

**DAV NCL PUBLIC SCHOOL , BLOCK-B AREA GORBI**

**HOLIDAY HOMEWORK CLASS : IX (2026-27)**

**ENGLISH**

**1. Writing Task**

Write any one of the following:

\*Paragraph\* : How I Spent My Summer Vacation (120 words)

\*Formal Letter:\* Write a letter to the Editor on the importance of cleanliness.

**2. \*Grammar Task\***

Complete in notebook:

Write 10 sentences using different tenses

Learn and write meanings of 15 new words from your textbook

**3. \*Diary Entry\***

Write diary entries for any 3 days of your summer vacation.

**SOCIAL SCIENCE.**

1. Learn and revise the 1st chapter of both Economics and History.

2. Students are required to prepare a neat and creative model in group showing the towns of the Indus Valley Civilization (Harappan Civilization) using mud and clay. The model should highlight the unique features of Harappan town planning such as well-planned streets, drainage systems, houses, granaries, wells, and public buildings.

Instructions:

Use mud, clay, cardboard, or eco-friendly materials for the model.

Clearly label important parts of the town.

The project should be neat, clean, and presentable.

Students may add small figures, trees, carts, or animals to make the model more attractive.

### **SCIENCE ( CHEMISTRY)**

1. Do question 1 to4, 7, 9,10,12, 13, 14, 15 from your NCERT Book in classwork notebook.
2. Revise and learn the content that has been already taught.

### **BIOLOGY**

1. Distinguish between hypotonic, isotonic, and hypertonic solutions.
2. Why is the plasma membrane called a selectively permeable membrane?
3. What is plasmolysis? Give an example.
4. Differentiate between Rough Endoplasmic Reticulum (RER) and Smooth Endoplasmic Reticulum (SER).
5. Draw a neat, labeled diagram of a plant cell and an animal cell.
6. What is the function of the Golgi apparatus?
7. Describe the structure and functions of mitochondria.

### **SANSKRIT**

(क) “अस्माकं देश :” व “संस्कृत भाषा का महत्व” विषय पर निबंध लिखें

(ख) चार्ट पेपर में कोई दो सुभाषित श्लोक सुन्दर लिखावट के साथ लिखें

### **HINDI**

(क) अलंकर की परिभाषा---

यमक,श्लेष, अनुप्रास,उषामा,को परिभाषित करें एवं उदहारण लिखें |

(ख) मुंशी प्रेमचंद के व्यक्तित्व एवं रचना लिखें |

### **POLITY**

## Pillars of democracy

Sheet1: ( major decision): draw or paste a picture representing free elections .write a 50 word summary of the Pakistan case study (general Musharraf )to explain why elections must vest real power in elected leaders.

Sheet2: ( free n fair electoral competition): create a comic strip illustrating the electoral system of China or Mexico. explain why one party dominance violets democratic principles.

Sheet3: ( one person, one vote ,one value): design and infographic highlighting boating restrictions from Saudi Arabia Estonia or Fiji.write the core definition of political equality.

Sheet 4: ( rule of law): write a case summary on Zimbabwe under Robert mugabe .List three reasons why a government cannot do whatever it likes simply because it won an election.

## GEOGRAPHY

Left column ( weathering- breakdown in situ):

° find in paste pictures showing mechanical weathering (example- rocks cracking due to Frost actions or thermal expansion )and chemical weathering (example - limestone caves dissolving from acidic rain water).

2. Right column (erosion -breakdown +transportation)

°paste pictures showing the active transport of soil and rock materials by wind (mushroom rock in desert) glaciers (u- shaped valley )sea waves ( sea cliffs,and arches)

3. Write some details about it.

## (ARTIFICIAL INTELEGENCE)

Complete your notebook up to the chapters taught (Communication Skills, Self Management skills & ICT Skills).

1. Are the point M (-3,-4), A (0,0) and G (6,8) on the same straight line? Suggest a method to check this without plotting and joining the points?
2. (i) Given the points A (1, -8), B (-4, 7) and C (-7, -4) show that they lie on a circle K whose centre is the origin O (0, 0). What is the radius of circle K?  
(ii) Given the points D (-5, 6) and E (0, 9), check whether D and E lie within the circle, on the circle, or outside the circle K.
3. Plot the points A (2, 1), B (-1, 2), C (-2, -1), and D (1, -2) in the coordinate plane. Is ABCD a Square? Can you explain why? What is the area of this square?
4. A computer graphics program displays images on a rectangular screen whose coordinate system has the origin at the bottom-left corner. The screen is 800 pixels wide and 600 pixels high. A circular icon of radius 80 pixels is drawn with its centre at the point A (100, 150). Another circular icon of radius 100 pixels is drawn with its centre at the point B (250, 230). Determine:
  - (i) whether any part of either circle lies outside the screen.
  - (ii) whether the two circles intersect each other.
5. Use the connection you found to find the coordinates of B given that M (-7, 1) is the midpoint of A (3, -4) and B (x, y)
6. Using the origin as one vertex, plot the vertices of:
  - (i) A right-angled isosceles triangle.
  - (ii) An isosceles triangle with one vertex in Quadrant III and the other in Quadrant IV
7. Plot point Z (5, -6) on the Cartesian plane. Construct a right-angled triangle IZN and find the lengths of the three sides.
8. Consider the points R (3, 0), A (0, -2), M (-5, -2) and P (-5, 2). If they are joined in the same order predict:
  - (i) Two sides of RAMP that are perpendicular to each other.
  - (ii) One side of RAMP that is parallel to one of the axes.
  - (iii) Two points that are mirror images of each other in one axis. Which axis will this be?Now plot the points and verify your predictions.
9. Look at Reiaan's bathroom. (look below diagram)
  - (i) What are the coordinates of the four corners O, F, R, and P of the bathroom?
  - (ii) What is the shape of the showering area SHWR in Reiaan's bathroom? Write the coordinates of the four corners.
  - (iii) Mark off a 3 ft × 2 ft space for the washbasin and a 2 ft × 3 ft space for the toilet. Write the coordinates of the corners of these spaces.
10. Other rooms in the house: (look below diagram)
  - (i) Reiaan's room door leads from the dining room which has the length 18 ft and width 15 ft. The length of the dining room extends from point P to point A. Sketch the dining room and mark the coordinates of its corners.

