** ROYAL OAK INTERNATIONAL SCHOOL**

**SR. SEC. CBSE AFFILIATED**

**HOLIDAY HOME WORK (SESSION 2018 - 19)**

**Class IX**

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Roll No. \_\_\_\_\_\_\_\_\_\_ Sec.\_\_\_\_\_\_\_**

**Please note the following :**

* **Summer vacations will commence from 17th May 2018(Thursday) till 29th June 2018(Friday) both days inclusive.**
* **The school will re-open on 2nd July, 2018(Monday)**
* **Schedule for the submission of HHW for all class is as follows :**

 **English : 09/07/2018**

 **Hindi : 10/07/2018**

 **Maths : 11/07/2018**

**Science : 12/07/2018**

**SSt. : 13/07/2018**

* **For Computer (2nd week of july) dates will be given in the classes only by the subject teachers.**
* **Summer HHW -5marks will be added as an Activity marks in Term - I**

**WISHING YOU ALL A VERY FRUITFULL AND ENJOYABLE VACATION**

**HAPPY HOLIDAYS**

**Attached**

**Your holiday homework this year is a fun mix of all the aspects of the language. It has been designed to ensure that you enjoy and learn at the same time. Do the homework in a folder using A4 size coloured sheets and present it beautifully.**

**English**

**Q1**. Read the book **Wings of Fire** by **A.P.J.AbdulKalam** and write a book review for the same. Make sure you include your personal response to the review. Also make a creative book jacket and put the review in it. Do not replicate the original cover of the book.

**Q.2 Theme- Polluting the planet....think again!**

***Earth and sky, woods and fields, lakes and rivers, the mountain and the sea, are excellent schoolmasters, and teach some of us more than we can ever learn from books. - John Lubbock***

Use the hints provided to create an Article of about 200-250 words on the topic- ‘Mother Earth

needs healing’. Illustrate your work as wellon A-3 size sheet. (Clues- Earth- home- deforestation- depletion of ozone layer pollution- plant trees- surroundings clean- fresh air- clean fuels- renewable sources of energy- be a planet savior- keep your surroundings clean- create awareness- happy Earth- happy future)

**Q3. Collect any five news items on the given issues. Paste them in your fair notebook and comment on any two in about 120-150 words.The given roll numbers will work on the following topics.**

* Women Centric Issues (roll no. 1-12) • Technological Developments (roll no. 13-24)

• Environmental Issues (roll no. 25onwards) .

**Q.4Do the attached Worksheet in your fair notebook.**

**fganh**

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**Maths**

**1.Practiseall the examples and questions of N.C.E.R.T and NCERT EXEMPLAR of**

**chapters: -**

**(i)NUMBER SYSTEM(ii)POLYNOMIAL(iii)COORDINATE GEOMETRY(iv)LINEAR EQUATIONS IN TWO VARIABLES (V)PROBABILITY (VI) STATISTICS** ALONG WITH THE WORKSHEET**.DO FOLLOWING IN SEPARATE HOLIDAY HOMEWORK NOTE BOOK**

WORK SHEET

1.Write three rational numbers and three irrational numbers between $\sqrt{2}$ and $√3$ .

2.Give an example to show that the product of rational numbers and irrational numbers may be a rational or irrational .

3.Find the value of a and b : $\frac{5+2√3}{7+4√3}$ = a + b$√3$

4.If X = $\frac{\sqrt{3}+ √2}{\sqrt{3}- √2}$ and Y = $\frac{\sqrt{3}- √2}{\sqrt{3}+ √2}$ , then find the value of X2 + Y2 .

5.Prove that $\frac{1}{1+ √2}$ + $\frac{1}{\sqrt{2}+√3}$+ $\frac{1}{\sqrt{3}+√4}$ +$ ……+ \frac{1}{\sqrt{8}+√9}$ = 2 .

6. Prove that $\frac{2n + 2n-1}{2n+1 - 2n}$ = $\frac{3}{2}$

7.Factorise : x4 + 3x2  - 28

8.If (x2 - 1 ) is a factor of f(x) = a x 4  + b x3 +cx2 + d x + e , then show that a + c + e = b + d = 0

9. If 2x - $√7$y = 10 andxy = - $√7$, find the value of 4x2 + 7 y2

10.Factorise (x2-y2)3 +(y2-z2)3 + (z2-x2)3 .

11.if a,b,c are all non zero and a+b+c = 0 then prove that $\frac{a.a}{bc}$+ $\frac{b.b}{ca}$ + $\frac{c.c}{ab}$ = 3.

12. Draw the graph of y = 3x + 2 . From the graph find the value of y if x = 2.

13.Points A(5,3), B(-2,5) & D (5,-4) are three vertices of a square ABCD . plot these points on a graph paper & hence find the coordinates of the point C .

14.Find the image of the pint (2,5) under (i) x- axis (ii) y- axis

15.Draw the graph of x – y = 0 and x + y = 0, now find the angle between them .

16. Draw the graph of the equation represented by a straight line which is parallel to x-axis and 4 units below it .

17.Solve the equation 5x – 7 = 3x + 2 and represent the solution on i) number line ii) The Cartesian pane .

18. If 6 eggs costs Rs 18 , find graphically how many eggs can be brought for Rs. 27 . And also find the cost of 4 eggs .

19. Ramesh is driving a car with a uniform speed of 60 km/h. Draw the distance time graph .From the graph , find the distance travelled by Ramesh in (i) 2 hours (ii)30 minutes.

20. The graph of a linear equation passes through the points (-1,4)and (2,1) . Find the values of p and q if graph also passes through (p,3) and (1,q) .

21.Find the combined mean of a group of 150 students if the man of 50 students is 40 and that of other 100 students is 50.

22.Find the median and mod of the following data : 7,9,12,13,7,12,7,12,15,7,24, 18, 7.

23.Determine the median of 24,23,a,a-1,12,16 where a is the mean of 10 , 20, 30, 40, 50 .

24.Find the probability of getting the sum as prime number when two dice are thrown together ?

25.The king ,queen and jack of hearts are removed from a deck of 52 playing cards and then well shuffled. One card is selected from the remaining cards. Find the probability of getting:

(a) A club (b) A king (c) The 10 of spade

Science

**BIOLOGY:**

1. **Model of any one Cell Organelle/ Cell from the given list: -**

 Mitochondria

 Chloroplast

 Nucleus

 Plant Cell

 Animal Cell

1. **Assignment**

 Q1 Write the main function of leucoplast.

 Q2 What is the function of SER in liver cells of vertebrates?

 Q3 Why the RER appears rough?

 Q4 Why viruses are not supposed to be living?

 Q5 What is a nucleoid?

 Q6 Why dry raisins placed in water swell up?

 Q7 In which part of a plant chromoplasts are found?

 Q8 Where are genes located?

 Q9 What will happen if we keep a plant cell or animal cell in a i) Hypotonic solution ii) Hypertonic solution iii) Isotonic solution.

 Q10 Explain the importance of osmosis for living beings?

 Q11 Give the historical development of cell theory.

 Q12 Who coined the term “cell “and how?

 Q13 Write the contribution of (a) Robert Hooke, (b) Leeuwenhoek (c) Robert Brown

 Q14 Draw a large diagram of an animal cell as seen through an electron microscope. Label the parts that carry on the function of Respiration, secretion, protein synthesis, transport of material.

 Q15 Which substance is responsible for transfer of characters from one generation to another?

**PHYSICS**

Q1.What kind of motion of an object is represented by graph shown in fig.

1. b) c)

distancedistancedistance

 Time TimeTime

Q2. A marble rolling on smooth floor has an initial velocity of 0.4m/s .2  If floor offers a retardation of 0.2 m/s2 . Calculate the time it will start take to come to rest .

Q3.Name the physical quantity denoted by

1. The slope of distance – time graph.
2. Area under velocity – time graph.
3. Slope of velocity – time graph.

Q4. A car accelerated uniformly from 18km/h to 36km/h in 5 sec. Calculate a) acceleration b)distance covered by the car in that time.

Q5.Derive Eq. of motion by Graph Method.

Q6.Train starting from rest attain a velocity of 108km/h in 3 minute. Assuming that acceleration to be uniform find a) acceleration b)distance travelled by train for attaining this velocity.

Q7.A train 100m long to cross river bridge of length 800m .What time it will take to cross thebridge? If train moves with constant velocity of 36km/h.

Q8.An athlete complete one round of a circular track of radius r in time t.What is his Av. Speed?

Q9.Two velocity- time graph have been shown. Which represent higher acceleration & Why?

 B

Velocity

 Time

Q10. An artificial satellite is moving in a circular orbit of radius 42,250km. Calculate its speed if it take 24 Hr. to revolve around earth.

Q11.A hammer of mass 1200kg is moving at 50m/s, Strikes a nail. The nail stop the hammer in a very short time of .001s . What is the force of the nail on hammer?

Q12.Name the physical quantity which determine the direction of momentum?

Q13.When a boy jump out of a boat,the boat move backward. Why?

Q14.What do you mean by action & reaction forces? Why do not they cancel out each other?

Q15.What is inertial ofmotion ? Give illustrations to explain the concept.

Q16. A bullet of mass 25g moving with speed of 200m/s is stopped within 5cm of the target . What is the average resistance offered by the target?

Q17.State law of conservation of momentum. Give an instance from your everyday life .

Q18.A boy of mass 50kg running at 5 m/s jumps on to a 20 trolley travelling in the same direction at 1.5 m/s. Find their common velocity.

Q19.Why 2nd law is real laws of motion?

Q20.Name the physical quantities whose units are given below:

1. Kgm s-2 b)N m2 Kg-2 c)Kg m S-1

**Chemistry:**

***ASSIGNMENT ON MATTER IN OUR SURROUNDINGS***

1. Write any five characteristics of solids, liquids and gases.

2. Why can we smell hot food from a distance?

3. Define latent heat of fusion.

4. Give reason – A gas fills completely the vessel in which it is kept.

5. Why a wooden table should be called solid?

6. Why more serious burns are caused by steam at 100 0C than water at same temperature?

7. Why can a sponge be compressed though it is a solid?

8. Carry out following conversion (a) 500c to Kelvin (b) 200 k to Celsius.

9. Name the conditions to liquefy a gas.

10. Why are clothes spread out for drying?

11. What kind of clothes is most suitable for summers? Why?

12. Washed clothes dry up more quickly on a hot summer day than on a rainy day. Why?

13. What is the difference between evaporation and boiling?

14. How does water get cooled in an earthen pot?

15. How does evaporation cause cooling? Explain with example.

**SOCIAL SCIENCE**

* **Prepare a project file on the story of the village Palampur .**

Must begin the project by including the following parameters :

* Cover page with your name ,roll no, academic year.
* Index
* Acknowledgement ( giving credit to those who helped you in this project)
* Map related to the project
* Introduction - Project overview ( brief idea about the project )
* Content sheet ( 10 to 12 with relevant photographs )
* Conclusion
* Source of information -Bibliography ( the book you read and the website you visited for the project )
* **Prepare a project file on the Drainage system of India .**

Must begin the project by including the following parameters :

* Cover page with your name ,roll no, academic year.
* Index
* Acknowledgement ( giving credit to those who helped you in this project)
* Map related to the project
* Introduction - Project overview ( brief idea about the project )
* Content sheets ( 10 to 15 with relevant photographs )
* Conclusion
* Source of information -Bibliography ( the book you read and the website you visited for the project )

Roll no. 1-8 :Bhramputra Drainage System

Roll no. 9-16 : Narmada Drainage System

Roll no. 17-24 : Mahanadi Drainage System

Roll no. 25-32 :Godavari Drainage System

Roll no.33 onwards :Kaveri Drainage System

* **Prepare a Timeline of World War II and represent the role of Adlof Hitler and Nazism in your History notebook .**
* **Prepare complete syllabus for Periodic Assessment I .**

Computer

Roll No. (1 to 11):- Paste the picture of Input devices on a chart paper and explain them.

Roll No. (12 to 23):- Paste the picture of Output devices on a chart paper and explain them.

Roll No. (24 onwards):- Paste the picture of commonly used operation system and explain them.

* **Topic:-** Global Warming, Woman empowerment, Cloud Computing .(Any one)Take printout of it.
* **Every student have to Use the following steps for formatting -**

(i) Set the line spacing to 1.5.

(ii) Heading should be bold and center aligned.

(iii) Justify the paragraph.

(iv) Set Font – Constania, And Font Size for Heading – 24 rest of the matter in 16.

(v) Change the orientation of the Page to Landscape.

(v) Take the print out of the project.

* **Learn lesson 1, lesson 2, and lesson 3.**

**ENGLISH:- IX**

**Worksheet-1**

 **Do this worksheet in your fair notebook.**

**SECTION:- A( Reading)**

**Q1. Read the following passage and answer the questions that follow.**

1.Fish keeping has benefits that make it an attractive hobby for millions of people. Aquariums can bring a bit of nature, a living ecosystem, into any home, including apartments that do not allow other pets .like tending a furry animal ,helping to maintain a fish tank can teach a child the responsibility of caring for other living creatures.

2.As pets fish have distinct advantages: they are quiet, they do not chew or scratch the furniture, and with a few slow -release feeders in their tank, they can safely be left alone for a week or two. But it is likely the documented benefit to human health that has helped make aquariums so popular.

3.Like petting a dog or cat, gazing at an aquarium at the end of a long, hard day can reduce stress and lower blood pressure. Likewise, research shows that people waiting to see a doctor or undergo medical procedure were less anxious after watching fish swimming in a tank. Watching fish also has a significant calming effect on children with attention deficit as well as on elderly people with Alzheimer's disease.

4. Today, home aquariums became popular as commercial fish breeding operations and air transport made it easy and affordable. More durable tanks and improved filtration system enabled hobbyists to sustain fish for longer periods.

5. Today, home aquariums range from a child's goldfish bowl to elaborate tanks holding several hundred gallons of water and dozens of exotic fish. more adventurous hobbyists opt for saltwater tanks ,which take more work and equipment to maintain a stable environment .saltwater fish are more costly and more susceptible to changes in temperature and water quality than freshwater species .on the positive side ,they are spectacularly colorful and turn a tank into a dramatic focal point. Modern aquariums have evolved far beyond the boring rectangular tank. today's models come in almost any

shape imaginable -round hexagonal, bow front .concave ,free form and flat to hang on the wall .they also have become key elements in home and office decor .they are built into walls and incorporated into tables ,lamps ,desks and even bath tubs. Almost any object it seems can be turned into a fish

tank. (approx. 360 words)

**1.1 On the basis of your reading of the passage answer the following questions:**

(a) Why do people prefer keeping fish as a pet?

(b) What are the special advantages of petting fish?

(c) How does fish-keeping control high blood pressure?

(d) Why is salt water tank used sometimes for keeping fish?

(e) What is the main reason for the popularity of aquariums?

(f) Why are aquariums available in different shapes?

(g) Find a word from the passage which means the same as:

(i) a disease of the brain that affects memory.

(ii) different/ unusual

**Q2. Read the passage given below:**

1. Maybe you’re bored of bananas, apples and grapes and need a fresh produce pick? A nutrient-richserving of kiwifruit may be just what you need. A serving of kiwifruit (2 kiwis) has twice the vitamin Cof an orange, as much potassium as a banana and the fiber of a bowl of whole grain cereal–all for lessthan 100 calories!

2. The fuzzy fruit is sky-high in both soluble and insoluble fiber, both of which are essential for promoting heart health, regulating digestion, and lowering cholesterol levels—that’s a winning trifecta. Kiwi fruit has also been considered a “nutritional all-star,” as Rutgers University researchers found that kiwifruit has the best nutrient density of 21 commonly consumed fruits.

3. Along with vitamin C, kiwi fruit are rich in many bioactive compounds that have antioxidant capacity to help to protect against free radicals, harmful by-products produced in the body. If you want clean energy, think of kiwifruit because they’re rich in magnesium, a nutrient essential to convert food into energy.

4. A kiwi fruit also doubles as a peeper-keeper by supplying your eyes with protective lutein, a

carotenoid that’s concentrated in eye tissues and helps protect against harmful free radicals. Kiwifruit is also packed with blood pressure-lowering potassium. In fact, a 100- gram serving of kiwifruit—that’s about one large kiwi—provides 15% of the Recommended Daily Allowance (RDA) of potassium.

5. Kiwi fruit has been growing in New Zealand for over 100 years. Once the fruit gained in popularity, other countries started to grow them including Italy, France, Chile, Japan, South Korea and Spain. At first, kiwis were referred to as ‘Yang Tao’ or ‘Chinese Gooseberry,’ but the name was ultimately changed to kiwifruit so that everyone would know where the fruit came from.

6. A ripe kiwi fruit will be plump and smooth-skinned, and free of wrinkles, bruise, and punctures. If you find that your kiwi is a little too firm after buying it, simply let it ripen at room temperature for three to five days. The firmer the fruit, the more tart it will taste. To speed up the ripening process, you can also place kiwis in a paper bag with an apple or banana. If you want to store the fruit longer, you should keep in a plastic bag in the refrigerator.

**2.1 Answer the following questions briefly.**

 (a) What does a serving of kiwi offer?

(b) Why has kiwi been considered a “nutritional all-star”?

(c) How is kiwi helpful for the eyes?

(d) How can you make a kiwi fruit ripen?

**2.2 Do as directed:** (a) Find words in the passage which mean the same as-

**(i) mixture (ii) condensed**

(b) Find words in the passage which mean the opposite of- **(i) attack (ii) sweet**

**SECTION:- B Writing & Grammar**

**Q3. Bal Bharti School, Lucknow is going to organise a Debate competition on 8 September 2017 on theoccasion of International Literacy Day. The topic for the debate is ‘Should English be given the position of second language?’ You, as Hiranya/ Hardik, write a debate on the same in about 120-150 words.**

**Q4. Complete the following story in 150 to 200 words. Given below is the beginning of a story. Continue from this point and complete the story in about 150-200 words.**

In a village there lived a Zamindar. Once he went to buy a pair of bullocks at a fair and found that he was short of five hundred rupees. So he went to a pawn-broker’s shop and asked if he could borrow five hundred rupees. The moneylender replied that unless he pawned something he would not get any money.The Zamindar took out an old rusty sword and said…………

**Q5. Fill in the blanks choosing the appropriate options:**

(a) Ask your questions now as you \_\_\_\_ not talk during the test.

(i) could (ii)may (iii)should (iv) need

(b) Rivers are considered holy \_\_\_\_ India.

(i) at (ii)in (iii) of (iv) with

(c) The students were talking when Mrs. Sarkar \_\_\_\_ the classroom.

(i) entering (ii) enter (iii)entered (iv) had entered

(d) I wish I ……… buy a new phone, but I don’t have money.

(i) shall (ii) could (iii) had (iv) may

**Q6. There is an error in each line. Write the error and the corrections in the answer sheet as given below.**

Error Correction

India had been a strange (a) \_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

country to foreigners. In it glorious (b) \_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

past, it were considered a country with (c) \_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

the lot of wealth. (d) \_\_\_\_\_\_\_\_\_\_ \_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Q7. Rearrange the given words and phrases to form meaningful sentences.**

(a) rear cattle / we / for / mainly / their milk

(b) even / but surprisingly / the / rear cows / smallest of ants

(c) of the ant / the cow / small green / is a / called Aphid / creature

(d) insects / Aphids / are / suck / that / juices of plants / the