# LITTLE FAIRY PUBLIC SCHOOL

**HOLIDAYS HOMEWORK (2025-26)**

**CLASS – 9th**

***Summer Vacations will commence from 26th May, 2025 to 30th June, 2025.***

***The school will reopen from 1st July,2025 (Tuesday)***

***Holidays homework is an attempt to channelize the creative energy , it keeps you connected with the syllabus. Doing it in the right- spirit with enthusiasm will make it a great learning experience***

**General Instructions :**

1. ***Revise all the work done in the class .***
2. ***Make sure that your work is neat, presentable, and original and conforms to the guidelines.***
3. ***Engage yourselves in morning walks, yoga, exercise, meditation with your parents or grandparents.***
4. ***Do the given homework as directed by the teachers.***

**ENGLISH**

**1. Diary Entry :**Write a detailed diary entry about a memorable travel experience, focusing on the sights, sounds, and emotions experienced during the trip.

**2. Story Based on a Picture:** Choose a picture and write a short story inspired by it, exploring the characters, setting, and plot.

**3. Poem:** Write all poetic devices and summary of the poem" The Road Not Taken " with pictures .

**4. Newspaper Clippings:** Paste newspaper clippings from the editorial section and write a review or analysis, expressing your opinions on the issues raised.

**5. Projects :**

Comparative Study:

Prepare a project comparing two locations, like Sikkim and , focusing on their geography, culture, and other features.

**6. Reading and Vocabulary :**

**6.1 Novel:** Read a novel, such as "To Kill a Mockingbird" by Harper Lee, and write about your favorite character, dialogues, and new vocabulary words.

**6.2 Vocabulary Building :** Create a list of new words and their meanings, using them in sentences.

**6.3 Other Activities :**

**6.3.1 Interview :** Interview a family member about their childhood and write about their experiences, comparing them to your own.

**6.3.2 Mahakumbh Poster :** Create a poster on the theme of Mahakumbh

**7)** Complete the following Modules in your assignment book:

| | |
|---|---|
| Discriptive Passage : 1,2,3 | Descriptive Paragraph writing: 31, 32, 33 |
| Diary Entry: 37, 38, 39 | Story Writing: 42, 43, 44, 45 |

**हिंदी**

1) समृति मंधाना (महिला क्रिकेट खिलाड़ी) का जीवन परिचय लिखते हुए उनकी क्रिकेट की यात्रा को ए-4 शीट पर लिखें |

2) हरिवंश राय बच्चन जी के दवारा लिखी गई आपकी पाठ्य पुस्तक के अतिरिक्त दो कविताएँ लिखें |

3) निम्नलिखित विषयों पर भाषण तैयार कीजिए। (समय सीमा 3-5 मिनट)

क) पर्वतीय संपदा का दुरुपयोग

ख) रागी का सेवन और स्वास्थ्य

4) सिक्किमकी कला संस्कृति और सामाजिक जीवन पर आधारित एक परियोजना तैयार करे|

5) भारत के प्रमुख चित्रकारों में से किसी एक के जीवन के परिचय देते हुए एक चार्ट पेपर पर सुंदर प्रस्तुतिकरण द्वारा दिखाये

**MATHEMATICS**

**1.**Prepare the working model on the given topics

**a)** Classification of polynomials (Roll no 1 to 10)

**b)**Verify experimentally if two lines intersect then (Roll no 11to 20)

**(i)** Vertically opposite angles are equal

**(ii)** The sum of two adjacent angles Is 180 º

**(iii)** The sum of all four angles is 360º.

**c)** On exterior angle property(Roll no 21to 30)

**d)**Make a model of tree made up of polygons (Roll no 31 onwards)

**2)** Draw the pie chart for the rate of literacy, land distribution and religion for Andaman and Nicobar and Lakshadweep.

**3)** Make a project on craft theory and its application in the field of mathematics.

**SCIENCE**

**1)**Write the following experiment from the Science Laboratory manual in your science practical file .Note down -Aim, materials required, chemical required, Theory Procedure, Observation, labelled diagrams,result, Inference

i) Experiment No 1: Preparation of Solutions (1A,1B and 1C)

**2.** Mixtures and Compounds

**3.** Types of chemical reactions and changes

**4.** Temporary mount of onion peel and cheek cells

**5.** Plant and animal tissues

**2)** Prepare Science working model on the given topic:

Theme: Science and Technology for Sustainable future.

Sub theme:

i) Food,Health and Hygiene (Roll no 1 to 6)

ii) Transport and Communication (Roll no 7 to 12)

iii) Natural farming (Roll no 13 to 18)

iv) Disaster management (Roll no 19 to 24)

v)Waste management (Roll no 25 to 30

vi)Resource management (Roll no 31 onwards)

**3)** Prepare any one labeled diagram from Chapter - 6 Tissue by using clay/paper cut out/Glitter/color stones/color threads etc. Using your imagination and creativity.

**4)** Prepare poster & Slogans on A-3 sheet on Theme: "Beat Plastic Pollution".

**SOCIAL SCIENCE**

**Geography**: Prepare My own Atlas on the following topics:

***Instructions***: Cover page showing Project Title, Schools Name, Name, Class and Section and all the maps will be paste on A4 sheets separately.

**(I) Chapter-1: Locate and label the following on the political map of India.** (Use 1 map only)

(a) Tropic of Cancer (Allocate the states on tropic of cancer) (b) Standard Meridian

(c) Latitudinal extent and Longitudinal extent (d) Southernmost point of Indi

(e) Northernmost Countries (f) Eastern most point

(g) Western most point (h) Neighbouring countries

**(II) Chapter-2: Physical Features of India Locate and label the following on the political map of India.**: (Use 2 separate Maps)

A)**Mountain and hill ranges:**

The Karakoram, The Zakar, The Patkai Bum,

The Jaintia, The Vindhya, The Aravalli, The Cardamom

B) **Peaks:** K2, Kanchenjunga, Nanga Parbat Ana Mudi

C) **Plateau:** Chhota Nagpur Plateau, Malwa Plateau, Deccan Plateau

D) **Deserts:** The Indian Desert, Western Ghats and Eastern Ghats

E) Lakshadweep and Andaman &and Nicobar Islands

**(III) Chapter 3: Drainage**

**Locate and label the following on the political map of India. (Use 1 map only)**

(a) **Rivers:** The Himalayan River Systems, The Indus, The Ganga , The Satluj. The Kaveri, The Krishna, The Perennial river, The Narmada, The Tapi, The Godevari The Mahanadi

(b)**Lakes:** Wular. Palicut, Sambhar, Chilika,

**(IV) HISTORY**

**Draw the outline map of France and Locate and label the following from Chapter -The French Revolution**

Bordeux, Nantes, Paris, Normandy, Marseilles,

**(V) Disaster Management project:** Complete this project which will be followed by Viva Voce

**1. TOPIC-DISASTER MANAGEMENT**

***Your project must include***

- Introduction
- Definition of Disaster
- What are the types of Disasters?
- What is vulnerability and risk?
- What is a Hazard?
- Differentiate between hazard and disaster.

**2. CHOOSE ANY ONE NATURAL OR MAN-MADE DISASTER.**

On the basis of your selection collect and present information about the same under following headings

- Meaning
- Causes
- Do's and don'ts
- Prevention and mitigation measures
- Your emergency Kit
- Steps taken by the Govt. to combat the disaster
- Latest means of forecasting Disasters
- Emergency numbers to be contacted.

**GUIDELINES FOR SUBMITTING THE PROJECT**

1. The total length of the project must be maximum 15-17 sheets .
2. The project report must be hand written and not a computerized or digital one.
3. It must be presented in the following order

a. Cover Page: must contain title, student's details (full name of the student class and section. Roll number), school's name and session

b. Contents: List of contents with page numbers

c. Acknowledgement: Acknowledging the institution and the persons who helped. d. Subject Matter/Content: Sub topics with relevant headings.

e. Summary and conclusion:

f. Bibliography: it must have the names of books, websites along with the links from where the content is collected g. Photographs and sketches should be labeled

h. The project must be submitted in a file dully covered. The cover should be relevantly designed and decorated. (as per topic)

**3. Prepare your own attractive newspaper on Newspaper Clipping File**

Collect 5 current news articles from newspapers related to:

- Environment/Climate
- Government schemes for disaster relief
- Technological advancement
- Social issues

***Paste them in a file and write a 3-4 line summary for each***

**4. Poster Making**

Topic Options (choose any one):

#Say No to Plastics
#Beat the Heat: Summer Safety Tips
#My India, Clean India
#Disaster Preparedness Saves Lives

***Use catchy slogans and visuals.***

## ART INTEGRATED PROJECT

**1.** Prepare a Scrap book on the different Economic Activities performed by the people of Lakshadweep islands.

*****Students may use variety of coloured papers and coloured pictures/photographs from magazines and newspapers (which are easily available).

**2.** Pairing Project: Delhi vs. Sikkim

Objective: Explore and compare the distinctive features of Delhi and Sikkim in terms of geography, climate, culture, biodiversity, tourism, and economy. This project aims to highlight the differences between a fast-paced urban city and a peaceful Himalayan state.

**Instructions:**

**Introduction (1 page)**

Briefly introduce Delhi and Sikkim.

Delhi: The capital city of India, known for its rich history, modern infrastructure, and urban landscape.

Sikkim: A small northeastern state in the Himalayas, famous for its natural beauty, cultural diversity, and sustainable tourism.

**Geography (1–2 pages)**

Delhi: Describe the geographical features of Delhi, including its location on the Yamuna River, its urban layout, and surrounding desert regions.

Sikkim: Describe the mountainous terrain of Sikkim, its location in the eastern Himalayas, and the rivers, valleys, and mountain peaks (such as Kanchenjunga, the third-highest mountain in the world).

Include maps for both regions. Delhi (urban area) and Sikkim (with its mountains and forests).

**Climate and Biodiversity (1 page)**

Delhi: The climate is hot in summers, with cold winters, and a semi-arid landscape. Discuss the air pollution challenges and how it impacts life in the city.

Sikkim: Sikkim has a temperate climate in the lower regions and an alpine climate at higher altitudes. Discuss the snowfall in winters and pleasant summers.

Biodiversity: Compare the flora and fauna of both regions. Sikkim is home to rare species like the Red Panda, Snow Leopard, and various alpine flowers. In contrast, Delhi has urban biodiversity in its parks and riverbed, like the Indian Peafowl and various migratory birds.

**Culture and Lifestyle (1–2 pages)**

Delhi: A cosmopolitan city with a blend of modernity and history. Discuss historical landmarks like Red Fort, Qutub Minar, India Gate, and Lajpat Nagar, reflecting its ancient and contemporary heritage.

The lifestyle in Delhi is fast-paced, with a focus on commerce, education, politics, and entertainment.

Sikkim: Rich in Buddhist culture with monasteries such as Rumtek Monastery. Festivals like Losar (Tibetan New Year) and Buddha Jayanti are celebrated.

Discuss the lifestyle in Sikkim, which is centered around agriculture, eco-tourism, and sustainable living.

**Tourism and Economy (1 page)**

Delhi: Major tourist destinations include India Gate, Lotus Temple, Akshardham Temple, Jama Masjid, and the Red Fort.

Sikkim: Famous for its scenic beauty and eco-tourism. Popular tourist spots include Gangtok, Tsomgo Lake, Nathula Pass, and Yuksom. Sikkim is also known for trekking and wildlife sanctuaries.

Economy: Delhi is a commercial hub with a strong economy based on trade, business, IT, and tourism. Sikkim's economy is largely based on agriculture, especially organic farming, and tourism.

**Conclusion (1 page)**

Compare and contrast the urbanization of Delhi with the natural serenity of Sikkim.

Discuss how these regions contribute to India's cultural heritage and diversity. Highlight the challenges faced by Delhi (e.g., pollution, overpopulation) vs. the preservation of nature in Sikkim.

Presentation:

Include maps, photos, charts, and infographics to visually support your work.

Use clear headings and sub-headings to organize the content.

**INFORMATION TECHNOLOGY**

**DESIGNING A CARD/CERTIFICATE/POSTER**

You all are supposed to design a CARD/CERTIFICATE/POSTER on the topic given below in Ms Word according to your ROLL NOS. and get the printout

1. Wedding Invitation Card ( Roll no 1-15 )
2. Your school has organised Annual Sports Day . Design the certificate including the school name, Participant name , position and the event (format with borders ,pictures etc.) (Roll no 16-30)
3. Poster to aware the people against the cruelty done to innocent animals. ( 31 onwards )

**Project Work:**

- Make a PowerPoint presentation (6–8 slides) on:

**(i) "Role of IT in Daily Life"** ( Roll no 1-15 )

**(ii) "Career Opportunities in ITeS Sector"**( Roll no 16 onwards )

#Include pictures, job roles, required skills, and examples.

**Written Assignment chemistry class 9th**

1**. Why do gases**

(i) exert pressure

(ii) fill the containers completely in which place

(iii) get compressed

**Explain.**

**2. Convert the following:**

(1) 395 K to Celsius scale (ii) 27°C to Kelvin scale (iii) 1.01 x 10° Pa to atmosphere

3. Define the following:

(i) boiling point. (ii) evaporation (iii) latent heat of vaporisation

4. Ordinary water boils at 100°C. Can it made to boil at 98°Cot 103°C?

**5. Give reasons for the following:**

(a) The smell of hot sizzling food reaches us several metres away but to get the smell from cold food you have to go close.

(b) Naphthalene balls disappear without leaving any solid.

(c) We can easily move our hand in air but to do th same through a solid block of wood or brick, need a karate expert.

6. Compare the three states of matter in terms of compressibility, density, energy of molecules .

7. At what temperature, the Fahrenheit and Celsius scales have the same reading?

8. We feel cool after a vigorous exercise. Why?

**9.** 5 mL of water was taken in a china dish and in a test tube separately. These samples were placed under different conditions as given below:

(i) Both the samples were kept under fan.

(ii) Both the samples were kept inside a cupboard.

(a) State in which case evaporation will be faster? Give reasons to support your answer.

(b) How will the rate of evaporation change if the above activity is carried out on a rainy day? Justify your answer.

10.Explain the following

(a) Our palm feel cool when we put some acetone on it.

(b) We can sip hot tea or milk faster from a sauce rather than a cup.

(c) The smell of a perfume can be felt even at metres away .

**Project/Activity**

Prepare a investigatory project /research work on any topic related to chemistry.

Example Let us prepare a model to demonstrate the movement of particles in solids, liquids and gases

**Requirements**: For making this model you need the following.

(i)a transparent jar

(ii) a big rubber balloon or a piece of stretchable rubber sheet.

(iii) a string and a tape

(iv) a few chin peas or black gramor dry green peas.

**CLASS IX**

**Subject:Biology Assignment**

1.What would happen to the life of a cell if there was no Golgi apparatus?

2.Where do the lipids and proteins constituting the cell membrane get synthesised?

3.Why is the plasma membrane called a selectively permeable membrane?

4.If the organisation of a cell is destroyed due to some physical or chemical influence, what will happen?

5.How do substances like CO2and water move in and out of the cell? Discuss.

6.How is a prokaryotic cell different from a eukaryotic cell?

7.Where are proteins synthesised inside the cell?

8.Carry out the following osmosis experiment:

***Take four peeled potato halves and scoops each one out to make potato cups. One of these potato cups should be made from a boiled potato. Put each potato cup in a trough containing water. Now,***

(a) Keep cup A empty
(b) Put one teaspoon sugar in cup B
(c) Put one teaspoon salt in cup C
(d) Put one teaspoon sugar in the boiled potato cup D.

***Keep these for two hours. Then observe the four potato cups and answer the following:***

(i) Explain why water gathers in the hollowed portion of B and C.
(ii) Why is potato A necessary for this experiment?
(iii) Explain why water does not gather in the hollowed out portions of A and D.

9.What is the role of ribosmes and golgi body?

10.What is nucleoid? How it is different from the nucleus of eukaryotic cell?

11.Differentiate between

i. Cell wall and cell membrane.
ii. Nuclear region of a bacterial cell and nuclear region of an animal cell.
iii. Prokaryotic cell & eukaryotic cell.

12.How are the following related to each other?

i. Chromatin network and chromosomes
ii. Chloroplast and chlorophyll
iii. Genes and DNA

13.What is osmosis?

14.State what will happen when human red blood cells are placed in a hypotonic salt/sugar solution.

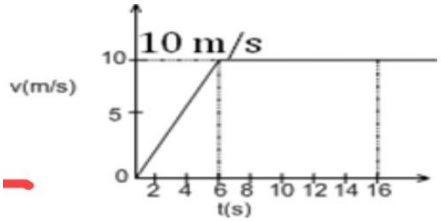
i. Why plant cell shrinks when kept in a hypertonic solution.
ii. Why lysosomes are known as suicidal bags?

15. i)Which structure is called little nucleus?
ii)Which organelles other than nucleus contain DNA?

Physics Assignment Holidays Homework

Class IX

1. A car travels at a speed of 40km/hr for two hour and then at 60km/hr for three hours. What is the average speed of the car during the entire journey?
2. A body is moving with a velocity of 12m/s and it comes to rest in 18m, what was the acceleration?
3. A stone is thrown in a vertically upward direction with a velocity of 5 m/s. If the acceleration of the stone during its motion is 10 m/s² in the downward direction, what will be the height attained by the stone and how much time will it take to reach there?
4. A ball starts from rest and rolls down 16m down an inclined plane in 4 s.
   (a) What is the acceleration of the ball? (b) What is the velocity of the ball at the bottom of the incline?
5. The velocity time graph of runner is given in the graph.



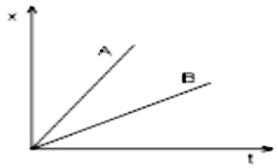

   (a) What is the total distance covered by the runner in 16s?
   (b) What is the acceleration of the runner at t = 11s?
6. The velocity of a body in motion is recorded every second as shown-

| Time(s) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Velocity(m/s) | 62 | 54 | 46 | 42 | 36 | 30 | 24 | 18 | 12 | 6 | 0 |

   Calculate the –
   (a) Acceleration (b) distance travelled and draw the graph.
7. Draw the graph for uniform retardation –
   (a) position – time graph (b) velocity – time (c) Acceleration- time
8. The position of a body at different times are recorded in the table given below:

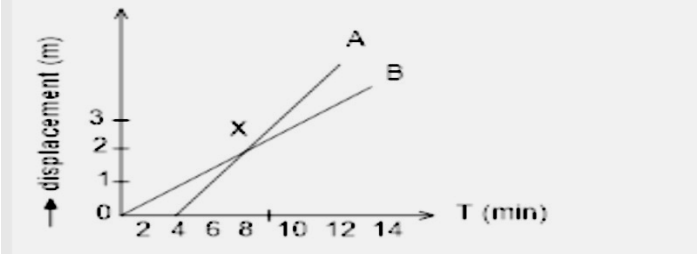
| Time(s) | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|---|
| Displacement(m) | 0 | 6 | 12 | 18 | 24 | 30 | 36 | 42 | 48 |

   (a) Draw the displacement time graph for the above data?
   (b) What is the slope of graph?
   (c) What is the speed of the motion?
9. A car travels at a speed of 40km/hr for two hour and then at 60km/hr for three hours. What is the average speed of the car during entire journey?
10. The velocity time graph of two bodies A and B traveling along the +x direction are given in the figure



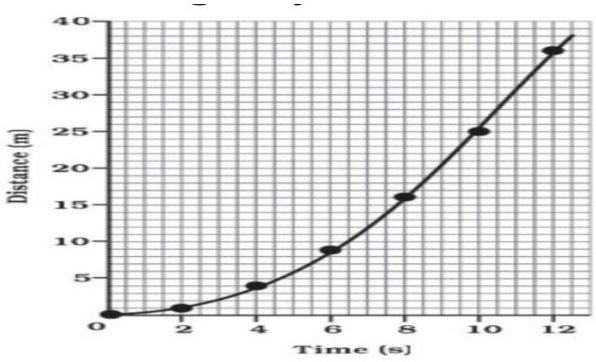

    (a) Are the bodies moving with uniform acceleration?
    (b) Which body is moving with greater acceleration A or B?
11. The driver of a car traveling along a straight road with a speed of 72 km/h observes a signboard which give the speed limit to be 54 km/h .The signboard is 70m ahead when the driver applies the brakes. Calculate the acceleration of the car which will cause the car to pass the signboard at the stated speed limit?
12. A car moving with a certain velocity comes to a halt if the retardation was 5m/s², find the initial velocity of the car?

13. Two boys A and B, travel along the same path. The displacement – time graph for their journey is given in the following figure.



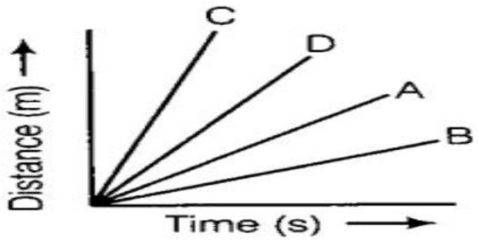

(a) How far down the road has B travelled when A starts the journey?
(b) Without calculation, the speed, state who is traveling faster A or B?
© What is the speed of A?
(d) What is the speed of B?
(e) Are the speed of A and B uniform?
(f) What does point X on the graph represent?
(g) What is the speed of approach of A towards B?
(h)What is the speed of separation of A from B?

14. Read the text carefully and answer the questions:
The change in the position of an object with time can be represented on the distance-time graph adopting a convenient scale of choice. In the distance-time graph, time is taken along the x–axis and distance is taken along the y-axis.




A. A man travels a distance of 1.5 m towards East, then 2.0 m towards South and finally 4.5 m towards East. What is the total distance traveled?
a) 8m b) 16m c) 5m d) 7m

B. Four cars A, B, C and D are moving on a levelled road. Their distance versus time graphs are shown in the adjacent figure. Choose the correct statement.




a) Car C is the slowest b) Car D is faster than car C
c) Car B is the slowest d) Car A is faster than car D

C. If the displacement of an object is proportional to the square of time, then the object is moving with:
a) decreasing acceleration b) increasing acceleration
c) uniform velocity d) uniform acceleration

D. Which of the following statement is correct for distance-time graph?

I. Time is taken along the x–axis

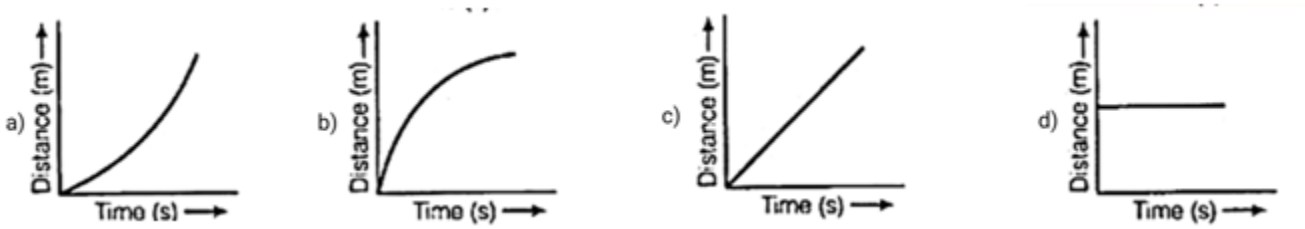
II. When an object travels equal distances in equal intervals of time, it moves with uniform speed

III. Distance-time graphs can be employed under various conditions

IV. For uniform speed, a graph of distance travelled against time is a curved line

a) (II) and (IV) b) (I) and (III) c) (III) and (II) d) (I), (II) and (III)

E. Which of the following figures correctly represents uniform motion of a moving object?




15. The third equation of motion is:

a) $v^2 = u^2 + 2aS$ b) $u^2 = v^2 + 2aS$ c) $S = ut - 1/at^2$ d) $S = ut + 1/at^2$

16. A person sitting in the truck projected a ball vertically upwards. The ball:

a) falls outside the truck b) falls by the side of truck

c) falls back in his hand d) falls in front of the truck

17. If two objects move in a circular path of radii in the ratio of 1:3 and take some time to complete the circle, what is the ratio of their speeds?

a) 1 : 3 b) 3:1 c) r2/r1 d) r2/r2

18. A ball is thrown up with a velocity of 20 $ms^{-1}$. What is the time of flight, neglecting air resistance?

a) 8 sec b) 1 sec c) 2 sec d) 4 sec

19. Which of the following is an example of uniform motion?

A. The motion of the car on a busy road. B. The motion of a satellite around the planet.

C. The motion of the moon around the earth. D. The motion of any particle on the arm of a clock.

a) (A) and (B) b) (B) and (C) c) All of these d) (B), (C) and (D)

20. .Read the Assertion (A) and Reason (R) statements carefully and mark the correct option out of the following options

a) Both A and R are true and R is the correct explanation of A.

b) Both A and R are true but R is not the correct explanation of A.

c) A is true but R is false.

d) A is false but R is true.

i).Assertion(A) Motion with uniform velocity is always along a straight-line path.

Reason (R): In uniform velocity a motion, speed is the magnitude of the velocity and is equal to the instantaneous velocity.

ii) Assertion (A):An object can have acceleration even if its velocity is zero at a given instant of time.

Reason( R):An object thrown vertically upwards is momentarily at rest at the highest point of its path.

iii) Assertion (A):The equations of motion can be applied only if acceleration is constant.

Reason( R):For a uniform linear motionthe acceleration of the object is a constant.

iv) Uniform circular motion is an accelerated motion.

Reason(R): In uniform circular motion magnitude of velocity change so that velocity is changing with time.

v) Assertion (A): Acceleration is defined as rate of change of velocity.

Reason (R): S.I unit of acceleration is m/s.

**Class IX S.Science (History): French Revolution**
Do the following questions with answers in note book

1. What were the main causes of the French Revolution?
2. What was the significance of the storming of the Bastille?
3. Explain the role of the Third Estate in the French Revolution.
4. What was the Estate General? Why was it called in 1789?
5. Who were the Jacobins? What role did they play in the Revolution?
6. Describe the conditions of peasants and workers before the French Revolution.
7. Who was Louis XVI? What was his role in the Revolution?
8. What was the Declaration of the Rights of Man and Citizen?
9. How did Enlightenment ideas influence the French Revolution?
10. What was the Reign of Terror? Who led it?
11. Describe the role of women in the French Revolution.
12. What was the significance of the Tennis Court Oath?
13. How did the Revolution affect the Church in France?
14. What changes did the National Assembly bring in France?
15. Who was Maximilien Robespierre? What were his policies?
16. How did the French Revolution impact the rest of Europe?
17. What was the role of philosophers like Rousseau, Voltaire, and Montesquieu?
18. What kind of government was established after the fall of the monarchy?
19. How did the Revolution end, and who came to power afterward?
20. What were the major achievements and failures of the French Revolution?

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7. Who was Louis XVI? What was his role in the Revolution?
8. What was the Declaration of the Rights of Man and Citizen?
9. How did Enlightenment ideas influence the French Revolution?
10. What was the Reign of Terror? Who led it?
11. Describe the role of women in the French Revolution.
12. What was the significance of the Tennis Court Oath?
13. How did the Revolution affect the Church in France?
14. What changes did the National Assembly bring in France?
15. Who was Maximilien Robespierre? What were his policies?
16. How did the French Revolution impact the rest of Europe?
17. What was the role of philosophers like Rousseau, Voltaire, and Montesquieu?
18. What kind of government was established after the fall of the monarchy?
19. How did the Revolution end, and who came to power afterward?
20. What were the major achievements and failures of the French Revolution?

**कक्षा: नवी**

**<u>कार्यभार</u>**

निम्नलिखित प्रश्नों के उत्तर लिखिए।

1. अनुस्वार तथा अनुनासिक का अंतर स्पष्ट कीजिए।
2. नासिक्य ध्वनियों से क्या तात्पर्य है? उदाहरण देकर समझाइए।
3. संस्कृत से हिंदी को कौन-कौन सी नासिक्य ध्वनियाँ मिलीं?
4. अनुनासिक ध्वनि से क्या तात्पर्य है? उदाहरण देकर समझाइए।
5. हिंदी में अनुनासिक ध्वनियों को महत्व क्यों मिला?
6. अनुनासिक को लिखकर दिखाने के लिए कौन-कौन से चिह्न बनाए गए हैं?
7. हिंदी में आश्रित तथा अनाश्रित नासिक्य व्यंजन ध्वनियाँ कौन-कौन सी हैं?
8. शब्द अपने तंत्र में किस तरह से बँधा रहता है?
9. वाक्य में प्रयुक्त शब्द को शब्द क्यों नहीं कह सकते?
10. वाक्य में प्रयुक्त होने पर शब्द के रूप में परिवर्तन कैसे होता है?
11. वाक्य में प्रयुक्त होने पर शब्द की स्वतंत्रता क्यों समाप्त हो जाती है?
12. शून्य प्रत्यय क्या है तथा यह क्या कार्य करता है?
13. प्रकार्य से ही शब्द का पद तय होता है, इस बात को उदाहरण देकर समझाइए।
14. पद को शब्द-रूप क्यों कहते हैं?

**कक्षा: नवी**

**<u>कार्यभार</u>**

निम्नलिखित प्रश्नों के उत्तर लिखिए।

1. अनुस्वार तथा अनुनासिक का अंतर स्पष्ट कीजिए।
2. नासिक्य ध्वनियों से क्या तात्पर्य है? उदाहरण देकर समझाइए।
3. संस्कृत से हिंदी को कौन-कौन सी नासिक्य ध्वनियाँ मिलीं?
4. अनुनासिक ध्वनि से क्या तात्पर्य है? उदाहरण देकर समझाइए।
5. हिंदी में अनुनासिक ध्वनियों को महत्व क्यों मिला?
6. अनुनासिक को लिखकर दिखाने के लिए कौन-कौन से चिह्न बनाए गए हैं?
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13. प्रकार्य से ही शब्द का पद तय होता है, इस बात को उदाहरण देकर समझाइए।
14. पद को शब्द-रूप क्यों कहते हैं?

**Information Technology Assignment Holidays Homework**

**Practice questions of Unit 1 – Communication Skills (Part – A)**

**SHORT ANSWER TYPE QUESTIONS**

1. What is Effective communication?
2. What do you understand by the phrase 'Barriers to Effective communication'?
3. Define Non-verbal communication. List the main elements of Non-verbal communication.
4. Define Verbal communication. What are the two forms of Verbal communication?
5. Enlist the factors affecting perspective in communication?

**LONG ANSWER TYPE QUESTIONS**

1. State the importance of effective communication.
2. What is Encoding? What is its significance in the communication cycle?
3. What do you understand by written communication?
4. Discuss the role of non-verbal elements in effective communication.
5. Comment on the statement, 'Our beliefs form a vicious cycle'. Support your answer with an example

**Practice questions of Unit 1 – Introduction to IT and ITeS Industry (Part –B )**

**SHORT ANSWER TYPE QUESTIONS**

1. Define ITES.
2. What is the structure of an IT-BPM industry?
3. Give an example of the use of IT in the following areas:
   Service Online Banking E-learning Library management Hospital management system
4. What do you understand by LMS?
5. Briefly describe the impact of IT in your everyday life.

**LONG ANSWER TYPE QUESTIONS**

1. What do you understand by the working of a call centre?
2. What is the basic requirement of IT enabled services?
3. How is IT beneficial in the insurance sector? Mention any three factors.
4. Mention the role of E-commerce in your life.
5. Mention various features of E-banking.
6. Discuss the use of information technology in the field of science and engineering.

# LITTLE FAIRY PUBLIC SCHOOL
# WORKSHEET: MATHEMATICS
# CLASS: IX (2024-25)
# NUMBER SYSTEM

**Multiple Choice Questions**

**1.** The product of any two irrational numbers is:
(A) always an irrational number
(B) always a rational number
(C) always an integer
(D) sometimes rational, sometimes irrational

**2.** The value of 1.999…. in the form $\frac{p}{q}$, where p and q are integers and q $\neq$0, is:

(A) $\frac{19}{10}$ (B) $\frac{1999}{1000}$ (C) 2 (D) $\frac{1}{9}$

**3.** $2\sqrt{3} \times \sqrt{3} + 1$ is equal to :

(A) $2\sqrt{9}$ (B) 6 (C) 7 (D) $4\sqrt{6}$

**4.** Between two rational numbers:
(A) there is no rational number
(B) there is exactly one rational number
(C) there are infinitely many rational numbers
(D) there are only rational numbers and no irrational numbers

**5.** which of the following is equal to x?

(A) $x^{\frac{12}{7}} - x^{\frac{5}{7}}$ (B) $\sqrt[12]{(x^4)^{\frac{1}{3}}}$ (C) $(\sqrt{x^3})^{\frac{2}{3}}$ (D) $x^{\frac{12}{7}} \times x^{\frac{7}{12}}$

**Short Answer Type Questions**

**6.** Find the three rational numbers between:
(i) -1 and -2 (ii) 0.1 and 0.11 (iii) $\frac{5}{7}$ *and* $\frac{6}{7}$ (iv) $\frac{1}{4}$ *and* $\frac{1}{5}$

**7.** Represent geometrically the following numbers on the number line:
(i) $\sqrt{4.5}$ (ii) $\sqrt{5.6}$ (iii) $\sqrt{8.1}$ (iv) $\sqrt{2.3}$

**8.** Simplify $16^{\frac{-1}{4}} \times \sqrt[4]{16}$

**9.** Find the value of x in $3 + 2^x = (64)^{\frac{1}{2}} + (27)^{\frac{1}{3}}$.

**10.** If a = -2 , b = -1, then find $a^{-b} - b^a$.

**Long Answer Type Questions**

**11.** If $x = \frac{\sqrt{3}-\sqrt{2}}{\sqrt{3}+\sqrt{2}}$ and $y = \frac{\sqrt{3}+\sqrt{2}}{\sqrt{3}-\sqrt{2}}$, find the value of $x^2 + y^2 + xy$.

**12.** If $x=\frac{2-\sqrt{5}}{2+\sqrt{5}}$ and $y=\frac{2+\sqrt{5}}{2-\sqrt{5}}$, find the value of $x^2 - y^2$.

**13.** Determine rational numbers p and q if $\frac{7+\sqrt{5}}{7-\sqrt{5}}-\frac{7-\sqrt{5}}{7+\sqrt{5}}=p-7\sqrt{5}\,q$.

**14.** Simplify: $\frac{6}{2\sqrt{3}-\sqrt{6}}+\frac{\sqrt{6}}{\sqrt{3}+\sqrt{2}}-\frac{4\sqrt{3}}{\sqrt{6}-\sqrt{2}}$.

**15.** Simplify: $\frac{3\sqrt{2}}{\sqrt{6}-\sqrt{3}}+\frac{2\sqrt{3}}{\sqrt{6}+2}-\frac{4\sqrt{3}}{\sqrt{6}-\sqrt{2}}$.

**16.** Show that: $\frac{1}{3-\sqrt{8}}-\frac{1}{\sqrt{8}-\sqrt{7}}+\frac{1}{\sqrt{7}-\sqrt{6}}-\frac{1}{\sqrt{6}-\sqrt{5}}+\frac{1}{\sqrt{5}-2}=5$

**17.** If: $x=\frac{\sqrt{p+q}+\sqrt{p-q}}{\sqrt{p+q}-\sqrt{p-q}}$, then find the value of $qx^2 - 2px + q$.

**18.** Show that: $\frac{x^{-1}+y^{-1}}{x^{-1}}+\frac{x^{-1}-y^{-1}}{x^{-1}}=\frac{x^2+y^2}{xy}$

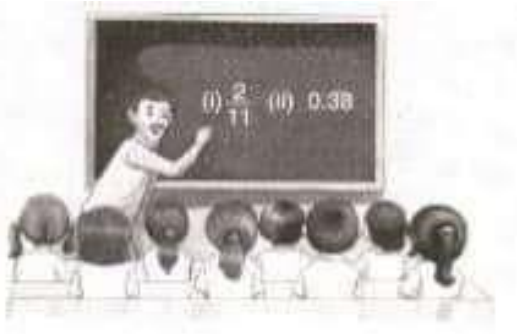
**19.** If $x = 2 + 3\sqrt{2}$, then find the value of $\left(x+\frac{14}{x}\right)$.

**20.** Find the value of a and b in the following:

(i) $\frac{5+2\sqrt{3}}{7+4\sqrt{3}}=a-b\sqrt{3}$

(ii) $\frac{\sqrt{2}+\sqrt{3}}{3\sqrt{2}-2\sqrt{3}}=a+b\sqrt{6}$

**21.** To judge the preparation of student's class IX on topic " Number System" Mathematics teachers write two numbers on black board (as shown in figure), and asks some questions about the members, which are following, then answer the question:




(i) Write the decimal form of 2/11
(ii) Write the p/q form of 0.38.
Write the decimal expansion of 2/11.
(iii) If p/q form of 0.38 is m/n, then find the value of (m + n)

# LITTLE FAIRY PUBLIC SCHOOL
# WORKSHEET: MATHEMATICS
# CLASS: IX (2024-25)
# POLYNOMIALS

## Multiple Choice Questions

1. The degree of the polynomial $3x^3 - x^4 + 5x + 3$ *is*:?
(A) 3 (B) – 4 (C) 4 (D) 1

2. If $p(x) = 5x^2 - 3x + 7, then\ p(1)\ equals\ to$
(A)– 10 (B) 9 (C) – 9 (D) 10

3. If $\frac{x}{y} + \frac{y}{x} = -1, (x, y \neq 0)$, then the value of $x^3 - y^3$ is
(A)1 (B) – 1 (C) 0 (D) ½

4. The remainder when $f(x) = x^3 - 2x^2 + 6x - 2$ is divided by $(x - 2)$, is
(A) 5 (B) 8 (C) – 10 (D) 10

5. If $(x + 1)\ and\ (x - 1)$ are the factors of $f(x) = ax^3 + bx^2 + cx + d$, then
(A) a + b = 0 (B) b + c = 0 (C) b + d = 0 (D) a + d = 0

## Short Answer Type Questions

6. If $f(x) = 2x^3 - 15x^2 + 15x + 2$, find f(2) and f(- 3).

7. If x = 2 is a root of the polynomial $f(x) = 2x^2 - 3x + 7a$, find the value of a.

8. Check whether the polynomial $f(x) = 4x^3 + 4x^2 - x - 1$ is a multiple of $2x + 1$.

9. If x + 1 is a factor of the polynomial $2x^2 - kx$, then find the value of k.

10. Find the coefficient of $x^2$ in $(x^2 - 2)^3$.

11. Find the value of (using identity only) i) $249^2 - 248^2$ ii) $95 \times 96$.

## Long Answer Type Questions

12. Expand : i) $\left(\frac{1}{x} + \frac{y}{3}\right)^3$
ii) $\left(4 - \frac{1}{3x}\right)^3$

13. $x + \frac{1}{x} = 3$, find the value of $x^2 + \frac{1}{x^2}$ and $x^3 + \frac{1}{x^3}$.

14. If x – 2y =11 and xy = 8, find the value of $x^3 + 8y^3$.

15. If $p(x) = x^3 + 3x^2 - 2x + 4$, find the value of $p(-2) + p(1) + p(0)$.

16. If $a + b + c = 6$ and $ab + bc + ca = 11$, find the value of $a^3 + b^3 + c^3 - 3abc$.

17. Using identities, find the product of
    i) $(x + 1)(x - 1)(x^2 + 1)(x^4 + 1)$.

    ii) $(x - \frac{y}{5} - 1)\,(x + \frac{y}{5} - 1)$.

18. Rationalise the denominator and simplify:
    $\frac{2\sqrt{6}-\sqrt{5}}{3\sqrt{5}-2\sqrt{6}}$

19. Simplify
    $\frac{\sqrt{5}+\sqrt{3}}{\sqrt{5}-\sqrt{3}} + \frac{\sqrt{5}-\sqrt{3}}{\sqrt{5}+\sqrt{3}}$.

20. Find the value of $\frac{6}{\sqrt{5}-\sqrt{3}}$, it being given that $\sqrt{3} = 1.732$ *and* $\sqrt{5} = 2.236$.

21. On one day, principal of a particular school visited the classroom. Class teacher was teaching the concept of polynomial to students. He was very much impressed by her way of teaching. To check, whether the students also understand the concept taught by her or not, he asked various questions to students. Some of them are given below. Answer them.

    i) Find the value of a, when x +1 is a factor of $x^3 - 2ax^2 + 16$.
    ii) Find the value of k, when x – 1 is a factor of $4x^3 - 3x^2 - 4x + k$.
    iii) How many zeroes are there in the polynomial $x^2 + 4x + 2$.