

Dear Parents

Greetings of the day!

Vacations are the best time to relax and enjoy. Summer vacations are the reason behind fun in the sun, beach and shadow of the umbrella, but it is also the time to keep some analogy of academics alive in the fun to chisel the inherent potential inside your child. My suggestion to you is to spend these holidays being sociable and be vibrant in undertaking your plans so that the vacation is made purposeful.

To begin with, enhance every precious moment prudently by motivating your child to read informative and enlightening books. Help them improve their speech by conversing with them on every possible occasion and strop their vocabulary by providing them with new words. Spend substantial time visiting your kith and kin and people in your vicinity. Hold parley with your child on daily happenings and crucial world events as this is the best time to update, put forth your thoughts, notions and ideas before your ward and ask for an opinion, be a constant supporter of tolerance and disseminate it amongst people, teach your child to help and let him/her realize the meaning of real happiness and harmony and certainly root out all possible ill feelings and factions. Try being friendly and benevolent to all, let your child play the part in family reunions which will strengthen your family bond. Look out for the ways to abrade the plodding routine and take up some supportive vigorous activities with your child like swimming, cycling, jogging, painting or any other activity that your child enjoys.

It's your time to make every single moment eventful and memorable for your child and fill them with loads of experiences, which he/she eagerly wants to share with his/her pals and Educators when returned to School.

I wish you a pleasant vacation!

Regards

**Principal
Delhi Public School Gwalior**

ADD ONS TO MAKE YOUR VACATION MEANINGFUL !!

Childhood is a crucial stage of development. Most of life's important lessons are learnt here! Let us join hands and make sincere efforts to augment and hone the learning process of the child through inculcation of self learning and keen observation.

- * Let us attempt to enable them by allowing them to assume responsibilities of the routine household and shopping chores. (e.g.: laying the table, serving the guests, making their beds, buying groceries from the nearby stores etc.)
- * Let us make them aware about their social responsibilities which will transform them into a responsible citizen of our society. (e.g.: keeping the surroundings clean, make use of public litter bins, switching off lights / fans / closing the taps properly etc.)
- * They should be taught how to connect with Almighty God through prayers and meditation. (e.g.: daily prayers, thought of the day, meditate to improve the concentration etc.)
- * Socialize and connect with people, neighbours and relatives. (e.g.: meeting & greeting neighbours, helping the elderly around, be friendly to the peers etc.)

We wish all the great for your summer holiday time. May all the pleasure in the world embrace you, let your fun endless with friends and family.

Note : Kindly do all the Holiday Assignments neatly and submit it latest by July 10, 2026.

SUBJECT – ENGLISH

I. Writing Task (to be done on A4 sheets and compiled in a file)

Unit-3 Science

1. Electric vehicles have now become a necessity in today's world. The rise in economic activities and the rapidly increasing population have led to a tremendous demand for transport, especially in urban India, resulting in severe air pollution.

Write a letter to the Editor of a national daily in 120 -150 words highlighting the importance of electric vehicles in creating a smog-free and clean environment. Use your own ideas along with the ideas from Unit-3 Science.

Unit-4 Environment

2. "Eco-tourism means responsible travel to natural areas that conserves the environment and improves the well-being of local people."

Keeping this in mind, write an article in 120–150 words on the topic "Eco-Tourism: A Step Towards Sustainable Development." Highlight the importance of protecting nature, supporting local communities, and promoting responsible tourism. Use your own ideas along with suitable examples.

Unit-5 Travel and Tourism

3. Wars in the present world have far-reaching ill effects on humanity and the environment. Write an article in 120–150 words discussing the ill effects of modern wars. Use relevant examples.

II. Comprehension Passages (to be done in Main Course Book)

Unit-3 Science

A2 (Solar Power), A4, A5, A6, D1 to D8

Unit-4 Environment

A1, A2, A3, B1, B2, B5, B6, B7, D1, D2, D3, D5, E1, E2, E3

Unit-5 Travel and Tourism

A1, A4, D1, D2, D3

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SUBJECT – HINDI

ग्रीष्मकालीन गृहकार्य

1. कभी आपको पारंपरिक रामलीला अथवा राम-कथा की नाट्य प्रस्तुति देखने का अवसर मिला होगा, उस अनुभव को अपने शब्दों में लिखिए।

अथवा

2. अपने घर के आस-पास देखिए, पता लगाइए, लिखिए कि नगरपालिका ने क्या-क्या काम करवाए हैं? हमारी भूमिका उसमें क्या हो सकती है ?

3. मोह और प्रेम में अंतर होता है। विस्तार से उदाहरण सहित लिखिए।

अथवा

कलेंडर किस माह से आरम्भ होता है ? हिंदी महीनों की सूची तैयार कीजिए एवं इनमें पडने वाले कोई 2 त्योहारों के नाम भी लिखिए।

4. **प्रोजेक्ट**

नेताजी सुभाषचंद्र बोस के व्यक्तित्व और कृतित्व पर एक प्रोजेक्ट बनाइए।

अथवा

पाठ (बालगोबिन भगत) में ऋतुओं के बहुत सुंदर शब्द चित्र उकेरे हैं। बदलते हुए मौसम को दर्शाते हुए चित्र/फोटो का संग्रह कर एक अलबम तैयार कीजिए।

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SUBJECT – SANSKRIT

ग्रीष्मावकाश गृहकार्य

1. भू, कृ, लभ्, दृश् धातुओं के रूप लट्, लृट्, लङ्, लोट्, विधिलिङ् लकारों में लिखें। (नोट बुक में)
2. किम् शब्द के रूप पुल्लिंग, स्त्रीलिंग में तथा पितृ, गुरु, भवत्, नदी के रूप लिखें। (नोट बुक में)
3. 'भगवद् गीता' आधारित कोई सात श्लोक अर्थ सहित लिखें एवं कंठस्थ करें। (प्रयोजना कार्य फाइल में)

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SUBJECT – MATHEMATICS

General Instructions :

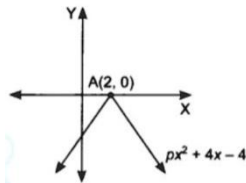
- Holiday Assignment consists of Multiple Choice questions, Assertion and Reasoning questions, Case based questions and solve the following questions.
- All the work to be done in A4 sized ruled sheets which are to be arranged in a stick file.
- All the best! Stay Home, Stay Safe!

Multiple Choice Questions

Q.1 Two natural numbers whose difference is 66 and the least common multiple is 360 are:
(a) 120 and 54 (b) 90 and 24 (c) 180 and 114 (d) 130 and 64

Q.2 The HCF and LCM of two numbers are 33 and 264 respectively. When the first number is completely divided by 2 the quotient is 33. The other number is:
(a) 162 (b) 32 (c) 66 (d) 132

Q.3



Graph of the polynomial $p(x)=px^2+4x-4$ is given as above. The value of p is:
(a) 0 (b) 2 (c) -1 (d) 1

Q.4 If one zero of the polynomial $x^2 - 4x + 1$ is $2 + \sqrt{3}$, then the other zero is
(a) $-\sqrt{3}$ (b) $2 - \sqrt{3}$ (c) 4 (d) 1

Q.5 $y = a + \frac{b}{x}$ where a and b are real numbers. If $y = 1$ when $x = -1$ and $y = 5$ when $x = -5$, then $a + b$ equals
(a) -1 (b) 0 (c) 11 (d) 10

Q.6 If $3^{(x-y)} = 9$ and $x - 2y = 6$ represent a system of equations, then the value of $x + y$ is
(a) -2 (b) -6 (c) -4 (d) None of these

Q.15 **Assertion (A):** Zeros of the polynomial $2x^2 - 8x + 6$ are 1 and 3.

Reason (R): If α and β are zeros of quadratic polynomial $P(x) = ax^2 + bx + c$, $a \neq 0$, then $P(x) = K[x^2 - (\alpha + \beta)x + \alpha\beta]$, where K is a constant.

Q.16 **Assertion (A):** Seven face cards are removed from a deck of 52 cards and the cards are well shuffled. Then the probability of drawing a face card is $\frac{5}{52}$.

Reason (R): King, Queen and Jack are known as face cards so, there are 12 face cards in total.

Q.17 **Assertion (A):** The system of equations $x + y = 6$, and $x - y - 2 = 0$ has unique solution.

Reason (R): The system of equations $a_1x + b_1y + c_1 = 0$, $a_2x + b_2y + c_2 = 0$ has unique solution when $\frac{a_1}{a_2} \neq \frac{b_1}{b_2}$.

Q.18 **Assertion (A):** Graphically the pair of linear equations $2x - y - 5 = 0$, and $x - y - 3 = 0$ represent intersecting lines.

Reason (R): The linear equations $2x - y - 5 = 0$ and $x - y - 3 = 0$ represent intersecting lines.

Q.19 **Assertion (A):** The distance of the point (2, 11) from the x -axis is 11 units.

Reason (R): The distance of a point (x, y) from x -axis is its ordinate, i.e. y units.

Q.20 **Assertion (A):** Point $P(1, \frac{5}{2})$ is equidistant from the points A(-5,3) and B(7,2).

Reason (R): If a point P is equidistant from the points A and B then AP=BP.

Solve the following :

Q.21 The HCF of two numbers is 29 and the other two factors of their LCM are 16 and 19. Find the larger of the two numbers.

Q.22 If the sum of the zeroes of the quadratic polynomial $ky^2 + 2y - 3k$ is equal to twice their product, find the value of k.

Q.23 Solve for x and y:
 $6x + 3y = 8x + 9y - 5 = 10x + 12y - 8$

Q.24 The center of a circle is $(2\alpha - 1, 7)$ and it passes through the point $(-3, -1)$. If the diameter of the circle is 20 units, then find the value of α .

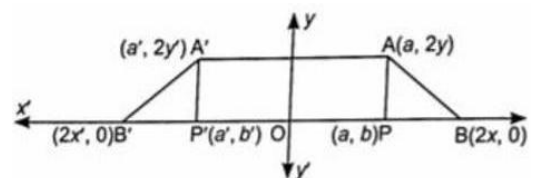
Q.25 The probability of selecting a blue marble at random from a jar that contains only blue, black and green marbles is $\frac{1}{5}$. The probability of selecting a black marble at random from a same jar is $\frac{1}{4}$. If the jar contains 11 green marbles, find the total number of marbles in a jar.

Q.26 The greatest number that will divide 76, 112, 172 and 184 so as to leave the remainder 40 in each case is $k^2 \times 3$. Find the value of k.

- Q.27 If the zeroes of $x^2 - px + 6$ are in the ratio 2:3, find p.
- Q.28 Determine graphically the coordinates of the vertices of a triangle, the equation of whose sides are given by $2y - x = 8, 5y - x = 14, y - 2x = 1$
- Q.29 Two points A(1,0) and B(-1,0) with a variable point P(x,y) satisfy the relation AP=BP=1. Show that $12x^2 - 4y^2 = 3$
- Q.30 A number is selected at random from the numbers 3, 5, 5, 7, 7, 7, 9, 9, 9, 9. Find the probability that the selected number is their average.
- Q.31 Prove that $\sqrt{p} + \sqrt{q}$ is irrational, where p,q are primes.
- Q.32 α, β are the zeroes of the quadratic polynomial $x^2 - (k + 6)x + 2(2k - 1)$. Find the value of k if $\alpha + \beta = \frac{1}{2}\alpha\beta$.
- Q.33 Two trains each 80 m long passes each other on parallel lines. If they are going in the same direction, the faster train takes one minute to pass the other completely. If they are going in opposite directions, they over take each other in three seconds. Find the speed of each train in Km/hr.
- Q34 One vertex of an equilateral triangle with sides 2 units is at the origin. Another vertex lies on the line $x = \sqrt{3}y$ and is in the first quadrant. Find the coordinates of the other two vertices.
- Q35 A coin is tossed. If it results in a head, a coin is tossed, otherwise a die is thrown. Describe the following events:
 (A) = getting at least one head
 (B) = getting an even number
 (C) = getting a tail
 (D) = getting a tail and an odd number

Case Study Based Questions

- Q.36 A floor designed is made by 2-dimensional geometrical figures as shown on coordinate axes.



Coordinates of points are also represented. Here $A'P'B'$ is mirror image of APB along y axis.

Answer the following questions based on above diagram.

- Find the coordinates of mid point of PP' .
 - Find the distance of point P from y-axis.
 - Find the distance PP' .
- Q.37 Deepak and Sanju works together in a bank in Delhi. Hometown of both of them is Rampur in Uttar Pradesh which is at a distance of 300 km from Delhi. To reach Rampur from Delhi they travel partly by train and partly by bus. This Diwali they travelled separately to Rampur. Deepak travels



60 km by train and remaining by bus and taken 4 hrs. Sanju travels 100 km by train and remaining by bus and takes 4 hrs 10 minutes.

Based on the above information, answer the following questions

- (i) If speed of train is x km/hr and speed of bus is y km/hr then write the algebraic representation of the situation.
- (ii) Find the speed of the bus.
- (iii) If the speed of train is 90 km/hr and speed of bus is 60 km/hr then find time taken by Deepak to travel 60 km by train and 240 km by bus.

Q.38 Akshat appears for a multiple choice questions test with four choices one of which is right. He either guesses or copies or knows the answer to a question. Total number of questions in the test is 50. He knows the answer to 50% of the questions, he guesses the answer of 15 questions and copies the answer of remaining questions.

Based on the above information, answer the following questions

- (i) What is the probability that he knows the answer of a question?
- (ii) What is probability that Akshat guesses the answer of a question?
- (iii) What is the probability that Akshat copies the answer of a question?

Q.39 Ravish runs a book shop at school of math, Gurgaon. He received 486 chemistry books, 216 Physics books and 702 Mathematics books of class XI.

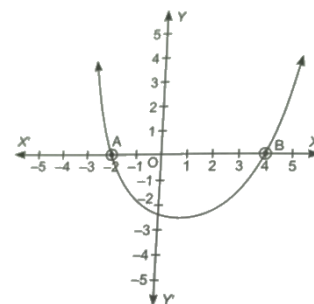


He wishes to arrange these books in minimum numbers of stacks such that each stack consists of the books on only one subject and the number of books in each stack is the same.

- (i) Find the number of books in each stack
- (ii) Find the Number of stacks of Mathematics books.
- (iii) Find the difference in number of stacks of Mathematics books and sum of stacks of Physics and Chemistry books

Q.40 In Maths activity period, Roma's Maths teacher told her to draw the graph of a polynomial having at most two zeros. She draws the graph as show below:

- (i) Name the shape drawn by Roma.
- (ii) Find the zeroes of $p(x) = x^2 - 49$
- (iii) If 1 is a zero of polynomial $p(x) = mx^2 - 3(m - 1)x + 4$, then find the value of m .



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SUBJECT – SCIENCE

General Instructions

1. Do all the questions (Biology Chemistry & Physics) in one notebook.
2. Write answers in a proper sequence.
3. Do neat & clean work.
4. Draw diagrams where ever required.

Section-A (Biology)

Objective Type Questions

- Q.1 Emulsification of fats is brought by –
(a) Hydrochloric acid (b) Bile
(c) Amylase (d) lipase
- Q.2 Carnivores have shorter intestine due to –
(a) Absence of vegetation in diet. (b) Smaller bulk of animal food.
(c) Smaller bulk of vegetable matter. (d) Absence of carbohydrate in diet.
- Q.3 Name a circulatory fluid in the human body other than blood.
(a) Platelets (b) RBC (c) Lymph (d) Plasma

Assertion and Reason Questions

The following two questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true, and R is correct explanation of the assertion.
(b) Both A and R are true, but R is not the correct explanation of the assertion.
(c) A is true, but R is false.
(d) A is false, but R is true.
- Q.4 **Assertion (A):** Bile is essential for digestion of lipids.
Reason (R) : Bile juice contains enzymes.
- Q.5 **Assertion (A):** The inner lining of the small intestine has numerous finger – like projections called villi.
Reason (R) : The villi increase the surface area for absorption.

Short Answer Type Questions

- Q.6 What would happen if green plants disappear from the earth?
- Q.7 Write the mechanism of photosynthesis.
- Q.8 Write an activity to show an action of salivary amylase on starch.

Case based Questions

Q.9 The organ system of human beings which is responsible for the transport of materials inside the body is called circulatory system. The various organs of the circulatory system in humans are: heart, arteries, veins and capillaries. Blood is also considered a part of the circulatory system in the circulatory system, the heart acts as a pump to push out blood. The arteries, veins and capillaries act as pipes through which the blood flows. These tubes that carry blood are called blood vessels.

- (A) Which Chamber of heart receives oxygenated blood?
(B) What do you mean by double circulation of blood?

Attempt either subpart C or D

- (C) Write the difference between arteries and veins.

OR

- (D) Why do human beings require double circulation of blood?

Long Answer Type Question

- Q.10 (a) Differentiate between the following:
(i) Renal artery & Renal vein.
(ii) Trypsin & Lipase.
(b) Draw a labelled diagram of human excretory system.

Section-B (Chemistry)

Objective Type Questions

- Q1. Which of the following represents a combination reaction?
(a) $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$ (b) $2\text{Mg} + \text{O}_2 \rightarrow 2\text{MgO}$
(c) $\text{Zn} + \text{HCl} \rightarrow \text{ZnCl}_2 + \text{H}_2$ (d) $\text{AgNO}_3 + \text{NaCl} \rightarrow \text{AgCl} + \text{NaNO}_3$
- Q2. What is the colour of ferrous sulphate crystals?
(a) Blue (b) Green (c) White (d) Brown
- Q3. Which of the following is a decomposition reaction?
(a) $2\text{H}_2 + \text{O}_2 \rightarrow 2\text{H}_2\text{O}$ (b) $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
(c) $\text{Zn} + \text{CuSO}_4 \rightarrow \text{ZnSO}_4 + \text{Cu}$ (d) $\text{NaOH} + \text{HCl} \rightarrow \text{NaCl} + \text{H}_2\text{O}$

Assertion and Reason Questions

The following two questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
(b) Both A and R are true but R is not the correct explanation of A.
(c) A is true but R is false.
(d) A is false but R is true.
- Q.4 **Assertion (A)** : Rusting of iron is a chemical change.
Reason (R) : Rusting involves formation of a new substance.
- Q.5 **Assertion (A)** : In a displacement reaction, a less reactive element displaces a more reactive element.
Reason (R) : Reactivity series determines displacement reactions.

Short Answer Type Questions

- Q.6 What is a balanced chemical equation?
- Q.7 What is a precipitation reaction? Give an example.
- Q.8 Define corrosion.

Case based Questions

- Q.9 A student performs an experiment by heating copper powder in air. After some time, the surface turns black. Then hydrogen gas is passed over it, and it turns reddish-brown again.
- A. What is the black substance formed?
B. Name the type of reaction when copper reacts with oxygen.
Attempt either subpart C or D
C. What happens when hydrogen gas is passed over copper oxide?
D. Write the balanced chemical equation.

Long Answer Type Question

- Q.10 Explain the following types of chemical reactions with examples:
- (a) Combination reaction
 - (b) Decomposition reaction
 - (c) Displacement reaction
 - (d) Double displacement reaction

Section – C (Physics)

Objective Type Questions

- Q.1 The focal length of a concave mirror is 20 cm. The radius of curvature will be:
(a) 10 cm (b) 20 cm (c) 40 cm (d) 80 cm
- Q.2 Which of the following mirrors is used as a rear-view mirror in vehicles?
(a) Plane mirror (b) Concave mirror (c) Convex mirror (d) Concave lens
- Q.3 The refractive index of a medium depends on:
(a) Colour of light (b) Nature of medium
(c) Speed of light in medium (d) All of the above

Assertion and Reason Questions

The following two questions consist of two statements – Assertion (A) and Reason (R). Answer these questions selecting the appropriate option given below:

- (a) Both A and R are true and R is the correct explanation of A.
 - (b) Both A and R are true but R is not the correct explanation of A.
 - (c) A is true but R is false.
 - (d) A is false but R is true.
- Q.4 **Assertion (A):** A convex mirror always forms a virtual and diminished image.
Reason (R): The reflected rays from a convex mirror always diverge.
- Q.5 **Assertion (A):** Light bends towards the normal when it travels from a rarer medium to a denser medium.
Reason (R): The speed of light decreases in a denser medium.

Short Answer Type Questions

- Q.6 Define principal focus of a concave mirror.
- Q.7 Write any two differences between concave mirror and convex mirror.
- Q.8 State two characteristics of the image formed by a plane mirror.

Case based Questions

- Q.9 Light changes its direction when it passes from one medium to another. This phenomenon is called refraction of light. The bending of light depends on the refractive index of the medium. When light travels from air to glass, it bends towards the normal. The relation between the angle of incidence and angle of refraction is given by Snell's Law.
- (A) What is meant by refraction of light?
 - (B) What happens to light when it travels from air to glass?

Attempt either subpart C or D

- (C) Write the formula for refractive index in terms of the speed of light.
(D) Name the law which describes the refraction of light.

Long Answer Type Question

- Q.10 a) Draw a ray diagram to show the image formation by a concave mirror when the object is placed beyond the centre of curvature (C).
b) Write the nature, position, and size of the image formed.

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SUBJECT – SOCIAL SCIENCE

Instructions -

1. The Project should be submitted in a handmade file or folder.
2. It should be prepared / made from eco-friendly products without incurring too much expenditure.
3. Refer CBSE website (Syllabus- Social Science) for the layout of the project report.
4. Refer Lesson-5 (Economics) for the relevant details.

Social Science— With reference to exploitation of consumers as per the Consumer Protection Act 1986, interview ten person in your neighbour or relation and collect varied experiences in case they have been victims of any exploitation by shopkeepers. Suggest the ways in which the consumers can be compensated along with relevant photographs if possible. Conclude the report along with your findings in 100-150 words.

*** Suggestive questions to be asked during interview:**

- i) Name of the person
- ii) When you buy some item, do you insist on a bill?
- iii) Do you keep the bill carefully?
- iv) Do you look for ISI mark, Agmark, expiry date, etc.?
- v) A shopkeeper tells you to buy a toothbrush, but you want to buy a tooth paste only from his shop. What do you do?
- vi) If you realize that you have been tricked by the shopkeeper, have you bothered to complain to him?
- vii) Do you bother taking next step if the shopkeeper is not accepting his/her fault?
- viii) Have you heard about consumer forum?
- ix) Do you know that they are there to help you to get compensation?
- x) Have you been a victim of online fraud?

OR

'Consumer Rights in India'

- Make a project report on the given topic covering the following points:
 1. Who is a 'consumer'?
 2. Malpractices in the market place.
 3. Need for protecting the consumers.
 4. Consumer movements in India.
 5. Different ways to protect consumers.
 6. Problems with the consumer movements.
 7. Consumer Rights - All types.
 8. Learning to become well-informed consumer.

- Note:** (i) Design a poster to aware consumers.
(ii) Draw/paste various safety marks.

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SUBJECT – BANKING & INSURANCE

Prepare a practical file (Spiral binding) on the following topics-

1. Explain the different types of negotiable instruments along with a specimen copy of all negotiable instruments.
2. Prepare a detailed report on different types of General insurance (attach a blank hard copy of Insurance application form).
3. Explain the utility services provided by the banks.
4. Prepare a detailed report on Life insurance (attach a blank hard copy of Insurance application form).

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SUJET : FRANÇAIS

Environment Awareness Project / Projet sur l'environnement

Prépare une affiche et rédige un paragraphe (100–120 mots) sur le sujet :« Que faut-il faire pour sauver notre planète? » Incluez des idées comme la réduction de la pollution, la protection de l'air, l'économie de l'eau et la préservation de la biodiversité.

Prepare a poster and write a short paragraph (100–120 words) on the topic: “Que faut-il faire pour sauver notre planète?” Include ideas such as reducing pollution, protecting air, saving water, and preserving biodiversity.

Activity: Draw, colour, and present your ideas creatively.

OU / OR

Political Systems Comparison (France & India) / Systèmes politiques (France et Inde)

Comparez les systèmes politiques de la France et de l'Inde (120–150 mots). Mentionnez le Parlement, le Président, le Premier ministre et le système électoral.

Compare the political systems of France and India in 120–150 words. Include information about the Parliament, the President, the Prime Minister, and the electoral system.

Activity: Create a simple chart or diagram to highlight the differences.

SUBJECT – ARTIFICIAL INTELLIGENCE

Case Study: AI in Healthcare

1. Write about how AI helps doctors (diagnosis, X-rays, robots).
2. Data Collection Activity
 - Ask 5 people:
 - Do they use AI daily?
 - Where do they see AI?
 - Present your findings in a small table

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SUBJECT – INFORMATION TECHNOLOGY

Make a project on any topic given below:

Project Topic (Any One):

1. Role of IT in Healthcare
2. Digital India Initiative

3. Online Education Platforms
4. Cyber Crime and Prevention

Instructions:

❖ Write 3–4 pages

Include:

1. Introduction
2. Explanation
3. Advantages & Disadvantages
4. Conclusion
5. Add pictures (optional but recommended)

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