (with Black pen or Marker)