DAV PUBLIC SCHOOL, IFFCO, PARADEEP
SUMMER HOLIDAY HOMEWORK, 2021-22
STD-IX

SL.NO	SUBJECT	H.W DETAILS
1	**English**	Q.1. Write a self-composed poem / article for school magazine. Q.2. Watch the news daily and write five positive news in a separate notebook. Q.3. Read at least 5 short stories of R.K.Narayan and write a review on them. Q.4. Prepare a tense chart and write 100 verbs along with their V2 and V3 forms. Q.5. Make a diary entry of your daily activities in 50 words everyday. Q.6. Read all the lessons taught for a test after the summer break .
2	**Hindi**	(1) निम्न में दिए गए शब्दों का दो-दो पर्यायवाची शब्द लिखिए:- अग्नि,आभूषण,आनंद,कृष्ण,चाँदनी,निर्मल,हिरण,घोड़ा,किसान,नक्षत्र (2) निम्न में दिए गए शब्दों का विलोम शब्द लिखिए:- उत्थान,अपेक्षा,आदान,कंचन,मंगल,दुर्लभ,आग्रह,श्वेत,साकार,साधन (3) निम्न में दिए गए उपसर्गों से दो-दो शब्द बनाइए:- संचालन,अभिजात,संसर्ग,अवमानना,परिचारिका,प्रयुक्त,अतिरिक्त,आहार, उपभेद,दुर्घटना (4) निम्न में दिए प्रत्ययों से दो-दो शब्द बनाइए :- अमरता,नकली,व्यंजित,पार्थिवता,चमकीली,लगाव,सफ़ाई,फूलदान,अपनापन,आवश्यक (5) निम्न में दिए गए संकेत बिंदुओं के आधार पर 80-100 शब्दों में अनुच्छेद लिखिए :- (क)भूकंप और इसके दुष्परिणाम संकेत बिंदु :-भूकंप का अर्थ,इसके कारण,इसके परिणाम,इसके बचाव के संभावित उपाय (ख)भारतीय कृषक संकेत बिंदु :-भूमिका,कृषक का जीवन,कृषक की समस्याएँ (निर्बलता,निर्धनता,निरक्षरता) (6)(क)आपका मित्र बीमारी के कारण शैक्षिक भ्रमण पर नहीं जा पाया,भ्रमण से वापस आने के बाद उसका विवरण देते हुए मित्र को पत्र लिखिए: (ख)मित्र को 2020 के लिए बाल वैज्ञानिक के रूप में चुने जाने पर अपनी

		शुभ कामनाएँ भेजते हुए पत्र लिखिए :
3	**Odia**	1) ଉକ୍କଳ ଗୌରବ ମଧୁସୂଦନ ଦାସ ଙ୍କ ଉପରେ ଏକ ଭାଷଣ ଲେଖ୍ ତାହାର ଭିଡିଓ ପ୍ରସ୍ତୁତ କରି ପଠାଅ । 2) 'ଜାତୀୟ ଜୀବନ ' ବିଷୟର ଏକ ମନମାନଚିତ୍ର (MIND MAPING) ପ୍ରସ୍ତୁତ କର । 3) 'କାହା ମୁଖ ଅନାଇ ବଞ୍ଚିବି ' ଓ 'ଜାତୀୟ ଜୀବନ ' ପାଠରୁ ୧୫ ଟି କରି ବହୁ ବିକଳ୍ପିତ ପ୍ରଶ୍ନ ଉତ୍ତର ସହ ଲେଖ । 4) ୫୦ ଟି ସନ୍ଧି ଶବ୍ଦ ବିଚ୍ଛେଦ ସହ ଲେଖ । ସ୍ୱର ସନ୍ଧିର ସୂତ୍ର ଲେଖ ଓ ମନେରଖ ।
4	**Sanskrit**	1. Subject Enrichment Activity: a. शव्दरूप लेखनम् कथनम् च- "अ" कारान्त शब्दाः-बालकवत् (राम, देव, नर, वृक्ष) b. शव्दरूप लेखनम् कथनम् च- "आ" कारान्त शब्दाः-लतावत् (लता, रमा, सीता, विद्या) c. शव्दरूप लेखनम् कथनम् च- "सर्वनाम शब्दाः"- (अस्मद्, युष्मद्, किम् (त्रिषुलिंगेषु) 2. Writing – "स्व दिनचर्यायाः लेखनम्"- 10 वाक्येषु संस्कृतेन लिखत। 3. महाराष्ट्र प्रदेशस्य भोजनरुचि, परिधानं, आभूषणं विषये PPT माध्यमेन दर्शयन्तु।

5	**Maths**	1. Do NCERT EXEMPLAR PROBLEMS of **ch-1** and **ch-2** in Exemplar problem copy.
		2. Activity-1(Art integrated activity): Construct a square root spiral and prepare a piece of art using the square root spiral.
		   *Activity to be done in mathematics Lab notebook.
		   • **MCQ - ASSERTION AND REASONING TYPE**
		
		Each question consists of two statements, namely statement-I (Assertion) and statement-II (Reason). For selecting the correct answer, use the following code.
		
		(a) **Statement I and statement-II both are true and statement-II is the correct explanation of statement-I.**
		(b) **Statement I and statement-II both are true but statement-II is not the correct explanation of statement-I.**
		(c) **Statement-I is true, but Statement-II is false.**
		(d) **Statement-I is false, but Statement-II is true.**
		
		3. **Statement-I :** $\sqrt{8}$ is an irrational number.
		
		   Statement-II : If m is a natural number which is not a perfect square, then $\sqrt{m}$ is irrational.
		
		4. **Statement-I :** $\sqrt{5}$ is an irrational number.
		
		   Statement-II : π is a rational number

5. **Statement-I :** The value of $(25)^3 + (-16)^3 + (-9)^3$ is 10800.

   Statement-II : If $a + b + c = 0$, then $a^3 + b^3 + c^3 = 3abc$.

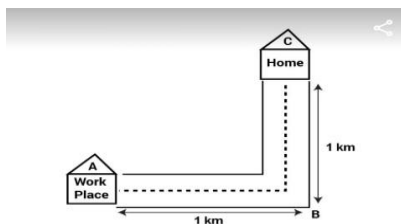6. **Statement-I :** If $p(x) = x^3 - ax^2 + 6x - a$ is divided by $(x - a)$, then the remainder is 5a.

   Statement-II : If $p(x)$ is divided by $(x + a)$, then the remainder is $p(a)$.
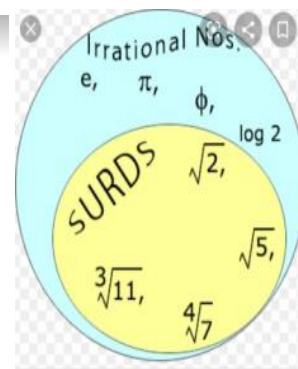
- **CASE STUDY QUESTIONS**

CASE STUDY-I : Many years ago, there were some men in Greece. They used to believe that all numbers can be shown in the form of a fraction. And, the number line is entirely made up of fractions. He chose the same path, on which he used to walk. After reaching home, he thought of finding the shortest path from his work place to home. So, he drew a path on a paper with the labelling of the distance he used to walk. Then, with the help of "Pythagoras theorem" he calculated the shortest path as $\sqrt{1^2 + 1^2} = \sqrt{2}$ km. Now, as he wanted to locate this number on the number line, he tried to represent that number in the form of a fraction. But as $\sqrt{2} = 1.41421356237$--- is non-terminating he was not able to find a specific fraction to represent this number. This is how these people concluded that there are some numbers which cannot be represented in the form of a fraction. So, those numbers which cannot be expressed in the form p/q , where p and q are integers and q is not equal to 0 ,are called irrational numbers. Numbers that are irrational and cannot be represented in the form of fractions or as recurring decimal numbers are known as surds. In order to make precise calculations, surds are used. It is an expression that includes a square a square root, cube root or other root symbol. Surds are used to write irrational numbers precisely- because the decimals of irrational numbers do not terminate or recur, they cannot be written exactly in decimal form. So $\sqrt{3}$, $2\sqrt{6}$ are surds

One day one of those men was going to his home from his workplace.

So, he drew a path on a paper with the labelling of the distance he used to walk

Based on your understanding of the above case study, answer the following five questions.

1. An irrational number between 2 and 3 is
   a) 1.1   b) $\sqrt{3}$ c) 2.5   d) 2.010010001-------

2. If $x = 5 + 2\sqrt{6}$, then find the value of $\left(x - \dfrac{1}{x} \right)$
   a) $2\sqrt{2}$ b) $4\sqrt{6}$ c) 8   d) none of these

3. The ratio of the circumference of a circle to the diameter of the circle is.

(a) An integer

(b) A rational number

(c) An irrational number

(d) A whole number

4. To locate $\sqrt{13}$ on the number line

a) we will draw a right triangle of base 9 units and perpendicular of 4 units.

b) We will draw a right triangle of base 2 units and perpendicular of 3 units.

c) Both (a) and (b) are true

d) None of the above

5. Find the value of $\dfrac{1}{125^{-\left(\frac{2}{3}\right)}} + \dfrac{1}{625^{-\left(\frac{3}{4}\right)}} + \dfrac{1}{729^{\left(-\frac{1}{2}\right)}}$

a) 132   b)177   c) 185   d) 225

CASE STUDY-II :

On a birthday party Disha wanted to distribute small cakes to each friend instead of chocolates. She decided to give the cakes in such a shape and size that she can ask each of her friends one question related to the cake. If her friends will answer correctly, she will give some gifts them too. The cakes are cuboidal in shape, whose length and breadth are given $(x-2)$ and $(x-1)$ and volume is given by $(x^3 - 3x^2 + 4)$.
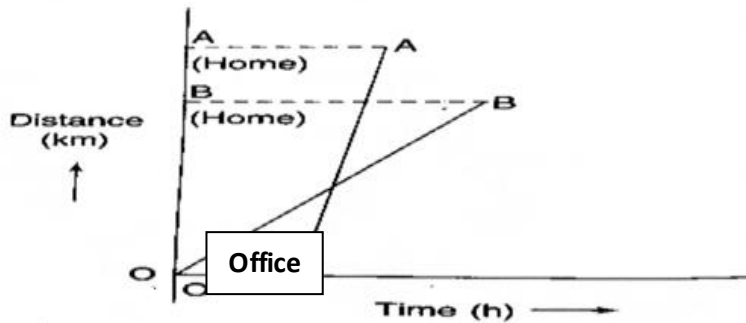

Based on your understanding of the above case study, answer the following five questions.

1. Find the product of length and breadth of each cuboidal cake.

a) $x^2 - 2x + 2$ b) $x^2 - 3x - 2$

c) $x^2 - 3x + 2$ d) $x^2 - 2x - 2$

2. How much cake will be required to distribute 20 friends?
   a) $20x^3 - 60x^2 - 8$ b)$20x^3 + 60x^2 - 8$
   b) c) $20x^3 - 60x^2 - 80$ d)$20x^3 - 60x^2 + 80$

3. By how much does the expression $x^3 - 3x^2 + 4$ exceeds the product of its length and breadth of each cuboidal cake.
   a)$x^3 - 4x^2 + 3x + 2$ b) $x^3 - 4x^2 - 3x + 2$
   c) $x^3 - 4x^2 + 3x - 2$ d) $x^3 - 4x^2 - 3x - 2$

4. x-a is a factor of $p(x) = ax^2 + bx + c$. Which of the following is true?
   (a) $p(a) = 2$ (b) $p(a) = 0$ (c) $p(2) = 1$ (d) $p(b) = 0$

5. If (x-2) is a factor of $x^3 - kx^2 + 4$ then the value of k is
   a)-3   b) 0   c) 3   d) 4

| 6 | Science | **PHYSICS**
1. FIND AN INNOVATIVE SOLUTION TO PROTECT THE DRY CROPS IN THE FIELD AT THE TIME OF HARVESTING.
    (WRITE THE SOLUTION IN A PAPER OR MAKE A PPT)
2. ANY OTHER INVATIVE IDEA IS WELCOME ALSO.
3. UP-TO DATE THE CLASS WORK AND HOME WORK COPY.
4. COMPLETE THE NCERT EXEMPLAR AND NCERT EXERCISE OF THE CHAPTER TAUGHT.
5. Read the followings and answer the questions from (i) to (v) on the basis of the following paragraph and studied concepts.
Two persons A and B were starting their journey from their office and driving cars on a road. There was a sign board on the road-side shows speed limit of 50 km/h. Person A applied the brakes and decreases his speed from70 km/h to 45 km/h in 4 second. On the other hand person B did not bother about the speed limit and he continued to drive his car at 80 km/h.

The following figure shows the distance-time graph for the two persons A and B who start from their office and reach their respective homes. Examine it carefully and answer the following questions:

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SPEED LIMIT 50
United States

MAXIMUM 50
Canada

40
Europe/Australia /United Kingdom

(i) What is the acceleration of the car, which is driving by boy A?

(a) 1.74 m/s^2

(b) -1.74 m/s^2

(c) Zero

(d) Uniform acceleration

(i) What is the acceleration of the car, which is driving by boy B?

(a) Zero

(b) -20 m/s^2

(c) Uniform acceleration

(d) 20 m/s^2

(ii) Whose average speed is more?

(a) Person A

(b) Person B

(c) Both have equal speed

(d) None of these

(iii) Who starts first from the office? And who reaches home first?

(a) Person A and Person B

(b) Person B and person A

(c) Person A and Person A

(d) Person B and Person B

(iv) What is the maximum speed limit given in the sign board?

(a) 40 m/s

(b) 13.88 m/s

(c) 90 m/s

(d) 50 m/s

REASON &ASSERTION TYPE QUESTIONS

In the following questions (from Q no- 6 to 7), the assertion and reason have been put forward. Read the statements carefully and choose the correct alternatives from the following.

DIRECTION: In the following questions, a statement of assertion (A) is followed by a statement of reason(R). Mark the correct choices as:

(a) Both the assertion (A) and reason(R) are true and reason (R) is the correct explanation of assertion(A)

(b) Both assertion (A) and reason(R) are true but reason(R) is not the correct explanation of assertion (A)

(c) Assertion (A) is true but reason (R) is false.

(d) Assertion (A) is false but reason (R) is true

6. **Assertion:** The speed of a body can be negative.
Reason: If the body is moving opposite to the positive direction of motion, then its velocity is negative.

7. **Assertion**: An object can have constant speed but variable velocity.

   Reason: Speed is a scalar but velocity is a vector quantity.

BIOLOGY

[1] Make a power-point presentation on the chapter "THE FUNDAMENTAL UNIT OF LIFE".   **(At least 15 slides)**

[2] During this present scenario of COVID 19 every one needs to be fit, healthy and should have a strong immune system. To boost your immune system, prepare a healthy food chart.

(Food chart must include type of food, daily exercise and hygienic steps.)

[3] Source based questions

Read the passage carefully and answer the following questions.

An experimental set up was prepared which consisted of two beakers. One beaker had water to which peeled pieces of carrot have been added .In the second beaker saturated sugar solution was put in which peeled pieces of carrot have been added. The set-up was kept overnight. In the first beaker the carrots will become soft and mushy where as in the second beaker the carrots will shrink in size.

(I)As per the above passage, in the first beaker the carrots will become soft and mushy where as in the second beaker the carrots will shrink in size. The phenomenon that involved in both the cases will be-

(a) osmosis
(b) active transport
(c) facilitated diffusion
(d) pinocytosis

(II)Some peeled pieces of apple were placed in distilled water and some in very salty water. The cells in the apple pieces will —

(a) lose water in both solutions
(b) gain water in both solutions
(c) lose water in the distilled water and gain water in the salty water
(d) gain water in the distilled water and lose water in the salty water

(III) When animal cells are placed in a hypotonic solution they -

(a) remain unchanged
(b) burst
(c) become turgid
(d) become plasmolysed

(IV) A piece of potato was cut from a potato tuber and weighed.

It was placed in pure water for one hour and then removed, and weighed again. Finally, it was placed in a concentrated sugar solution for an hour, removed, blotted dry and weighed again. Which line in the table records the results which would most likely to be obtained is-

	First weighing	Second weighing	Third weighing
(a)	5g	6g	4g
(b)	5g	4g	6g
(c)	5g	3g	4g
(d)	5g	4g	3g

(V) a plant cell contain that an animal cell does not have-

(a) cytoplasm   (b) nucleus

(c) cell wall   (d) cell membrane

Assertion and reason questions-

In the following questions, a statement of Assertion is followed by a statement of Reason. Mark the correct choice as-

a) If both Assertion and Reason are true, and Reason is the correct explanation of Assertion

(b) If both Assertion and Reason are true, but Reason is not the correct explanation of Assertion

(c) If Assertion is true, but Reason is false

(d) If Reason is true, but Assertion is false

[4] ASSERTION (A): The Golgi apparatus mainly performs the function of packaging materials.

REASON(R): Materials to be packed in the form of vesicles from the ER fuse with trans face of the Golgi Apparatus.

[5] ASSERTION (A): Cell walls permit the cells of bacteria to tolerate hypotonic solution.

REASON(R): Osmosis causes water to move from a region of few solutes to a region of more solutes.

CHEMISTRY

SECTION-A (MCQ QUESTIONS)

1. Which of the following is a chemical change?

    (a) Squeezing a tomato

    (b) Burning of a Magnesium ribbon.

    (c) Mixing of iron filings and Sulphur powder

    (d) Boiling of water

2. The boiling point of water at higher altitude is

(a) 373 K   (b) < 373 K   (c) > 373 K   (d) 273 K

3. The temperature at which vapour pressure of liquid becomes equal to atmospheric pressure is called

(a) Boiling point   (b) Melting point

(c) Ignition Temperature   (d) Sublimation Temp.

4. On converting 25 °C, 38 °C and 66 °C to Kelvin scale, the correct sequence of temperature will be

(a) 298 K, 311 K and 339 K

(b) 298 K, 300 K and 338 K

(c) 273 K, 278 K and 543 K

(d) 298 K, 310 K and 338 K

5. While determining boiling point of water the bulb of thermometer should be kept:
   a)Above the surface of water
   b)Immersed Inside the water
   c)Outside of the Round bottomed flask
   d)Touching to the bottom of container inside water.

6. Which of the following will produce severe burns?
   (a) Hot water   (b) Cold water   (c) Steam   (d) Ice

SECTION-B. ASSERTION-REASON TYPE QUESTIONS

The following 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.
1. Assertion (A): The rate of diffusion of liquids is more than solids.
   Reason (R): The intermolecular force of attraction is more in solids than liquids.
2. Assertion (A): Naphthalene balls disappear with time without leaving any residue.
   Reason (R): Naphthalene balls converts from solid to liquid state very quickly.
3. Assertion (A): Ice mixed with common salt is freezing mixture having temperature below 0^0C.
Reason (R): It will melt at 0^0C
4. Assertion (A): On applying pressure, liquids convert into gases.
   Reason (R): On applying pressure, intermolecular space decreases.
5. Assertion (A): The rate of evaporation of water in a plate is higher than that in a cup.
   Reason (R): The rate of evaporation decreases with increase in humidity.

SECTION-C (SHORT QUESTIONS)

1. Why gases show the diffusion very fast. Mention the factors which affect the rate of diffusion.
2. Mention two differences between Evaporation and Boiling.
3. (a) Why does a desert cooler cool better on a hot dry day?
(b) Why are we able to sip hot tea faster from a saucer rather than a cup?
(c) Naphthalene balls disappear with time without leaving any solid. Give reason.
(d) For any substance, why does the temperature remain constant during the change of state?

7	Soc. Sc	❖ **Geography -** Collect information about the silk route. Also find out the new developments which are improving communication routes in the regions of high altitude. ❖ **History –**

1. Design the political symbols of France.
2. Make the diagram of political system of France under the constitution of 1791.

❖ **Political Science -** Write 10 points about the article 370 and article 35A included in the constitution of India in favour of Jammu and Kashmir.

❖ **Economics -** Prepare a POWERPOINT PRESENTATION on the topic– **'PANDEMIC COVID-19: A CURSE UPON HUMANITY'.**
[Points to be included in the project are acknowledgement, preface/objective of the project, index, introduction, causes of spreading corona virus worldwide, effects of the pandemic, precautions to be followed, steps taken by Govt. of India to tackle it, conclusion, bibliography.]

❖ Learn all the chapters completed through online classes.

1. **Read the given extract and answer the following questions.**
Democracy is better than other forms of government because it allows us to correct its own mistakes. There is no guarantee that mistakes cannot be made in democracy. No form of government can guarantee that. The advantage in a democracy is that such mistakes cannot be hidden for long. There is a space for public discussion on these mistakes. And there is a room for correction. Either the rulers have to change their decisions or the rulers can be changed. This cannot happen in a non-democratic government. Democracy cannot get us everything and is not solution to all problems. But it is clearly better than any other alternative. It offers better chances of a good decision; it is likely to respect people's own wishes and allows different kinds of people to live together. Even when it fails to do some of these things, it allows a way of correcting its mistakes and offers more dignity to all citizens. That is why democracy is considered the best form of government. The most common form of democracy in modern time is representative democracy.

Answer the following MCQ by choosing the most appropriate option

1.1. Which form of government can give guarantee that there will be no mistake by the government?
A. Democracy
B. Dictatorship
C. Military
D. None of these

1.2. 'Either the rulers have to change their decisions or the rulers can be changed' happens the situation in -
A. Democratic government
B. Non Democratic government
C. Autocratic government
D. Military government

1.3. Democracy is considered as the best form of government, because it –
A. Allows us to correct our mistakes
B. Helps to protect our assets and property
C. Gives chances to live in a comfortable and luxurious way
D. Provides us tight security.

1.4. In modern time democracy believes in form of government.

A. Direct
B. Representative
C. Mutual
D. Leadership

ASSERTION & REASON QUESTION

1. In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and chose the correct option.
   Assertion (A): It is important to increase the area under irrigation.
   Reason (R): The well-being of farmers closely related to production on the farm.
   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.

2. In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and chose the correct option.
   Assertion (A): Transport is the fast developing activity in the non-farm sector
   Reason (R): An increase in peoples' income resulted in more use of transport services.
   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.

3. In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and chose the correct option.
   Assertion (A): Consumption of chemical fertilizers in Haryana is highest in the country.
   Reason (R): Loss of soil fertility in this region lead to low yield and low income.
   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.

4. In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and chose the correct option.
   Assertion (A): Migration of labour to the cities is common in most villages across India.
   Reason (R): Labour migrates in search of regular work.
   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.

5. In the questions given below, there are two statements marked as Assertion (A) and Reason (R). Read the statements and chose the correct option.

		Assertion (A): The medium and large farmers supply wheat to the market in Palampur. **Reason (R):** Fair size of landholding and capital enables then to have surplus. 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.
8	**IT**	Q1. Now a days, the busy life of all is occupied by the computers. Explain the role and importance of computers in different fields . (Explain any two fields in detail) Q2. As we all know that mouse is an input device. There are some actions performed through mouse. Explain any 4 actions performed by mouse . Q3. What are the pros and cons of using ICT? NB: Up to date the class notes in your C.W copy and all your home works in your H.W copy provided till date 22.05.2020 .

N.B:

✓ Maintain index in your CW and HW copy.

✓ Draw margin line in your CW and HW copy.

✓ Do page numbering in all copies.

Its SUMMER TIME again. Time to strengthen your family bond, sharing joy and sorrow. Use your holiday home work as an opportunity to spend quality time together. Let your child take the lead and use his/ her imagination, creativity and knowledge to do the assigned work. The role of the parent is to be a facilitator and guide to sheer the child in the right direction. Take good care of your health and hygiene.

WE WISH YOU TONS OF HAPPINESS, JOY AND FUN WHILE YOU ARE ON VACATION.
MAINTAIN SOCIAL DISTANCING AND STAY SAFE .

Supervisor   **Coordinator**   **Principal**