ADRIEL HIGH SCHOOL

HOLIDAY HOMEWORK

SESSION: 2021-22

CLASS IX

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SESSION-2021-2022

CLASS-IX

Dear parents,

It is summer vacation time, a time to relax as well as fruitfully occupy children in various scholastic and co-scholastic areas. Keeping this in mind our teachers have painstakingly designed interesting Projects/Assignments for children to be completed during summer vacation. This would encourage in-depth learning, strengthen concepts and prepare ground for improved academic output.

As parents kindly motivate and lend support to your children and ensure that they complete the given work well in time and best of their ability. Your encouragement can actually make a huge difference to the ultimate learning outcome of these projects. We would be happy if parents encourage children work on their own.

Please note the following

- Make your child read Hindi and English story books and children's Science magazine as much as possible so that each child can contribute to the school magazine in some way or the other
- Encourage them to undertake creative writing both in Hindi and English. You can tell them to write their experiences about the vacation and maintain a daily diary too. Even watching good English movies/plays can be enjoyable experience
- To make them aware of their surroundings, tell them to watch various informative TV Channels like Discovery, National Geographic, History and Animal Planet
- To enhance their creative talent, motivate them to draw/paint, make PPT presentations on any family celebration or any activity/place/concept that interests them
  We look forward to your co-operation
  HAPPY HOLIDAYS

Vice-Principal   Principal

English

1. Read the chapter 'The Sound of Music' 'The Little Girl' and write the character sketches of the following

    a. Bismillah Khan

    b. Evelyn Glennie

    c. Margie

2. Given below are a list of literary device select three poems from the syllabus and highlight the presence of listed literary device while explaining the literary device

    a. Simile

    b. Metaphor

    c. Personification

    d. Irony

    e. Repetition

    f. Hyperbole

    g. Paradox

3. Write articles of 150 to 200 words on the following topic

    a. Child labour

    b. Global terrorism

    c. Freedom of speech in a democratic nation like India

4. During covid-19 many people like doctors, helpers etc. have helped all of us make a thank you note in the shape of a greeting card. Give your card a colourful book keep the following points in mind

   * How valuable the help was?

   *Your feeling of gratitude.

5. Read the book Gulliver's travel by Jonathan Swift. Write summary of the story.

Hindi

ग्रीष्मावकाश कार्य

कक्षा 9वी

विषय हिंदी

1. प्रश्न १ अपनी पसंद के लिए दो वस्तुओं पर विज्ञापन तैयार कीजिए।

2. प्रश्न २ अपने घर या विद्यालय के नजदीक आपको अक्सर किसी पक्षी को देखने का मौका मिलता होगा। उस पक्षी का नाम भोजन खाने का तरीका रहने की जगह और अन्य पक्षियों से संबंध आदि के आधार पर एक चित्रात्मक विवरण तैयार करें।

3. प्रश्न ३ पशु पक्षियों पर लिखी कविताओं का संग्रह करें और उनके चित्रों के साथ में प्रदर्शित करें।

4. प्रश्न ४ एनसीईआरटी द्वारा कवि केदारनाथ अग्रवाल पर बनाई गई फिल्म देखें व उसकी समीक्षा लिखें।

5. प्रश्न ५ विभिन्न लेखकों के चित्र एकत्रित करके एक कोलाज बनाइए उनकी रचनाओं में से किसी प्रमुख रचना का नाम भी लिखिए।

Social Studies.

History

1. Find out any one revolutionary figure read in history. Write a short biography of the person

2. Draw up a list of democratic rights we enjoy today whose origin today could be traced to French revolution

3. Make flowchart of French society indicating the three estates.

Political Science

1. "Popular governments may be undemocratic."Give an example to support the statement.

2. Why do we need democracy? Justify the statement.

Economics

1. Make a poster on farming and non-farming activities on the case study of Palampur village.

2. What are the non-farm production activities taking place in your region. Make a short list or table.

3. How do medium and large farm farmers obtain capital for farming. How is it difficult to obtain the capital.

Geography

1. Collect information about the 'Silk Route'. Also find out the new developments, which are improving Communication routes in the regions of high altitude.

2. Identify the following with help of map pointing

   i. Island group of Indian lying in Arabian Sea and Bay of Bengal
   ii. The state through which tropic of cancer passes.
   iii. The Union territories of India
   iv. The place situated on the three seas
   v. The strait separating Sri Lanka from India
   vi. India's neighboring country Nepal.

Project Work:

Make a project on Disaster Management in the times of Corona.

General Instructions:

➢ The Project should be handwritten.

➢ The project should be 10-15 pages.

➢ It should cover Pandemic Diseases.

➢ Use Pictures, Graphic Representations, Tables, etc.,

MATHEMATICS

CHAPTER 1

1. Express the rational number $0.4\overline{5}\ 0.4\overline{5}$ in the form p / q, where p and q are natural number.

2. Find the remainder, when the polynomial $2x^4+x^3+4x^2-3x-2$ is divided by $x-3x-3$ (without applying long division).

3. Find the value of k if (x-1) is a factor of $4x^3+3x^2-4x+k$.

4. Represent $5-\sqrt{5}$ on a number line.

5. Simplify the following by rationalising the denominator **.** $\dfrac{7\sqrt{3}-5\sqrt{2}}{\sqrt{48}+\sqrt{18}}$

6. If $x + \frac{1}{x} = 7$, then find the value of $x^3 + \frac{1}{x^3}$.

CHAPTER 2

1. Evaluate the following products without multiplying directly:

(i) 103×107

(ii) 98×96

2. Factorize the following using appropriate identities:

(i) $9x^2 + 6xy + y^2$

(iii) $x^2 - \dfrac{y^2}{100}$

3. Verify:

(i) $x^3 + y^3 = (x+y)(x^2 - xy + y^2)$

(ii) $x^3 - y^3 = (x-y)(x^2 + xy + y^2)$

4. Using remainder theorem find the remainder when f(x) is divided by g(x)

$f(x) = x^{24} - x^{19} - 2$ g(x) = x + 1

5. Check whether 7+ 3x is a factor of $3x^2 + 7x$

6. Evaluate the following using suitable identities:

(i) $(99)^3$

(ii) $(102)^3$

7. Write the following cubes in expanded form:

(i) $(2x+1)^3$

(ii) $(2a-3b)^3$

Chapter 3

1. Locate the points (5, 0), (0, 5), (2, 5), (5, 2), (-3, 5), (-3, -5) and (6, 1) in the Cartesian plane.

2. Take a triangle ABC with A (3, 0), B (-2, 1), C (2, 1). Find its mirror image.

3. In which quadrant or on which axis do each of the points (-2, 4), (2, -1), (-1, 0), (1, 2) and (-3, -5) lie? Verify your answer by locating them on the Cartesian plane.

4. Plot each of the following points in the Cartesian Plane

 (a) (3, 4)   (b) (-3, -4) (c) (0, -5)   (d) (2, -5)   (e) (2, 0) (3)

ACTIVITY

• Math Lab Manual – Construct a Square Root Spiral

• Objective : To construct a square root spiral.

CHEMISTRY

1. 5ml of water was taken in a test tube and china dish separately. These samples were then kept under different conditions as below Both the samples are kept under a fan Both the samples are kept inside a cupboard

 a) State in which case evaporation will be faster?

 b) Give reason   : How will the rate of evaporation change if above activity is carried out on a rainy day? Justify

2. Explain how will you separate Ammonium chloride and common salt using sublimation

3. Write an activity to prove that liquids of different densities diffuse at different states.

4. All of us are familiar with LPG cooking gas cylinder used at home

 a) What is the full form of L.P.G?'

 b) What is it composed of?

 c) In what form gas is stored? What are the factors responsible for it?

 d) What is the change observed when regulator is opened? Why?

5. Make a pictionary of 10 new words related to chemistry from the chapters Matter in our Surrounding, Is Matter around Us Pure and also paste pictures related to the topic. Make a pictionary of 50 new words related to chemistry from the chapters of NCERT and also paste pictures related to the topic.
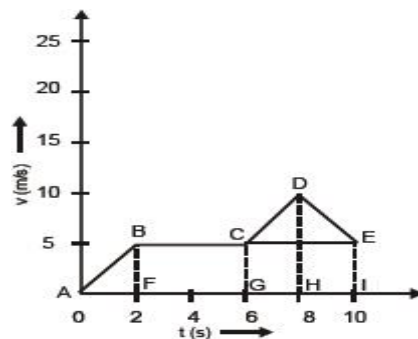
PHYSICS

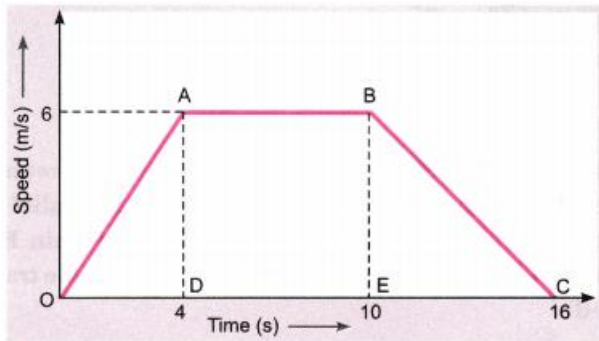**Do the Assignment in your Notebook:-**

1. Match the column

Column A	Column B
22 km/h	.266 m/s
100 Km/h	6.11 m/s
10 m/min	27.77 m/s
2 km/s	83.33 m/s
5 km/min	2000m/s

2. Find the total displacement of the body from the following graph:

3. A car travels at 54 km/h for first 20 s, 36 km/h for next 30 s and finally 18 km/h for next 10 s. Find its average speed.

4. Define acceleration and give its SI unit. When is acceleration of a body negative? Give two examples of situations in which acceleration of the body is negative.

5. Define uniform circular motion and give example of it. Why is it called accelerated motion?

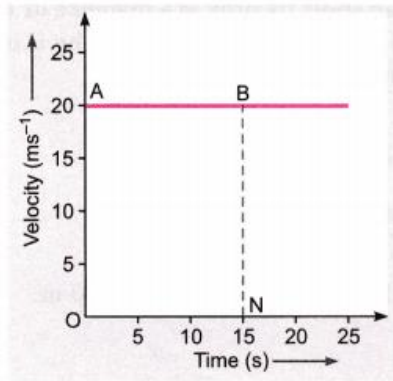6. Study the speed-time graph of a body given here and answer the following questions:

a. What type of motion is represented by OA?

b. What type of motion is represented by AB?

c. What type of motion is represented by BC?

d.   Find out the acceleration of the body

e. Calculate the retardation of the body.

f. Find out the distance travelled by the body from A to B.
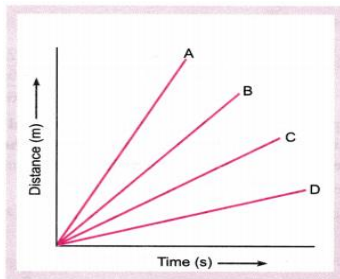
7. Distance travelled by a train and time taken by it is shown in the following table, (i) Plot distance-time graph. (ii) What is the average speed of the train? (iii) When is the train travelling at the highest speed? (iv) At what distance does the train slow down? (v) Calculate the speed of the train between 10:40 AM to 11:00 AM.

Time	Distance (in km)
10:00 AM	0
10:30 AM	25
10:40 AM	28
11:00 AM	40
11:15 AM	42
11:30 AM	50

8. The velocity-time graph shows the motion of a cyclist. Find (i) its acceleration (ii) its velocity and (iii) the distance covered by the cyclist in 15 seconds.

9. A body travels along a circular path of radius 70 m. After travelling half a revolution in 20 s, find the

   i. average velocity,

   ii. average speed.

10. Four cars A, B, C and D are moving on a levelled road. Their distance versus time graphs are shown in figure. Which car is the slowest?

BIOLOGY

1. Write the answer for following questions in your Biology notebook :

   a. What is active transport?

   b. How does amoeba obtain its food?

   c. How do substances like CO_2 and water move in and out of the cell?

   d. What would happen if the plasma membrane rupture or breaks down?

   e. Why plasma membrane is called selectively permeable membrane?

2.   Make the given project on the assigned topic of Ch 14 Natural Resources.

<u>COMPUTER SCIENCE</u>

➢ Create a report file including 4 word documents, 4 spreadsheets and 4 presentations.