

**JKG International School, Indirapuram**  
**Holiday Assignment**  
**Session: 2019-20**  
**Class: X**

Dear Parent,

Korean Culture Centre of Embassy of the Republic of Korea is organizing Essay writing and Painting Competition named "All India 7<sup>th</sup> Korea-India Friendship Competition 2019." The Essay writing competition will be there for the students of classes VI to XII.

<b>Category</b>	<b>Topic</b>	<b>Word Limit</b>
Grade VI to IX (Junior)	My Favorite South Korean Person	150-300 words
Grade X to XII (Senior)	South Korea-My favorite Destination	300-500 words

It should be done on A4 size ruled sheet.

The painting Competition will be there for the students of classes I to XII. The students can select any one topic of their own choice.

- 1- South Korea – as I see it (technology, Beauty, Tourism, Sports, Culture etc.)
- 2- Legendary Indian Princess Huh Hwang – ok to Korea. (Ayodhya, Queen Heo Memorial)
- 3- Korea and India's Independence movement (March Ist Movement, 15<sup>th</sup> August – Liberation day)

**Entry Specifications**

- 1- The painting must be original & work done on paper.
- 2- Paper can be of any kind.
- 3- Any kind of coloring can be used including crayons, water colors, acrylic colors, oil colors, charcoal, paints, oil paints etc.

Junior Group (Grade I to VII)	A4 Size
Senior Group (Grade VIII to XII)	A3 Size

**NO ENTRY FEE**

**Note:**

- **There is No Participation Fee of any Kind.**
- **Free Trip to South Korea for Top 3 winners of each competition.**
- **Cash Prizes of ₹ 1, 19,000 (Essay comp.)**
- **Cash Prizes of ₹ 75,000 (Painting comp.)**
- **Consider it as a part of Holidays Home Work.**

Subjects	Chapters/ Units
<b>English</b>	1. Assignment 1 to 5 of Factual passage 2. Assignment 1 to 5 of Discursive passage 3. Do Q. no. 1 to 4 of Editing (Error-Correction) given on pg. no. 157 & 158 4. Do first five Questions of close (Gap filling) given on pg no. 153 & 154. 5. Write a letter to the Editor Q. no. 1 & Q. no. 2 given on pg no. 90 in English Plus. 6. Write a letter of enquiry Q. no. 1 & Q. no. 2 given on Pg no. 89 in English Plus  <b>Note: 1, 2, 3 and 4 needs to be done in the English Plus Assignment book.            5 &amp; 6 to be done in English notebook.</b>
<b>Mathematics</b>	Do the given assignment. Project given in Lab manual page no. 102, 106, 112, 117
<b>Science</b>	Do the given assignment.
<b>Social Science</b>	<ul style="list-style-type: none"> <li>• Project- Visit to a bank and discuss various activities that you have observed in the bank and make a project file on it.</li> <li>• Make a report on the recent elections conducted in our country and what are the result</li> </ul>
<b>Hindi</b>	<ul style="list-style-type: none"> <li>• अकबर व बीरबल के किसी एक किस्से को कार्टून चरित्र में ढालकर पत्रिका तैयार कीजिए।</li> </ul>
<b>Computer</b>	<ul style="list-style-type: none"> <li>• Log on to the site flipkart.com &amp; amazon.com and search for books by your favorite author. Compare the process and their rating on each site.</li> <li>• Create a document 2-3 pages on 'Historical monuments in India'. Add graphics to the document by using pictures or clip art and also use different shapes to make the document creative.</li> </ul>

**Note: Prepare for UT-I.**

## Holiday Assignment Physics

- Q1. Why do we prefer a convex mirror as a rear view mirror in vehicles?
- Q2. The refractive index of diamond is 2.42. What is the meaning of this statement?
- Q3. Which one of the following materials cannot be used to make a lens?  
(a)Water (b)Glass (c)Plastic (d)Clay
- Q4. What is the significance of +ve sign of magnification?
- Q5. Differentiate between virtual image formed by a concave mirror and of a convex mirror.
- Q6. Name the component of white light that has the greatest wavelength.
- Q7. How the phenomenon of lateral inversion does occurs?
- Q8. Show diagrammatically, how two converging lenses should be arranged so that a parallel beam becomes parallel after passing through two lenses.
- Q9. List four characteristics of the images formed by plane mirror?
- Q10. What will happen to a ray of light when it falls normally on a surface? Show it with a diagram.
- Q11. Distinguish between a convex lens and a concave lens.
- Q12. Can a convergent lens in one medium become divergent in another medium?
- Q13. A man is going away from the plane mirror with a velocity of 3 m/s. With what velocity is he going away from his own image in the mirror?
- Q14. Under what condition a convex lens when placed in a medium behaves as an ordinary glass plate?
- Q15. Which one of the two –glass and water is optically denser and why?
- Q16. Compare and contrast biomass and hydroelectricity as source of energy.
- Q17. Why is tidal energy not likely to be a potential source of energy?
- Q18. Explain how the energy of flowing water is related to solar energy.
- Q19. Biogas is considered to be a boon to the farmers. Give reasons.
- Q20. Being renewable source use of wood as a fuel is not a wise decision. Explain.
- Q21. Differentiate between box-type solar cooker and spherical reflector type solar cooker.
- Q22. What is meant by nuclear waste? State the main hazard of this waste on the living beings. How is this waste disposed off?
- Q23. Why is there a need to harness non-conventional sources of energy? Give two main reasons.
- Q24. Which part of the solar cooker is responsible for greenhouse effect?
- Q25. What is a good source of energy?
- Q26. Distinguish between conventional and non-conventional sources of energy with examples.
- Q27. Discuss non-conventional sources of energy with their advantages and limitations.
- Q28. What are fossil fuels? Give example. What are disadvantages of fossil fuels?
- Q29. What is geothermal energy?
- Q30. How is nuclear energy generated during nuclear fusion?

## Holiday Assignment Chemistry

- Q1. Why do we apply paint on iron articles?
- Q2. Why is respiration considered an exothermic reaction?
- Q3.  $N_2 + H_2 \longrightarrow NH_3$ , name the type of reaction.
- Q4. Lead nitrate on heating gives lead oxide, nitrogen dioxide, and oxygen. Write Balanced equation for this reaction.
- Q5. If copper metal is heated over a flame it develops a coating. What is the colour and composition of coating.
- Q6. State the law which is kept in mind when we balance a chemical equation.
- Q7. When a green compound is heated strongly, its colour changes to black and odour of burning sulphur is given out.
- a) Name the compound.
- b) State the type of reaction
- c) Write the chemical equation involved.
- Q8. A white compound on heating decomposes to give brown fumes and a yellow Residue is left behind. Name the compound. Write the chemical equation of the reaction stating its type.
- Q9. Why do we store silver chloride in dark colored bottles? Explain in brief.
- Q10. Identify the type of each of the following reactions:
- a) A reaction in which a single product is formed from two or more reactants.
- b) The reaction mixture becomes warm.
- c) An insoluble substance is formed.
- d) External surface of the container in which reaction takes place becomes freezing cold.
- Q11. "A solution of potassium chloride when mixed with silver nitrate solution, an Insoluble white substance is formed."
- a) Translate the above statement into a chemical equation.
- b) State two types for this reaction.
- Q12. A) When a metal 'X' is added to salt solution of a metal 'Y', following chemical reaction takes place:  
Metal 'X' + Salt solution of 'Y'  $\longrightarrow$  Salt solution of 'X' + metal 'Y'
- B) Mention the inference you draw regarding the reactivity of metal 'X' and 'Y' and also about the type of reaction. State the reason of your conclusions.
- Q13. Give one example of each:
- a) Chemical reaction showing evolution of gas.
- b) Change in color of a substance during chemical reaction.
- Q14. Why do silver articles turn black and copper items turn green after sometime?
- Q15. Balance the following chemical equations:
- a)  $Fe_2O_3 + CO \longrightarrow Fe + CO_2$
- b)  $H_2S + SO_2 \longrightarrow S + H_2O$
- c)  $MnO_2 + Al \longrightarrow Mn + Al_2O_3$
- d)  $NH_3 + O_2 \longrightarrow NO + H_2O$
- e)  $Pb(NO_3)_2 + KI \longrightarrow PbI_2 + KNO_3$
- f)  $Zn + AgNO_3 \longrightarrow Zn(NO_3)_2 + Ag$
- Q16. What is milk of magnesia? Is it a strong or mild base?



## Holiday Assignment Biology

1. Define peristaltic movement.
2. Name the tissue that transports water and minerals in plants.
3. What is the role of acid in our stomach?
4. What is emulsification?
5. Define transpiration.
6. Where is auxin synthesized in plants?
7. What is synapse?
8. What are tropic movements?
9. Which hormone has inhibiting effects on growth of plants?
10. What is phototropism?
11. How is small intestine designed to absorb digested food?
12. What are stomata? Draw a labeled diagram of stomata.
13. Write the equation for the process of breakdown of glucose in a cell:
  - (a) in the presence of oxygen.
  - (b) in the absence of oxygen.
14. Write the differences between inhalation and exhalation.
15. List the three events which occur during photosynthesis.
16. Which hormone is known as emergency hormone in our body? How it helps in coping during emergency?
17. Where are different receptors present in our body? What are their functions?
18. Draw a labelled diagram of human brain and state the functions of its different parts.
19. What are hormones? Give the name of associated gland and functions of different animal hormones..
20.
  - (a) How brain and spinal cord are protected?
  - (b) What are the different parts of human nervous system?
  - (c) What are the limitations of nervous system?[Join Free Learning Group -or](#)
21. Describe the process of double circulation in human beings.
22. What are the methods used by plants to get rid of their waste products ?
23. Give reason for the following:
  - (a) Arteries are thick walled blood vessels.
  - (b) Veins are thin walled blood vessels.
  - (c) Veins have valves in them.
24. If you chew chapatti for long, after some time it taste sweet? Why is this so?
25. What is the benefit of residual volume of air in the respiratory process?
26. Why is the energy needs in plants is very less as compared to animals? Explain.
27. Draw a well-labelled diagram of Nephron. Explain the process of formation of urine in the human kidney.
28. Draw a diagram showing Human Respiratory System. Label the following parts :
  - (a) Alveolus
  - (b) Trachea
  - (c) Bronchus
  - (d) Lungs



