ARMY PUBLIC SCHOOL JAMMU CANTT

HOLIDAY HOMEWORK FOR CLASS IX

Dear Students,

Summer Vacation is a great time to inculcate innovativeness, creativity and interest. So, we bring you a series of enjoyable activities which will surely enhance your personality and learning process in your leisure time.

ENGLISH	**1. BEING CREATIVE**
	Compose a poem (minimum three stanzas) on any topic and rhyme scheme of your choice using following poetic devices:
	 i) assonance ii) personification iii) simile iv) metaphor
	
	2. WRITING SECTION:
	    Write a diary entry on 'how you spent your summer break.'
	
	 3. READING IS FUN
	  Malgudi Days by R.K Narayan
	  Read the novel and write about your favorite character.
	
	 4. GRAMMAR SECTION
	    1.Do two Editing exercises (Integrated grammar-modals, subject verb agreement and tenses)
	    2.Do two Omission exercises (Integrated grammar-modals, subject verb agreement and tenses)
	    3. Do two gap filling exercises (Integrated grammar-modals, subject verb agreement and tenses
	ART INTEGRATED PROJECT
	  Compare and contrast location on map, famous dishes, climate, famous attractions, costumes, flora and fauna, folk dances, languages, folk songs of Jammu and Kashmir with Gujarat. Paste pictures with a nice and brief write up (Do it on a separate project file)
	
	 NOTE :
	  Revise the syllabus done in the class & prepare yourself for the assessment to be held in July.

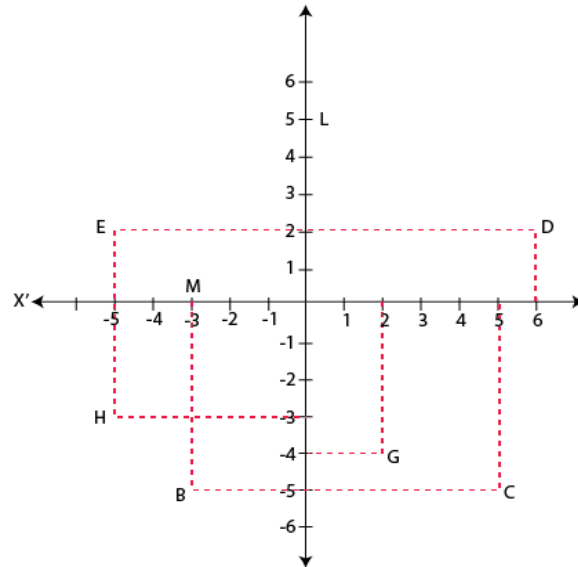|	

HINDI	**स्पर्श पाठ आधारित प्रश्न**
	स्वरचित कार्य
	प्रश्न 1 'पोशाक से ही मनुष्य की पहचान होती है'--- विषय के पक्ष या विपक्ष में लगभग 100-150 शब्दों में विचार
	     प्रकट करें ।
	प्रश्न 2 कबीरदास का चित्र बनाओ एवं उनके किन्हीं पाँच दोहों को कार्यपुस्तिका पर लिखो एवं याद करो ।
	प्रश्न 3 अपने प्रिय पालतु पशु का चित्र खींचों या बनाओ और उसके साथ आपके भावनात्मक संबंधों के विषय में
	     लगभग 60-100 शब्दों में लिखो ।
	
	संचयन-पाठ आधारित प्रश्न
	प्रश्न 4 'गिलहरी का घर' का एक मॉडल बनाओ ।
	व्यावहारिक व्याकरण
	प्रश्न 5 पाठ्यपुस्तक स्पर्श के पठित पाठों में से दस अनुस्वार एवं दस अनुनासिक लगे शब्दों को ढूंढ कर लिखो ।
	प्रश्न 6 निम्नलिखित उपसर्ग एवं प्रत्यय से बने तीन- तीन शब्दों को प्रवाह चित्र द्वारा दिखाओ ।
	     उपसर्ग-दूर, अ, कु, प्र, वि, निर्
	     प्रत्यय -आहट, ई, आई, आ, अनीय
	गतिविधि-पर्वतारोहण से सम्बंधित दस चीजों के चित्र बनाकर नाम भी लिखें ।
	(फाइल में लगाने हेतु)
	
	लेखन भाग- रचनात्मक कार्य
	
	प्रश्न 1 अपने मित्र को 'स्वच्छता अभियान' का हिस्सा बनने के लिए निमंत्रण पत्र लिखें ।
	प्रश्न 2 राज्य स्तर की खेल प्रतियोगिता में प्रथम आने पर छोटी बहन को बधाई पत्र लिखें ।
	<u>**कला एकीकृत परियोजना**</u>
	गुजरात एवं जम्मू कश्मीर की पारंपरिक पोशाकों के चित्र बनाओ एवं उनके बारे में संक्षिप्त जानकारी लिखो । (यह कार्य फाइल पर करना है ।)
	नोट:- बाकी संपूर्ण लिखित कार्य कार्य पुस्तिका पर करना है ।
	पढ़ाए गए संपूर्ण पाठ्यक्रम को याद करके अभ्यास करें ।
	   संचयन के सभी पाठो का सवाध्ययन करें।

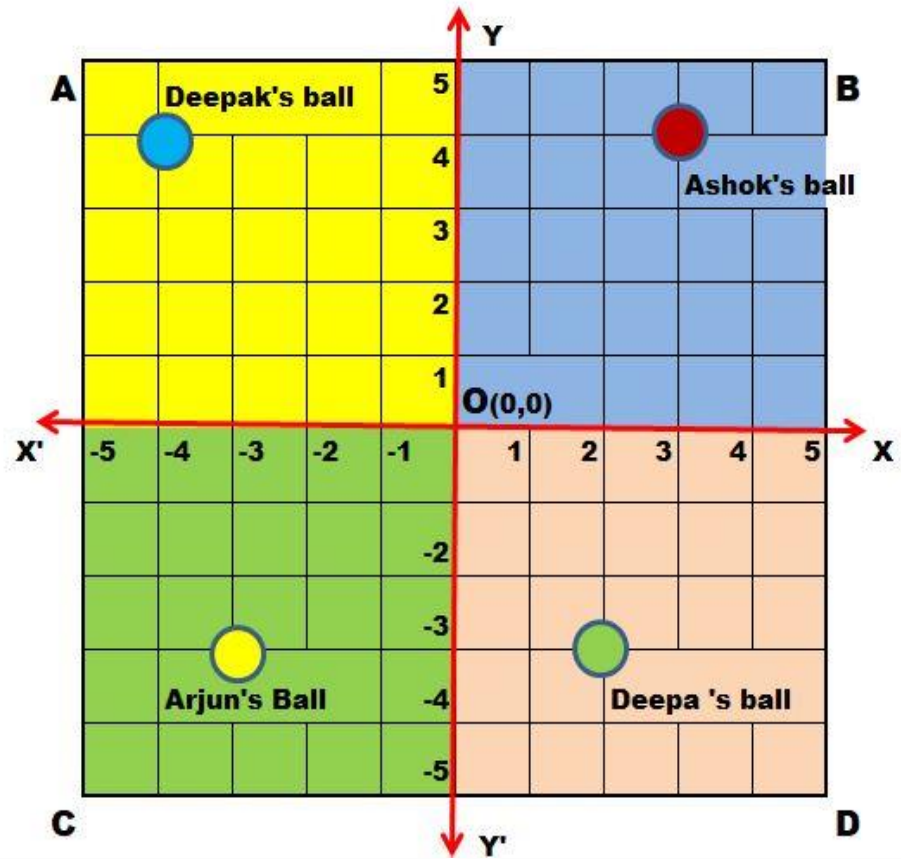| MATHS | 1. Give an example of two irrational numbers whose:
   a) Difference is a rational number
   b) Product is a rational number
   c) Product is an irrational number
   d) Difference is an irrational number

2. If $(x + 5)$ is a factor of $x^3 + 2x^2 - 13x + 10$, find other factors.

3. Simplify:-
   (a) $3\sqrt{5} + \sqrt{5} + \sqrt{180}$
   (b) $\sqrt{54} + \sqrt{150}$

4. Plot the following points on the graph and write in which quadrant or on which axis they lie.
   (2,3), (3,-4), (7,-2), (3,0), (4,7), (5,-5), (2,0), (0,5),(0,-2),(0,0),(1,4),(3,4),(-5,4)

5. Find the decimal expansion of:
   a) 8/3   b) 2/11   c) -16/45   d) 22/7

6. Insert 10 rational numbers between -3/11 and 8/11

7. Express each in p/q form:
   a) 15.725   b) 8.0025   c) 0.585

8. Represent $\sqrt{6}$, $\sqrt{7}$ & $\sqrt{8}$ on the number line.

9. If $2x + 3y = 13$ and $xy = 6$, find the value of $8x^3 + 27y^3$

10. Find the following products:
   (i) $(x+y+2z)(x^2 + y^2+4z^2-xy -2yz -2zx)$
   (ii) $(2x-y+3z)(4x^2+y^2+9z^2+2xy+3yz-6xz)$

11. If $3x + 2y = 12$ and $xy = 6$, find the value of $9x^2 + 4y^2$

12. Express $2x = 5$ in the form $ax + by + c = 0$ and find the value of a, b and c.

13. Write six solutions of $3x + y = 8$.

14. If $x = -1$ and $y = 2$ is a solution of $kx + 3y = 7$, find the value of k.

15. Show that $x = 2$ and $y = 1$ satisfy the linear equation $2x + 3y = 7$.

16. Write four solutions of $2x + 3y = 8$. Represent on graph also.

17. Draw the graph of the equation $2x - 3y = 12$. At what points, the graph of the equation cuts the x-axis and the y-axis?

18. If $(x + 2)$ and $(x - 1)$ are the zeroes of $x^3 + 10x^2 + mx + n$ then find the values of m and n.

19. Write the following cubes in the expanded form:
   (i) $(3a + 4b)^3$
   (ii) $(5p - 3q)^3$

20. Plot the points A(1,4), B(-2, 0) and C(3,0) on the Cartesian plane. Name the figure obtained on joining points A, B and C.

21. (a) If $a + b\sqrt{3} = \dfrac{5 + 2\sqrt{3}}{7 + 4\sqrt{3}}$, find the value of a and b.

   I.   If $a + b\sqrt{7} = \dfrac{3 + \sqrt{7}}{3 - \sqrt{7}}$, find the value of a and b.

22. Without plotting the points indicate the quadrant in which they will lie, if
   (i) the ordinate is 5 and abscissa is $- 3$

   (ii) the abscissa is $- 5$ and ordinate is $- 3$ |

(iii) the abscissa is – 5 and ordinate is 3

(iv) the ordinate is 5 and abscissa is 3

23. See figure and write the following:

a) The coordinates of B.
b) The coordinates of C.
c) The point identified by the coordinates (–3, –5).
d) The point identified by the coordinates (2, – 4).
e) The abscissa of the point D.
f) The ordinate of the point H.
g) The coordinates of the point L.
h) The coordinates of the point M.

24. Read the Source/Text given below and answer any four questions:

There is a square park ABCD in the middle of Saket colony in Delhi. Four children Deepak, Ashok, Arjun and Deepa went to play with their balls. The colour of the ball of Ashok, Deepak, Arjun and Deepa are red, blue, yellow and green respectively.
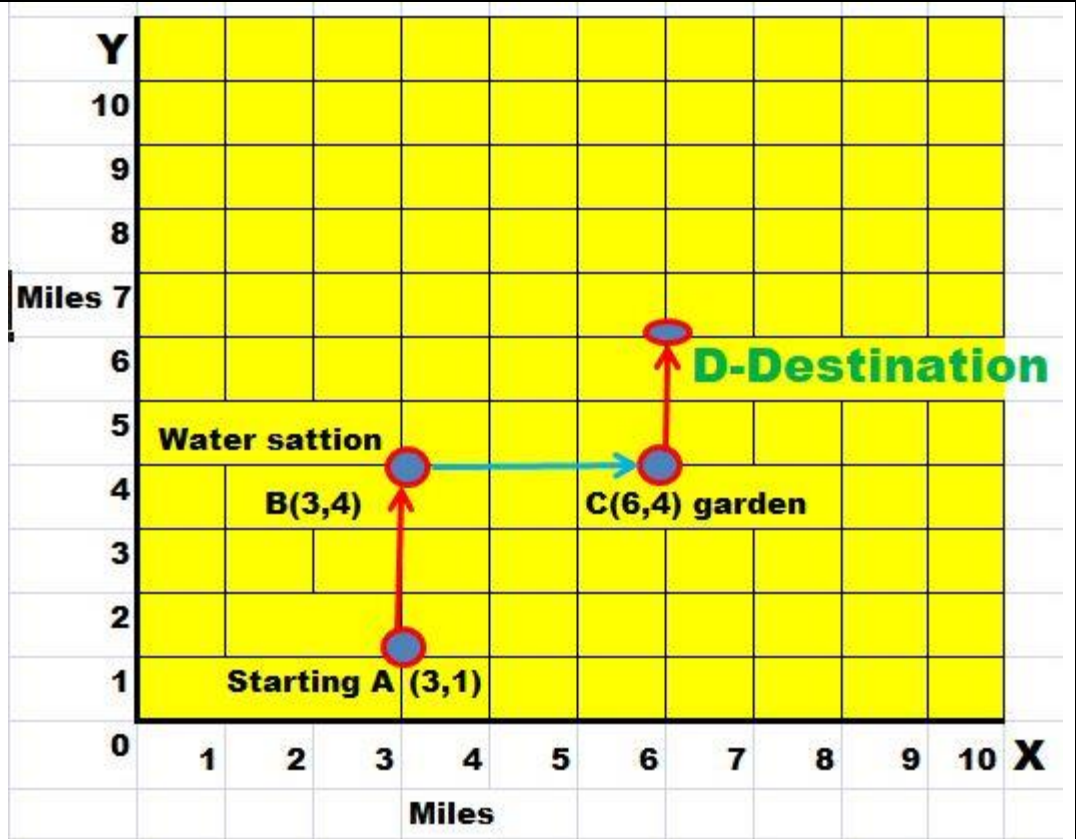
All four children roll their ball from centre point O in the direction of XOY, X'OY, X'OY' and XOY'. Their balls stopped as shown in the above image.

Answer the following questions:

a) What are the coordinates of the ball of Ashok?
b) What are the coordinates of the ball of Deepa? What the line XOX' is called? What the point O (0,0) is called?
c) What is the ordinate of the ball of Arjun?

25. Read the Source/Text given below and answer any four questions:

Arun is participating in an 8 miles walk. The organizers used a square coordinate grid to plot the course. The starting point is at A (3, 1). At B (3, 4), there's a water station to make sure the walkers stay hydrated. From water station, the walkway turns right and at C (6,4) a garden is situated to keep walkers fresh. From the garden, the walkway turns left and finally, Arun reaches at destination D to complete 8 miles.

i. How far is the water station B from the starting point A?
a. 4 miles   b. 3 miles   c. 1 mile   d. 5 miles
ii. How far is the water station B from garden C?
a. 3 miles   b. 4 miles   c. 1 mile   d. 5 miles
iii. What is the abscissa of destination point D?
a. 3   b. 5   c. 3   d. 6
iv. What is the ordinate of destination point D?
a. 3   b. 2   c. 6   d. 5
v. What are the coordinates of destination point D?
a. (5, 6)   b. (6, 5)   c. (3, 9)   d. (6, 6)

ACTIVITY WORK: (DO THESE ACTIVITIES ON MATHS LAB MANUAL. TAKE

HELP FROM SAMPLES GIVEN BELOW . BUT YOU HAVE TO DRAW YOUR OWN

WITH YOUR CREATIVITY. DONOT COPY THE SAME)

   a. Draw beautiful square root spiral with your own creativity.(Students
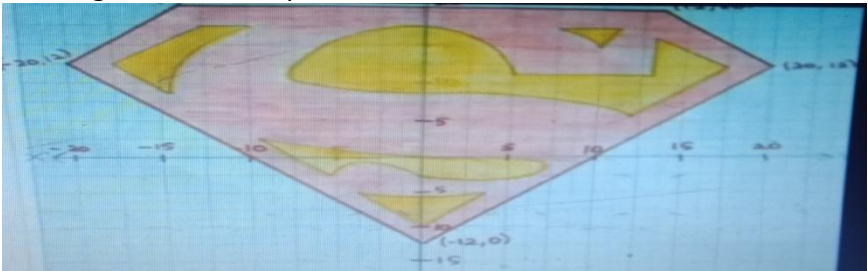   will draw square root spiral and make beautiful designs with it)

b. Draw warli art with the help of different geometrical shapes. (MATHS IN WARLI ART)(Students will draw different shape of triangles, circles and rings on a chart paper , paste it on another colourful chart paper and complete your warli painting. Decorate your warli paintings with different colours.)

C) Draw a logo with the help of Cartesian coordinates.

ART INTEGRATED PROJECT (DO IT ON A SEPARATE FILE)

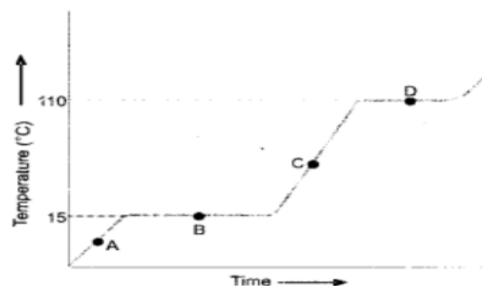COMPARISON OF GUJARAT AND JAMMU AND KASHMIR IN TERMS OF POPULATION, FOLK DANCES, LITERACY RATE AND CLIMATE.

NOTE :
1. MAINTAIN YOUR NOTEBOOK.
2. REVISE FOLLOWING CHAPTERS DURING SUMMER BREAK
   (i) NUMBER SYSTEM
   (ii) POLYNOMIALS
   (iii) CO-ORDINATE GEOMETRY
   (iv)LINEAR EQUATIONS IN TWO VARIABLES

SCIENCE	**CHEMISTRY**

CHEMISTRY

1.Name the SI unit of measuring temperature.

2.The boiling point of water is 100 degree Celsius under atmospheric pressure. Convert this temperature in SI units.

3. a) What temperature in kelvin scale is equal to 50 degree Celsius ?

   b) Describe an activity to show that rate of evaporation increases with surface area.

   c) State four differences between evaporation and boiling.

4.The given graph shows the heating curve for a pure substance. The temperature rises with time as the substance is heated :

   a)What is the physical state of the substance at the points A, B, C and D ?

   b)What is the melting point of the substance?

   c). What is its boiling-point?

   d)What happens to the temperature while the substance is changing state ?

5.Distinguish in tabular form between solids, liquids and gases under the following characteristics:

   1) Intermolecular attraction

   2) Density

   3) Kinetic energy of particles at a given temperature

6.Arrange the following in the increasing order of

   a) Force of attraction

   b) Density

Iron nail, kerosene, oxygen gas

7.Write and learn the name and atomic mass of elements up to atomic number 30. [Write in your notebook]

Portfolio-

Write summary of the chapter-1: Matter in our surroundings in your own words in A4 sheet

Activity-Make ppt on different states of matter.

Write experiment-1&2 in your practical notebook

BIOLOGY

1.Write the following experiments in your practical notebooks:

  i) To prepare a temporary mount of onion peel to record observations and draw diagrams.

  ii) To prepare a temporary mount of cheek cell to record observations and draw diagrams.

  iii) Identification of Parenchyma, Collenchyma and Sclerenchyma tissues in plants, Striped, Smooth and Cardiac muscle fibres and Nerve cells in animals from prepared permanent slides. Record your observations and draw

diagrams.

2. Make the projects as directed:
 i) 3-D model of MITOCHONDRIA. (Roll.NOs. 1-10)
 ii) PPT on the CELL-ORGANELLES given in CH-5. (Roll.NOs. 11-20)
 iii) Diagrams showing comparison of a PLANT CELL and an ANIMAL
 CELL. Draw diagrams on two full chart paper. Use two separate charts for
 the two diagrams. (Roll.NOs. 21-30)
 iv) Clay models on any five different shapes of cells. (Roll.NOs. 31-40)
 v) Model of a PROKARYOTIC CELL. (Roll.NOs.41 Onwards)
3. Revise Ch-5 The fundamental unit of life fir UT1

PHYSICS

1. Explain Newton's first, second and third laws of motion with the help of suitable examples.
2. Give the mathematical formulation of Newton's second Law of Motion.
3. Why can a small mass such as a bullet kill a person when fired from a gun?
4. Describe our walking in terms of Newton's third law of motion.
5. (a) Plot a distance- time graph for an object moving with non- uniform motion.
   (b) Plot a distance-time graph for an object moving with uniform motion.
6. (a) Plot velocity-time graph of uniformly accelerated motion and calculate displacement and acceleration from the graph.
   (b) Plot velocity-time graph of uniformly decelerated motion and calculate displacement and acceleration of an object from the graph.

ART INTEGRATED PROJECT

 Compare and contrast J&K and Gujarat in the following aspects:
 (a) Soil
 (b) Flora and fauna.
 (c) Crops.
 Pictures to be pasted to support the points. (Do it in separate project file).
 NOTE **:**
 Revise the syllabus done in the class & prepare yourself for the assessment to be held in July.

S.SC	**HISTORY**
	1. In 1774, Louis XVI of the Bourbon family of Kings ascended the throne of _____ .
	2. What was newly elected assembly called?
	3. The burden of financial activities of state during the Old Regime was borne by the _____.
	4. In France, the eighteenth century witnessed the emergence of a social group, termed as the _____ .
	5. The American constitution and its guarantee of individual rights was an important example for political thinkers in _____ .
	6. The constitution of 1791 vested the power to make laws in the _____
	7. The constitution began with a Declaration of the rights of _____ .
	8. The National Assembly of France voted in April 1792 to declare war against _____
	9. On what principle was voting conducted in the Estates General?
	10. What is a Guillotine?

GEOGRAPHY

1. In which hemisphere India is located?
2. Which tropic divides India into almost two equal parts?
3. What is total area of Indian landmass?
4. From where does Standard Meridian pass in India?
5. What is the latitudinal extent of India?
6. Which countries share their borders with India?
7. How many states and union territories does India have?
8. Which is the smallest and the largest state of India area wise?
9. What is a sub-continent. Name countries forming Indian Sub-continent.
10. Name and locate the states on physical map of India, through which Tropic of Cancer passes.

ECONOMICS

1. What are the main activities of the people in village Palampur?
2. What was the benefit of electricity in Palampur?
3. Define working capital. Give examples.
4. What was the main reason behind growth of three different crops in a year in Palampur?
5. From where do small farmers borrow money?
6. Farmers of which states were the first to use modern farming methods in India?
7. What is the multiple cropping system?
8. State any three efforts which can be made to increase non-farming production activities in villages.
9. Define   a) HYV seeds   b) Fixed capital   c) Human capital

10. What are the harmful effects of chemical fertilizers?

CIVICS
1. What is a referendum?
2. Mention one non-democratic feature of President Mugabe's government.
3. In which country women do not have the right to vote?
4. Which party of Zimbabwe led the struggle for independence?
5. Name one non-democratic country.
6. Name the country where people belonging to Russian minority find it difficult to get right to vote.
7. 'Major decisions in a democracy must be taken by elected leaders' . Justify the statement by giving two reasons and a suitable example.
8. Define democracy and elaborate any two common features of it.
9. What is a representative and direct democracy?
10. Enlist the rights /freedoms which people do not enjoy in non-democratic countries.

ART INTEGRATED PROJECT
 PART-II (BE CREATIVE)
1. Practice all maps so far covered under different chapters using different colors.

2. Every student has to compulsorily undertake one project on Disaster Management as per cbse directions.

Topics for the same are as follows:- (Any one)

Terrorist Attacks

Or

Any Cyclone which struck India from 2015 to 2021.

Or

Uttarakhand Glacier burst

The Project should cover following points:

a. Introduction and causes of disaster

b. Impact of the Disaster.

c. Emergency Rescue and Relief Operations by different Agencies.

General Instructions:-

1. The project should be handmade. Done on project file as discussed in class.
2. It should be well presented, pictorial and as per the cbse guidelines.

NOTE :

Revise all chapters done in the class.

SANSKRIT	- **अधोलिखितानां वाक्यानां संस्कृतम् अनुवादं कुर्वन्तु।**
	
	१. मेरा नाम .... है।
	
	२. मैं नवमी कक्षा में पढ़ती /पढ़ता हूं।
	
	३. मेरे विद्यालय का नाम आर्मी पब्लिक स्कूल जम्मू है।
	
	४. मैं इस स्थान पर रहता/ रहती हूं।
	
	५. मुझे संस्कृत भाषा अच्छी लगती है।
	
	- स्वर सन्धि- (अचसन्धिः)
	    १.) दीर्घ, २.) गुण, ३.) वृद्धिः ४.) अयादि ५.) यण्।
	- व्यञ्जन सन्धि (हलसन्धिः)
	    १) जश्त्व म् स्थाने अनुस्वरः।
	- विसर्ग सन्धि (ः)
	    १.) उत्व,
	    २.) रत्वम् ।
	
	(इत्यस्य स्फोर्कपत्रनिर्माणं कुर्वन्तु।
	इन संधियों का चार्ट निर्माण करें।)
	- द्वाविंशति उपसर्गाः लिखन्तु।
	- अस्, क्री, दा कृ, श्रु धातु पञ्चलकारेषु लिखत्।
	
	- कलात्मकम् एकीकरणस्य गतिविधिः।
	जम्मू-काश्मीरराज्यस्य तथा गुजरातराज्यस्य अशनरशनयोः चित्रं निर्मानं कृत्वा संस्कृतभाषया दशवाक्यानि लिखन्तु।

COMPUTER	**IT**
	ACTIVITY a) Create the layout of 4w's canvas on your notebook. Mention the complete structure of each block of the 4w's canvas. b) Create an e-collage of applications of Natural Language processing and Computer Vision and paste it on your notebook. c) Revise Unit-1 and Unit-2.
ART/CRAFT	1. Draw a colour wheel on your drawing pad and also write the names of colour schemes. Use only poster colours . 2. Draw a picture of Mahbubani painting on A4 size sheet and colour it with poster colours . **ART INTEGRATED PROJECT** 3. Make one necklace with paper jewelry. **CHOOSE ANY PICTURE**

STAY SAFE, STAY HEALTHY

Have wonderful vacations and time