



# BRAJKISHORE KINDERGARTEN, CHHAPRA

Session – 2025 - 2026

## Home Work for Summer Vacation

Class – X

Name:.....Sec.....Roll No.....

### English

1. Read Ch-3, “The Midnight Visitor” (Foot Prints Without Feet) and chalk out short questions and answer the same.
2. Read Chapter-3, “Two Stories About Flying” (First Flight) and chalk out short questions and answer the same.
3. Grammar: Write the structures of Tenses in your note book and practice Narration.

### हिन्दी

1. ‘सूरदास के पद’ (काव्यखण्ड) एवं ‘नेताजी का चश्मा’ (गद्यखण्ड) पाठ को ध्यानपूर्वक पढ़कर प्रश्नों के उत्तर याद करें।
2. व्याकरण की कॉपी में लिखें –  
(i) अलंकार की परिभाषा एवं भेदों के नाम लिखकर याद करें।
3. परियोजना कार्य – सुभाषचंद्र बोस का सचित्र जीवन-परिचय स्टिक फाइल में प्रस्तुत करें।

### Maths

1. Check whether  $4^n$  can end with the digit 0 for any natural number n.
2. Prove that  $\sqrt{2}$ ,  $3\sqrt{5}$ ,  $4 - \sqrt{2}$  are irrational number.
3. To show the relation between zeros and coefficients of quadratic polynomial.
4. Define the terms: -
  - (a) Real number
  - (b) Polynomial
  - (c) Integers
  - (d) Composite number
  - (e) Prime number
5. What is the fundamental theorem of arithmetic.
6. Find the zeros of the following quadratic polynomial and verify the relationship between the zeros and the coefficients.
  - (a)  $x^2 - 2x - 8$
  - (b)  $t^2 - 15$

## Science

### Physics

1. Define the principal focus of a concave mirror.
2. The radius of curvature of a spherical mirror is 20 cm. what is its focal length.
3. A convex mirror used for rear-view on an automobile has a radius of curvature of 3:00 m.  
If a bus is located at 5:00 m from this mirror, find the position nature and size of the image.
4. A ray of light travelling in air enters obliquely into water. Does the light ray bend towards the normal or away from the normal? Why?
5. We wish to obtain an erect image of an objects, using a concave mirror of focal length 15 cm. What should be the range of distance of the object from the mirror? What is the nature of the image? Is the image larger or smaller than the object? Draw a ray diagram to show the image formation in this case.

### Chemistry: -

1. Write the balanced chemical equations for the following reactions.  
Solution of barium chloride and sodium sulphate in water react to give insoluble barium sulphate and the solution of sodium chloride.
2. Zinc metal reacts with aqueous hydrochloric acid to produce a solution of zinc chloride and hydrogen gas.
3. Carbon dioxide gas is passed through lime water to form a precipitate of calcium carbonate.
4. Calcium carbonate dissolves in hydrochloric acid to give calcium chloride water and carbon dioxide.
5. Aluminium sulphate reacts with sodium hydroxide to form a precipitate of aluminium hydroxide while the solution after the reaction is found to contain sodium sulphate.
6. What does one mean by exothermic and endothermic reactions? Give examples.
7. Why are decomposition reaction called the opposite of combination reactions?  
Write equations for these reactions.
8. Explain the following in terms of gain or loss of oxygen with two examples each.  
(a) Oxidation                      (b) Reduction

### **Biology –**

1. Draw a neat labelled diagram of 'Human Digestive System'.
2. Remember the "Nutrition in human beings" and "Types of respiration".

### **Social Science**

**History :** - Read Chapter – 1 "The Rise of Nationalism in Europe" carefully and prepare notes for the same.

**Geography:** - Project – Draw the map of India, locate and label the different types of soil found in India and define it.

**Political Science:** - Read Chapter – 2 "**Federalism**" and prepare notes for the same.

**Economics :** - Prepare a project on different sectors of the Indian Economy.

### **Computer**

1. Write Q. Ans. of Chapter - 1
2. Write Notes in copy – Chapter – 1 & Chapter - 2