M R Vivekananda Model School Sector 13 Dwarka
HOLIDAY HOMEWORK
Class -IX(2024-25)

Dear Parents,

The most awaited Summer Break is from 20th May to 30th June. As per forecast by weather department the temperature will rise more and warm breeze (Loo) will blow. We suggest the following to remain healthy and hydrated:

- **Wear cotton clothes, Consume more liquids and water, Go for morning walk and remain indoors. We want students to utilize this time by reading newspapers, spending value time with elders and grandparents, help parents with daily chores, watch informative TV channels such as National Geographic and Discovery etc.**
- **Students have been given interesting, creative and knowledgeable home work. Ensure that your ward does the task on his/her own using innovative ideas. Parents are advised to guide their ward only.**

Principal

ENGLISH

1) Extract information about any three personality and write a Biography describing about their life, achievements and their contribution to the society. In about 200 words.
2) Refer to the Dictionary every day , select 5 words daily and write their meanings . Also Make Sentences using them.
3) Write about your visit to any destination during your holidays in about 150 words describing about all the fun and excitement you did. Write a diary entry expressing about the places you visited and the fun you had.
4) Write a paragraph describing the following prominent personalities in about 150 words on
   I. ROLL No 1-15 Evelyn Glennie (Refer lesson 2 in Beehive)
   II. ROLL No. 16-30 APJ Abdul Kalam (Refer lesson 6 in Beehive)
   III. ROLL No. 31-40 Santosh Yadav (Refer lesson 8 in Beehive)
   IV. ROLL No.41-52 Maria Sharapova (Refer lesson 8 in Beehive)
5) Read chapters of Moments 1 to 8 and write their summary in English notebook.

SUBJECT – MATHEMATICS

(i) Do Practice exercise of Ch-1,2,3,4 from Maths NCERT in assignment notebook
(ii) Do lab activity 1,2,3,5, 7,11,13,15,17,23 and 26 in School Maths Lab File.
(iii) Make a decorative chart /A3 Sheet on any of the topic (Maths slogan,Formulae,Maths use in daily life,collage of Great Mathematician)

(iv) Make any Model/decorative item / any useful product by using anyone of the following topics as per given Roll no

*NUMBER SYSTEM (1-5)
* POLYNOMIAL (6-10)
*COORDINATE GEOMETRY (11-15)
* TRIANGLE (16-20)
*QUADRILATERAL (21-30)
* LINES AND ANGLES (31-35)
* CIRCLE (36-40)
* SURFACE AREA AND VOLUME (41-45)
*STATISTICS (above 45)

(V) Do the assignments in separate note books or on ruled Sheets (Assignment pdf will be shared in class group)

SCIENCE

BIOLOGY

1. Do following assignment in your notebook.

1.Answer the following questions.
2. What is chromosome?
3. Define plasmolysis.
4. Why is ATP called energy currency of the cell?
5. Which factor determines the shape and size of the cell?
6. What is gene?
7. What is lacking in a virus which makes it dependent on living cell to multiply? Give reason.
8. Lysosomes are a kind of waste disposal system of a cell. Justify the statement.
9. Draw a labeled diagram of a prokaryotic cell.
10. Which cell organelle is called power house of the cell? And why?

Long answer type questions:

11. Create a ven diagram to compare the structure of plant and animal cell.
12. Distinguish between hypotonic solution, isotonic solution and hypertonic solution.
13. With the help of the flow chart list all the cell organelles and write one function of each of them.
14. Define osmosis. Explain the phenomenon with an example

2. Make a Beautiful, innovative chart on different scientists and their contribution in the field of biology.[Prefer Indian Scientist and their contribution]

PHYSICS

1. Prepare notes of motion

2. Do NCERT questions of Motion
3. Write three experiments in practical file.[Bell Jar, force required newton's 3rd law]
4. Do the following assignment

1. A particle is moving in a circle of diameter 5m. Calculate the distance covered and the displacement when it competes 3 revolutions.
2. A body thrown vertically upwards reaches a maximum height 'h'. It then returns to ground. Calculate the distance travelled and the displacement.
3. A body travels a distance of 15m from A to B and then moves a distance of 20m at right angles to AB. Calculate the total distance travelled and the displacement.
4. An object is moving in a circle of radius 'r'. Calculate the distance and displacement
   (i) when it completes half the circle
   (ii) when it completes one full circle.
5. An object travels 16m in 4s and then another 16m in 2s. What is the average speed of the object?
6. Vishnu swims in a 90m long pool. He covers 180m in one minute by swimming from one end to the other and back along the same straight path. Find the average speed and average velocity of Vishnu**.**
7. In along distance race, the athletics were expected to take four rounds of the track such that the line of finish was same as the line of start. Suppose the length of the track was 200m.

(a) What is the total distance to be covered by the athletics?
(b) What is the displacement of the athletics when they touch the finish line?
(c) Is the motion of the athletics uniform or non-uniform?
(d) Is the displacement of an athletic and the distance covered by him at the end of the race equal?

8. Starting from a stationary position, Bhuvan paddles his bicycle to attain a velocity of 6m/s in 30s.Then he applies brakes such that the velocity of bicycle comes down to 4m/s in the next 5s. Calculate the acceleration of the bicycle in both the cases.
9. Amit is moving in his car with a velocity of 45km/hr. How much distance will he cover
   (a) in one minute and
   (b) in one second.
10. The odometer of a car reads 2000 km at the start of a trip and 2400km at the end of the trip. If the trip took 8 hr, calculate the average speed of the car in km/hr and m/s.

CHEMISTRY

1.Make flash cards showing symbols of elements and their atomic and mass no.
2. Complete practicals files, write practicals of physics, chemistry and biology in practical files.
3.Do the following assignment

Q1. Why can we split a piece of chalk into tiny particles on hammering but not iron?
Q2. Find the density of sand with a mass of 208 g ejecting a volume of 80 mL of water.
Q3. Why is liquid classified as a fluid?
Q4. Solid ice float on water. Justify the statement.
Q5. By which physical phenomenon does the fragrance of a burning stick spread?
Q6. Name the physical phenomenon accountable for parching watery clothes. Why does the spreading of clothes increase the rate of drying?

Q7. Which characteristics of gases help in witnessing LPG gas leakage?
Q8. Convert the following to the Kelvin scale.
(i) 65 ° C
(ii) 300 ° C
Q9. Is dry ice same as the normal ice? If no, then differentiate between dry and ordinary ice.
Q10. Why are fluid particles held less firmly than solid?
Q11. How will you differentiate between a gas and a vapour?
Q12. What are the essential requirements of a substance to be categorised as a matter?
Q13. A student spilt ammonia in one corner of the lab. Soon the laboratory was loaded with the pungent annoying smell. The students instantly unclogged the windows and doors and switched on the exhaust fans. After some time, students got the consolation. What happened? Explain

SOCIAL SCIENCE

Note:The students have to make a Combined Holiday homework of History,Political Science, Geography and Economics.

There are two projects to be made:

(I) Disaster Management (Individual project) and
(II) Art Integrated Project-AIL (Group project)

I. DISASTER MANAGEMENT

PROJECT WORK

"We cannot stop natural disast we can arm urselves with knowledge:so many lives wouldn't have to be lost if there was enough disaster preparedness."
Petra Nemcova

* Objectives: The main objectives of giving project work on Disaster Management is to:

a. Create awareness about different disasters, their consequences and management
b. Prepare the students in advance to face such situations.
c. Ensure their participation in disaster mitigation plans
d. Enable the students to create awareness and preparedness among the community.

* The project work will help in enhancing the Life Skills of the students.

विषय - हिंदी

(1) अब तक करवाए गये पाठ्यक्रम का अभ्यास करें।

(2) Roll no. - 1 to 10 'हरिवंश राय बच्चन' की जीवनी लिखे।(A-3 शीट पर)।

(3) Roll no. - 11 to 20 'हरिवंशराय' की कविता लिखो(A-3 शीट पर)।

(4) Roll no. - 21 to 30 'रहीम' की जीवनी लिखे।(A-3 शीट पर)।

(5) Roll no. - 30 to LAST 'रहीम के दोहे' लिखे।(A-3 शीट पर)।

(6) परियोजना कार्य : (सभी बच्चो के लिये)

•विषय - **(दुख का अधिकार)**

▪ परियोजना के लिए निम्नलिखित बिंदुओं को ध्यान में रखिए :-

-**कवि जीवन परिचय,** -**पाठ का सार**

-इसको आकर्षक बनाने के लिए आप **चित्रों और भिन्न रंगो** का प्रयोग कर सकते हो।

•आपका कार्य **आतंरिक मूल्याङ्कन** के अन्तर्गत जाँचा जाएगा।

(7)कार्य विशेष : (सभी बच्चो के लिये)

विशेष - विवेकानंद,गीता जयंती,हिन्दी दिवस,15 अगस्त, शिक्षक दिवस,

गणतंत्र दिवस, अनुशासन,जल बचाओ,वायु प्रदूषण,प्रकृति,दिवाली,

सुविचार-नारी शक्ति

•इन सभी विषयों पर सभी बच्चे (2-2 A-4 sheet coloured) तैयार करें।

Enjoy your holidays but at the same time, work hard to achieve your cherished goals. Feel free to call, if find any difficulty in the subject.