

Holiday Homework
Session-2022-23 Class- IX (A, B & C)

English - TEXT BOOK

1. Read the Newspaper daily and write one news article under the given headings like National, International, Sports and Weather.
 2. Write a self-composed poetry on any one of the given topics with minimum 4 stanzas.
 - a) Music
 - b) My school My pride
 - c) Your grandmother's hands
 - d) The shapes you see in clouds.
 3. Read and then write the summary of the Ch-3 'The Little Girl'
- Note- Do the given homework in A4 size ruled sheet

PHYSICS - Textbook specific- NCERT science

1. A bus is moving at a speed of 72 km/h. On applying brakes it
 - i. Comes to rest in 5 second. Find the acceleration and distance covered by the bus.
2. A ball is dropped from the edge of a roof. How long does it take to fall 4.9m? (given acceleration =9.8m/s²)
3. If a body travels along a circular path of radius 14m.calculate its distance and displacement when it completes one rotation.
4. A body is moving with a velocity of 10m/s. If the motion is uniform what will be the velocity after 10s.
5. Can the average velocity of a moving object be zero. Give an example
6. A body goes round with a constant speed in a circular orbit. Is the Motion uniform or accelerated?
7. Under what condition will the distance and distance of a moving object will have the same magnitude?
8. Can a body at rest have acceleration?
9. A ball is thrown vertically upwards and returns to hand of the thrower. Draw speed time graph and velocitytime graph.
10. Plot velocity time graph for a uniform motion. What does the area between the graph and time axis for a certain interval indicate.

Activity-

Take a close look at the electric meter installed in your house. Observe its features closely for a week:

- i) Note readings of the meter each day at 8 a.m and 8 p.m
- ii) How many units were used during the day and night?
- iii) Tabulate your observations and draw inferences from the data.
- iv) Collect information about the power stations in and around Faizabad.
- v) Suggest 10 alternatives to reduce the consumption of electricity

CHEMISTRY - TEXTBOOK SPECIFIC- (do in notebook)

1. GIVE REASONS-
 - a. A gas fills completely the vessel in which it is kept.
 - b. A gas exerts pressure on the wall of the container.
 - c. A wooden table should be called a solid.
 - d. Naphthalene balls disappear with time without leaving any solid.
 - e. An iron almirah is a solid at room temperature.
2. Give an experiment to show that ammonium chloride undergoes sublimation.
3. Tabulate the differences in the characteristics of states of matter. Also comment upon the rigidity, compressibility, fluidity, filling a gas container, shape, kinetic energy and density by drawing suitable diagrams.

ACTIVITY-

Prepare a model to demonstrate movement of particles in solids, liquids and gases. (REFER NCERT BOOK PAGE 13)

BIOLOGY - TEXTBOOK SPECIFIC- (do in notebook)

I. ANSWER IN BRIEF-

1. Why is the cell called the structural and functional unit of life?
2. Name a single cell which may constitute a whole organism. What are they called?
3. Every multicellular organisms has come from a single cell. Justify the statement.
4. Can you name the two organelles which contains their own genetic material?
5. How does a cell show division of labour?

II. VALUE BASED QUESTION-

1. a. A fruit is green when unripe but become beautifully coloured when ripe. How does this change occur?
- b. What is the importance of this change?
- c. What is mutualism involved?
- d. Give an example of such a mutualism in our society?

ACTIVITY- (do in project file)

Collect data from reliable sources from the internet about trends in the number of people infected by COVID-19 in different states in India or in different countries and the number of people who have recovered or succumbed due to the infection.

- Explain how the virus can be spread.
- What is the correct procedure to wash hands?
- Explain the preventive measures for COVID-19.
- What can you do as an individual to avoid the spread of COVID-19?

Social Science (History / Civics) - TEXTBOOK SPECIFIC- History:

(1) Mention the different political symbols used during the French Revolution and explain their significance in 3-4 lines in your History notebook.

(2) On the map of France mark the areas affected by Great Fear and the places important for slave trade.

ACTIVITY-

Make a PPT of about 8-10 slides explaining the meaning of democracy and the merits and demerits of Democracy.

Geography- TEXTBOOK SPECIFIC-

1. Mark the maps and paste the same in your textbooks.
 - A. India and its neighboring countries along with latitude and longitude and Indian standard parallel.
 - B. India physiography- (map given in the NCERT book)
 - C. Major rivers of India along with their tributaries.

Activity Based-

1. Make a project file of 10 to 12 pages on punch sheets.
2. Word limit not to exceed 1000 words.
3. Pictures from various sources eg- Newspapers and Magazine cuttings can be used. Topic- "the Indian Monsoon – its Importance and Implications for our country".

Artificial Intelligence (AI- 417): TEXT BOOK SPECIFIC

Write a note on the following topics in a small size notebook-

1. Communication
2. Type of Communication
3. Communication cycle
4. 7 C's of Communication
5. Types of Sentence

&

1. Introduction to Artificial Intelligence
2. Applications of Artificial Intelligence

ACTIVITY ZONE-

1. Which type of **Operating System** software is used in your school's computer laboratory? Write few names.
2. Make a presentations on **Cyber Safety and Security**.

Art – Topics-

- a. Lockdown (COVID-19) Scene
- b. School girl teaching the alphabets to the parents
- c. To working human figure

GAMES- Make a one minute video of you n your family performing Surya Namaskar.

Holiday H.W.(Maths)

Class - IX

1. Find two rational number between $-\frac{2}{3}$ and 2.
2. Find six rational numbers between $\frac{1}{3}$ and $\frac{2}{5}$.
3. Write 3 rational numbers and 3 irrational numbers between $\frac{1}{2}$ and $\frac{1}{3}$.
4. Express in the form of p/q where q \neq 0.:-
(i) $0.02\bar{5}$ (ii) $0.0\bar{2}$ (iii) $0.0\bar{1}2$
5. Represent $\sqrt{2}$, $\sqrt{5}$, and $\sqrt{10}$ on the number line.
6. Solve geometrically $\sqrt{4.5}$.
7. Rationalize the denominator of the following :-

(i) $\frac{\sqrt{3} - \sqrt{2}}{2\sqrt{3} + 3\sqrt{2}}$

(ii) $\frac{\sqrt{5} - 2}{\sqrt{5} + 2}$

(iii) $\frac{\sqrt{3} + 1}{\sqrt{3} - 1}$

(iv) $\frac{2\sqrt{3} - 3\sqrt{5}}{2\sqrt{3} + 3\sqrt{5}}$

(v) $\frac{\sqrt{2} + \sqrt{3}}{\sqrt{2} - \sqrt{3}}$

(vi) $\frac{2 - \sqrt{3}}{2 + \sqrt{3}}$

8. Simplify :- (i) $\frac{\sqrt{5} - 1}{\sqrt{5} + 1} - \frac{\sqrt{5} + 1}{\sqrt{5} - 1}$ (ii) $\frac{\sqrt{2} - 1}{\sqrt{2} + 1} - \frac{\sqrt{2} + 1}{\sqrt{2} - 1}$
9. If $x = 7 - 4\sqrt{3}$, find :-

(i) $x - \frac{1}{x}$

(ii) $x^2 - \frac{1}{x^2}$

(iii) $\left(x + \frac{1}{x}\right)^2$

10. Find the value of 'a' and 'b' in each of the following :-

(i) $\frac{2\sqrt{2} - 2}{2\sqrt{2} + 2} = a + b\sqrt{2}$

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

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

*****HAPPY LEARNING *****