THE RAJASTHAN INTERNATIONAL SCHOOL, KOTPUTLI
CLASS: X
SUB: FIT (Holiday Homework)

Make a scrap book or Power point presentation:

1) Explain various types E-Commerce & E-Creating web sites with pictures. And elaborate how these websites are useful for common man.
2) Explain the latest communication technologies used such as 4G, 3G, CDMA, GSM, Wi-Fi, Bluetooth, Hotspot, GPRS, GPS etc.
3) Explain with help of various pictures how you can say that computers are versatile in nature.

THE RAJASTHAN INTERNATIONAL SCHOOL

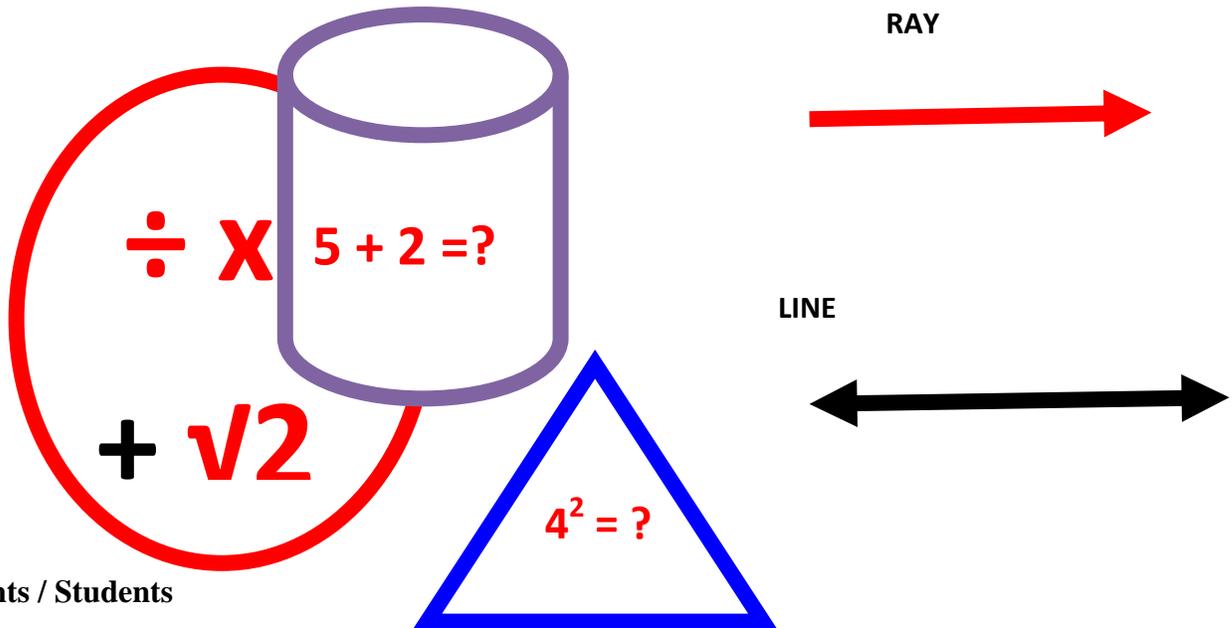## Summer Vacation HW Class 10

Subject - English

1. Write any five stories and give each story a suitable title.
2. Frame two long questions and four short questions from the chapters done till now. Then write their answers.
3. Make a ppt on any one from the following topics:
   a) Tenses
   b) Voice
   c) Modals
   d) Determiners
   e) Clauses
4. Read English newspaper everyday for at least half an hour. (Write down any two headlines every day.)
5. Revise the syllabus done till now.
6. Read the chapters of your Literature Reader.

हिन्दी ग्रीष्मकालीन अवकाश गृहकार्य

कक्षा – 10

1. अपनी पाठ्य पुस्तक क्षितिज के पद्य भाग से राम–लक्ष्मण–परशुराम संवाद नाम पाठ को पढकर उसे संवादात्मक शैली में लिखिए।

2. रचना के आधार पर वाक्य के तीनों भेदों से प्रत्येक वाक्य के 5–5 उदाहरण लिखिए एवं प्रत्येक वाक्य का परस्पर रचनांतरण भी कीजिए।

3. कर्तृवाच्य के कोई दस उदाहरण लिखकर उन्हें कर्म वाच्य व भाव वाच्य में परिवर्तित कीजिए।

4. निम्नलिखित विषयों पर लगभग 50 शब्दों में विज्ञापन लिखिए।
   (क) विद्यार्थियों द्वारा निर्मित हस्तकला की वस्तुओं की प्रदर्शनी के प्रचार हेतु।
   (ख) पर्यावरण के प्रति जागरूकता बढाने हेतु।
   (ग) शीतल पेय पदार्थ की बिक्री हेतु।
   (घ) साड़ियों की सेल हेतु।

5. निम्नलिखित विषयों पर अनुच्छेद लिखिए।
   (क) बीता समय वापस नही आता।
   (ख) जल ही जीवन है।

6. अपने मोहल्ले में बच्चों के खेलने के लिए पार्क विकसित करने के लिए नगरपालिका अध्यक्ष को पत्र लिखिए।

7. नित्य प्रातः काल उठकर खुली हवा में घूमने और व्यायाम करने की सलाह देते हुए अपनी छोटी बहन को एक पत्र लिखिए।

THE RAJASTHAN INTERNATIONAL SCHOOL, KOTPUTLI

SUMMER VACATION HOME WORK IN MATHS FOR CLASS X

(SESSION: 2018-19)

RAY

$\div$ **X** 5 + 2 =?

LINE

+ √2

4^2 = ?

Dear Parents / Students

In an effort to help the students retain their hard earned Mathematical skills, We have put together some summer homework for practice. This is to reduce the amount of time spent in the beginning of the year in recapitulation. Students are advised to complete the questions given below in separate notebook and submit the notebooks when the school reopens after summer break. Following questions are meant to enhance your knowledge and enrich your Mathematical skills.

1. After how many decimal places number $\dfrac{13}{13125}$ terminate ?

2. Write $\dfrac{3}{8}$ in the decimal form.

3. Find the HCF of the following pairs of numbers:

(i) 32 and 54 (ii) 18 and 24 (iii) 70 and 30 (iv) 56 and 88 (v) 475 and 495 (vi) 75 and 243

(vii) 240 and 6552 (viii) 155 and 1385

4. If the HCF of 408 and 1032 is expressible in the form 1032 m − 408 × 5, find m.

5. Find the largest number which divides 615 and 963 leaving remainder 6 in each case.

6. Find the greatest number which divides 285 and 1249 leaving remainders 9 and 7 respectively.

7. 105 goats, 140 donkeys and 175 cows have to be taken across a river. There is only one boat which will have to make many trips in order to do so. The lazy boatman has his own conditions for transporting them. He insists that he will take the same number of animals in every trip and they have to be of the same kind. He will naturally like to take the largest possible number each time. Can you tell how many animals went in each trip?

8. Express the HCF of 468 and 222 as 468x + 222y where x, y are integers .

9. Prove that $\sqrt{5}$ is irrational

10. Show that any number of the form 4n, can never end with the digit 0 for any natural number N

11. 144 cartons of coke can and 90 cartons of Pepsi can are to be stacked in a canteen. If each stack is of the same height and is to contain cartons of the same drink. What would be the greater number of cartons each stack would have?

12. Use Euclid Division Lemma to show that cube of any positive integer is either of the form   9m, (9m + 1) or (9m + 8).

13. Prove that $(3 + 2\sqrt{5})$ is irrational.

14. Find the zeroes of each of the following quadratic polynomials and verify the relationship between the zeroes and their co efficient: (i) $f(x) = \sqrt{3}\,x^2 + 10x + 7\sqrt{3}$
 (ii) $f(x) = x^2 - 2x - 8$
15. If the sum of the zeros of the quadratic polynomial $f(t) = k\,t^2 + 2t + 3k$ is equal to their product, find the value of k.
16. Apply division algorithm to find the quotient q(x) and remainder r(x) on dividing f(x) by g(x) in each of the following (i) $f(x) = x^3 - 6x^2 + 11x - 6$ g(x) = = $x^2 + x + 1$
(ii) $(x) = = 10\,x^4 + 17x^3 - 62\,x^2 + 30x - 105$ g(x) $= 2x^2 + 7x + 1$

17. Check whether the first polynomial is a factor of the second polynomial by applying the division algorithm: $f(x) = 6x^5 - x^4 - 4\,x^3 - 5x^2 - x - 15$ g(x) $= 2x^2 - x + 3$

18. Obtain all zeros of the polynomial $f(x) = 2x^4 + x^3 - 14\,x^2 - 19\,x - 6$, if two of its zeros are -2 and -1.
19. Obtain all zeros of $f(x) = x^3 + 13\,x^2 + 32\,x + 20$,if one of its zeros is -2.
20. Solve the following systems of equations graphically:
      $x + y = 3$ and $2x + 5y = 12$
21. Solve the following system of linear equations graphically: 3x + y - 11 = 0 and x-y -1 = 0
   Shade the region bounded by these lines and y -axis. Also, find the area of the region bounded by these lines and y-axis.

22. Solve the following systems of equations by substitution method
      $11x + 15y + 23 = 0$ and $7x - 2y - 20 = 0$

23. 4 tables and 3 chairs, together, cost Rs 2,250 and 3 tables and 4 chairs cost Rs 1950. Find the cost of 2 chairs and 1 table.

24. A lending library has a fixed charge for the first three days and an additional charge for each day thereafter. Sarita paid Rs 27 for a book kept for seven days, while Kavita paid Rs21 for the book she kept for five days. Find the fixed charge and the charge for each extra day.

25. Renal has pens and pencils which together are 40 in number. If she has 5 more pencils and 5 less pens, then number of pencils would become 4 times the number of pens. Find the original number of pens and pencils.

ACTIVITY BASED QUESTIONS

Q.1. To Find the H.C.F of two number experimentally based on Euclid Division Lemma

Q.2. Collect 20 Mathematical Identity from your book and prepare a beautiful chart

(A 4-Size) and paste it in your notebook.

(Wish you all a very enjoyable and thrilling summer vacations.)

(THANKS)

CLASS-X   (Biology)
Chapter – Life Processes
SET-A

Students are instructed to do any one set,either A or B

Write answers of the following questions-

1.What is the respiratory pigment in human blood? Where it is found ?

2.Draw the diagram of human respiratory system and label its main parts.

3. Explain,in brief, the single circulation in fishes.

4.Why is the rate of breathing much faster in aquatic organisms than the terrestrial organisms?

5.Why do we need transportation system?

6.Enlist the components of human circulatory system.

7.Name thwe blood cell that is mainly involved in the transportation of oxygen and carbon dioxide. Mention the main function of WBCs.

8.Give atleast three basic differences between artery and vein.

9. Draw the dieagram of cross section of human heart.

10. Define translocation. Where does it occur?

11. Why do plants have slow transport system?

12. where is lymph formed? What is its role in the transportation in human?

13. Define transpiration. How it is caused?

14. Give schematic diagram of double circulation.

15. Why are the walls of ventricles thicker than that of atria?

Chapter – Life Processes SET-B

Q.1What is saliva? State its role in the digestion.

Q.2 What is the role of HCl in the digestion of food in stomach.

Q.3 Where are salivary glands situated in man?

Q.4 State two functions performed by bile juice.

Q.5 Write two functions of large intestine.

Q.6 What are enzymes? Name any one enzyme of our digestive system and write its function.

Q.7 Which enzyme initiates the digestion of proteins? Name the other enzyme produced by the same gland.

Q.8 Why do herbivores have longer, small intestine than carnivores?

Q.9 Why do the walls of a trachea not collapse when there is no air in it?

Q.10 " The breathing cycle is rhythmic exchange of gases is a continous process". Justify this statement.

Q.11 How opening and closing of stomata takes place?

Q.12 What is emulsification of fats?

Q.13 State three common features of respiratory organs of animals.

Q.14 How does gaseous exchange take place in Amoeba?

Q.15 "All plants give out oxygen during day and carbon dioxide during night". Do you agree with this statement? Give reason.

Q.16 Is nutrition is necessary for an organism? Discuss.

Q.17 What is the adaptations of leaf for photosynthesis?

Q.18 What will happen if mucus is not secreted by the gastric glands?

MAKE A WRITTEN PROJECT ON THE FOLLOWING TOPIC-

1.Ciggarette smoking-effect on health of smoker and society.

Prepare a SURVEY report conducted in group(only one report by each group of 8-10 students)-

1.Digestive disorders in the people of urban area and their solutions.

Name of the resident-
Age-
Weight-
Gender-
Locality-
Normal feeding habit-
Regular disorder-
Irregular disorder-
Dieting frequency-
Suggession/Remedy-
Disorder may include;

Indigestion, Acidity, constipation, jaundice, vomitting, loose motion, dysentery, obesity stomach pain, gas formation, loss of apettite, diorrhoea,

Suggesstions/Remedy-

Avoiding spicy food, avoid drinking water immediately after meal ,use of less oily food, minimum use of processed food- use of less oily food, minimum use of processed food, develop habit of having walk after meal, maximum use of green vegetables, use of antacids- maximum dse of roughage, regularity in meal timing, use of easily digestable food atleast for few days- use of ORS, USE OF DILUTED SALT SOLUTION IN WARM WATER-check and change in water, Avoiding spicy food, maximum, use of vegetable and fruit juices

CHEMISTRY-X

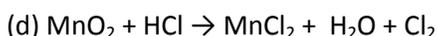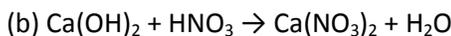## Chapter 1– Chemical reactions and Equations

Q.1 State one basic difference between a physical change and chemical change.

Q.2 What happens chemically when quicklime is added to water filled in a bucket?

Q.3 Why do gold and platinum not corrode in moist air?

Q.4 Balance the following chemical reactions:

(a) $BaCl_2 + H_2SO_4 \rightarrow BaSO_4 + HCl$

(b) $Ca(OH)_2 + HNO_3 \rightarrow Ca(NO_3)_2 + H_2O$

(c) $Pb(NO_3)_2 \rightarrow PbO + NO_3 + O_2$

(d) $MnO_2 + HCl \rightarrow MnCl_2 + H_2O + Cl_2$

Q.5 Write the balanced equation for the following reaction and identify the type of reaction in each case.

(a) Potassium bromide + barium iodide → Potassium iodide + Barium bromide.

(b) Hydrogen + chlorine → Hydrogen chloride

Q.6 Which of the following changes are exothermic or endothermic in nature?

1. Decomposition of ferrous sulphate.

2. Dissolution of sodium hydroxide in water.

3. Dilution of sulphuric acid.

4. Dissolution of ammonium chloride in water.

Q.7 Give two examples from everyday life situations where redox reactions are taking place.

Q.8 Write the chemical equation of the reaction in which the following changes have taken place with an

example of each:

(a) change in colour.

(b) change in temperature.

(c) formation of precipitate.

Q.9 Write chemical equation for the reactions taking place when:

(a) Iron reacts with steam.

(b) Magnesium reacts with dil. HCl

(c) Copper is heated in air.

Q.10 2 g of ferrous sulphate crystals are heated in a dry boiling tube.

(a) List any two observations.

(b) Name the type of chemical reaction taking place.

PHYSICS

Class - X

Chapter - Light – Reflection and Refraction

Students are instructed to do any one set,either A or B

SET-A

Q.1 List four characteristics of the images formed by plane mirror.

Q.2 Magnification of a plane mirror is +1. What does it means?

Q.3Define radius of curvature and aperture.

Q.4 Why are we advised not to see the sun direcly?

Q.5 Name the type of mirror used in design of solar furnaces. Explain how high temperature is achieved by this device?

Q.6 "A concave mirror of focal length 15 cm can form a magnified erect as well as inverted image of an object placed in front of it". Justify the statement stating the position of the object with respect to the pole of the mirror in both the cases for obtaining the images.

Q.7 What is refraction? Why does a ray of light bend on refraction?

Q.8 How can we differentiate between convex and concave lenses without touching them?

Q.9 Refractive index of diamond with respect to glass is 1.6 and absolute refractive index of glass is 1.5. Find out the absolute refractive index of diamond.

Q.10 What is the distance between plane mirror and the image, if the object is at 15 m?

Q.11 A convex lens of focal length 25 cm and a concave lens of focal length 10 cm are placed in close contact with each other. Calculate the lens power of this combination.

Q.12 An object is kept in front of a concave mirror of focal length 20 cm. The image is three times the size of the object. Calculate two possible distances of the object from the mirror.

Q.13 An object of height 6 cm is placed perpendicular to the principal axis of a concave lens of focal length 5 cm. Use lens formula to find position, nature and size of image formed if the distance of the object from the lens is 10 cm.

Q.14 At what distance from a concave lens of focal length 20 cm, a 6 cm tall object be placed so as to obtain its image at 15 cm from the lens? Also calculate the size of the image formed. Draw a ray diagram to justify your answer for the above situation.

Q.15 An image 2/3rd the size of object is formed by a convex lens at a distance of 12 cm from it. Find the focal length of the lens.

Q.16 Why is the magnification produced by a concave lens always less than 1?

Q.18 What is meant by power of a lens? Define its SI unit.

Q.19 Which of the two lenses will form a virtual and magnified image of an object placed 8 cm from the lens? Draw a ray diagram to justify your answer.

Q.20 If the image formed by a lens is diminished in size and erect, for all positions of the objects what type of lens is it?

SET-B

Q.1   What is reflection of light? What are laws of reflection?

Q.2   Differentiate between real and virtual image?

Q.3   Give the characteristics of image formed by plane mirror?

Q.4   Make a list of uses of mirrors in your daily life?

Q.5   Make list of uses of lenses in your daily life?

Q.6   Draw the ray diagrams for object placed at different position in front of a concave mirror?

Q.7   Write three applications of refraction?

Q.8   What is power of a lens? Write the unit of power of lens?

Q.9   What is the linear magnification of mirror?

Q.10   What is mirror formula?

Q.11   What are the laws of refraction?

Q.12   What is the cause of refraction of light?

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Creative Work For Summer Vacation - 2018

Subject – Fine Art

Class X

1. Make one creative project with the help of waste material.

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HOLIDAYS HOME-WORK

Class X(S.St)

Q.1   On the outline map of India locate and label the following:-

A. Place where Indian National Congress session was held in September 1920

B. Place where Indian National Congress session was held in 1927.

C . Place where Indian National Congress session was held in 1929.

D. Place where Indian National Congress session was held in December 1920

E. Champaran-Movement of Indigo Planters.

F. Kheda – Peasant Movement.

G. Chauri Chaura-calling off the NCM.

Q.2   Make a chart paper showing consumption and conservation of resources in your locality.

Q.3   Ideas of nationalism also developed through a movement to revive Indian folklore.Support

The statement with examples ?

Q.4   Classify the resources for better understanding its scope.

Q.5   Prepare a topic on power sharing in India .

Q.6   On a map of world locate and label capital city of Belgium and state of Sri Lanka.

Q.7   On a map locate and label types of soil.

Q.8   Conduct a census of ten families in your locality and make a report.

' दशमी कक्षा '

प्रश्न 1. अधो लिखितानां धातुपदानां कर्मवाच्य रूपाणि लिखत।

दृश् , कृ , पा , वच् , गम् ,

प्रश्न 2. स्व विद्यालयस्य विषये दश संस्कृत वाक्यानि लिखत।

प्रश्न 3. स्वामिने वर्धापनं पत्रं लिखत।

प्रश्न 4. कवि कालिदासस्य संक्षिप्तं परिचयं दीयताम्।

प्रश्न 5. अधोलिखितानां पदानां रूपाणि लिखत।

अस्मद् , युष्मद् , तद् , किम् , गुरु , कवि , च

Sudha