ENGLISH:

General instructions : Question 1 has to be done on PADLET.For questions 2, 3 , 4 you can use either google docs or your English notebook .

1. **Art Integrated** :

THEME 1: SAVE THE GIRL CHILD

Write a short story in 200 – 250 words with the help of the cues given below also give a suitable title to the story (ANY ONE). You should incorporate a theme of your choice from the options given below to complete your story.
Make use of interesting color themes and pictures to illustrate your story on **PADLET .**

Beginning :

It was a Sunday afternoon. Pragun was feeling very nervous. She stood in a corner looking through the window . When she heard her name , she ... ...

THEME 2: CORONA WARRIORS

Beginning : Satish was standing on the balcony watching the last rays of the Sun. Loud and angry voices in the street below distracted his attention. He ran down the stairs to see what had happened ... ...

THEME 3 : STOP CHILD LABOUR

Beginning:

I sat down with relief as I ticked off the last task in the checklist and suddenly

I saw a poor boy aged thirteen on the street selling .....

2. WRITING SKILLS:

" If you work hard and know where you are going , you'll get there ." This is the famous line by Evelyn Glennie in the chapter "The sound of music" . There are many instances when we work hard for something and achieve it . Record an incident in your life when you worked really hard and were successful in life as a diary entry in your diary .

3. READING SKILLS:

Read the newspaper daily and write one headline that catches your eye . It can be from any category like NATIONAL , INTERNATIONAL, SPORTS , GLAMOUR , BUSINESS and keep a record of it daily in the table format given below .

S. No	Date	Category	Headline
1	27 April 27, 2021	National	Indian scientists develop 'capsules' to curb crop burning

4. CREATIVE MONOLOGUE:

Imagine you are Robert Frost from the poem 'The road not taken ' and instead of him you were the one who had to make a choice between the two roads . Write a creative monologue on what decision you will take and how you will feel if you were in the place of Robert Frost.

HINDI:-

निर्देश –

- **प्रश्न 1 padlet पर साझा करिए-** https://padlet.com/neelimapathak29674/kcg7i9te3gzuked
- **प्रश्न 2,3,4,5,6,7 हिन्दी उत्तरपुस्तिका में लिखिए | ग्रीष्मावकाश गृहकार्य को आतंरिक मूल्यांकन के अंतर्गत जाँचा जाएगा|**

1) अपना परिचय देते हुए एक समाचार वाचक की तरह समाचार प्रस्तुत करते हुए चार से पाँच मिनट की अपनी वीडियो बनाइए | अपनी प्रस्तुति को प्रभावशाली बनाने के लिए आप समाचार से संबंधित चित्र भी दिखा सकते हैं | (padlet पर साझा करेंगे)

2) 'दुःख का अधिकार' पाठ के आधार पर लेखक और बूढ़ी स्त्री द्वारा की गई काल्पनिक बातचीत को अपनी कल्पना से संवाद के रूप में लिखिए |

3) रैदास के पदों में जिन संत कवियों का परिचय दिया गया है | उनके चित्रों के साथ उनका परिचय देते हुए अपनी कार्यपुस्तिका में लिखिए |

4) पढ़ाए गए पाठों में से अनुस्वार- अनुनासिक, उपसर्ग-प्रत्यय के दस-दस शब्द छाँटकर अपनी उत्तरपुस्तिका में लिखिए |

5) रिक्तस्थान में सही शब्द भरिये-

i) वह ------हालत में भी ------भर काम कर रहा था |(दिन -दिवस, दीन

-गरीबी)

ii) आज -----के समय ------आयेगा | (श्याम-नाम, शाम-संध्या)

iii) पंचों ने -----रूप से सारा ------बाँट दिया |(समान-बराबर, सामान -वस्तुयें)

iv) राजा को -----कर, वह अपनी बेगुनाही का ------देने लगा |(प्रणाम -नमस्कार ,प्रमाण -सबूत)

v) -----वन से भागकर -----में छिप गया |(बाग-उपवन, बाघ-पशु)

6) निम्नलिखित शब्दों से वाक्य बनाइए, जिससे इनका अर्थ स्पष्ट हो जाए:-

आदि- आदी, गृह- ग्रह, गिरि-गिरी, दिशा- दशा, मूल- मूल्य, उतर- उत्तर, परिणाम- परिमाण, और-ओर, अवधि - अवधी, अनल-अनिल

7) अपनी अथवा अपनी माँ की पसंद का कोई खाद्य पदार्थ अपनी माँ की सहायता से बनाइए तथा उसमें प्रयुक्त सामग्री का विवरण देते हुए बनाने की विधि हिंदी में लिखिए |

MATHEMATICS:-

1. Portfolio Activity 1:TO BE UPLOADED IN TEAMS AS ASSIGNMENT.

Draw colourful paintings made of square root spiral.Few

examples are as follows. Use your creativity to draw one.

2. Construct square root spiral till $\sqrt{10}$ with the help of compass and ruler on a number line. Show the working with the pythagoras theorem.

3.Solve the following questions in Maths Notebook.

1. Represent the following irrational numbers on number line.

   (i) $\sqrt{10}$ (ii) $\sqrt{17}$ (iii) $2+\sqrt{2}$

2. Represent geometrically $\sqrt{8.1}$ on number line.

3. Write the following numbers in p/q form (i) $2.0\overline{15}$ (ii) $0.\overline{235}$ Ans ($\dfrac{399}{198}, \dfrac{235}{999}$)

4. Find two rational numbers and two irrational numbers between $\sqrt{2}$ and $\sqrt{3}$.

5. Simplify (i) $2\sqrt{50} + 3\sqrt{32} + 4\sqrt{18}$ Ans($34\sqrt{2}$)

   (ii) $\sqrt[4]{16} - 6\sqrt[3]{343} + 18 \times \sqrt[5]{243} - \sqrt{196}$ Ans(0)

   (iii) $\sqrt[4]{81} - 8\sqrt[3]{216} + 15\sqrt[5]{32} + \sqrt{225}$ Ans(0)

6. If x=3+2 $\sqrt{2}$, Check whether $x + \dfrac{1}{x}$ is rational or irrational.   Ans (rational)

7. Rationalise the denominator

   (i) $\dfrac{4\sqrt{3} + 5\sqrt{2}}{4\sqrt{3} + 3\sqrt{2}}$ Ans $\dfrac{9 + 4\sqrt{6}}{15}$

   (ii) $\dfrac{\sqrt{2}}{\sqrt{2} + \sqrt{3} - \sqrt{5}}$ Ans $\dfrac{\sqrt{6} + 3 + \sqrt{15}}{6}$

8. If $x = 2 + \sqrt{3}$, find $\left(x + \dfrac{1}{x}\right)^3$ Ans(64)

9. Simplify : $\dfrac{\sqrt{6}}{\sqrt{2}+\sqrt{3}} + \dfrac{3\sqrt{2}}{\sqrt{6}+\sqrt{3}} - \dfrac{4\sqrt{3}}{\sqrt{6}+\sqrt{2}}$ Ans(0)

10. Simplify : $\dfrac{\sqrt{72}}{5\sqrt{72}+3\sqrt{288}-2\sqrt{648}}$ Ans$\left(\dfrac{1}{5}\right)$

11. Evaluate $\dfrac{15}{\sqrt{10}+\sqrt{20}+\sqrt{40}-\sqrt{5}-\sqrt{80}}$ Ans (5.398)

if $\sqrt{5} = 2.236$ and $\sqrt{10} = 3.162$

12. Find a and b if $\dfrac{7+3\sqrt{5}}{3+\sqrt{5}} - \dfrac{7-3\sqrt{5}}{3-\sqrt{5}} = a+b\sqrt{5}$ Ans(a=0,b=1)

13. If $\sqrt{18-6\sqrt{5}} = \sqrt{a} - \sqrt{b}$, then prove that a+b=18.

14. Simplify: $\left(\dfrac{x^b}{x^c}\right)^{b+c-a} \times \left(\dfrac{x^c}{x^a}\right)^{c+a-b} \times \left(\dfrac{x^a}{x^b}\right)^{a+b-c}$ Ans (1)

15. Prove that $(x^{a-b})^{a+b} \cdot (x^{b-c})^{b+c} \cdot (x^{c-a})^{c+a} = 1$

16. Prove that : $\dfrac{a^{-1}}{a^{-1}+b^{-1}} + \dfrac{a^{-1}}{a^{-1}-b^{-1}} = \dfrac{2b^2}{b^2-a^2}$

SCIENCE:-

1. ACTIVITY: Graphical representation (to be done only by the students of IX A and IX F)

Select any one match from the IPL cricket series of any season. Plot Runs versus Overs for both the teams on the same graph.   Also mention the date of the match and name of the teams .

Upload in the assignment tab of your class team named- Physics Holiday Homework.

2. ACTIVITY: (to be done only by the students of IX C and IX D)

Capture images manifesting Tyndall effect at your home and upload in the assignment tab of your class team named- Chemistry Holiday Homework.

3.ACTIVITY: (to be done only by the students of IX B and IX E)

Use your creativity to prepare a model of **any one** of the following using waste materials

1.   cell organelles

2.   cell membrane

3.   animal cell

4.   plant cell

5.   eukaryotic cell

6.   prokaryotic cell

WORKSHEET (FOR ALL THE SECTIONS)

Answer the following questions:

PHYSICS (to be done in classwork notebook)

Q1. In which one of the following cases will the distance covered and the magnitude of the displacement are not same? Justify your answer.

(a) an athlete covers one lap in a race.

(b) a raindrop falls in still air.

(c)a passenger in a train travels from Delhi to Mumbai

Q2. Plot the distance -time graph of a moving car and find the speed using graph

Time (am)	10	10.05	10.10	10.15	10.20	10.25
distance	0	5	10	15	20	25

Q3. Differentiate between scalar and vector quantity.

Q4.A particle moves in a circle of diameter 5m. What is it's displacement and distance covered after 1 ½ revolutions?

Q5.Two trains A and B start moving at the same time. Plot the distance –time graph and state which of the two is in non uniform motion.

TIME	DISTANCE TRAVELLED BY A	DISTANCE TRAVELLED BY B
6.00pm	0	0
6.15pm	10	15
6.30pm	20	24

6.45pm	30	32
7.00pm	40	38
7.15pm	50	42

CHEMISTRY

Q1.Match the Column - I with the Column - II.

Column-I	Column-II
a. Iron	1. Colloid
b. Urea	2.Element
c. Air	3Compound
d. Coloured gemstone	4. Mixture

Q2. A solution contains 50 g of common salt in 450 g of water. Calculate the concentration of the solution.

Q3. Which separation techniques will you apply for the separation of the following?

(a). Sodium chloride from its solution in water.

(b). Ammonium chloride from a mixture containing sodium chloride and

ammonium chloride.

(c) Small pieces of metal in the engine oil of a car.

(d) Different pigments from an extract of flower petals.

(e) Butter from curd.

(f) Oil from water.

(g) Tea leaves from tea

(h) Iron pins from sand.

(i) Fine mud particles suspended in water.

Q4. Pragya tested the solubility of three different substances at different temperatures and collected the data as given below (results are given in the following table, as grams of substance dissolved in 100 g of water to form a saturated solution).

Substance Dissolved	Temperature (in K)				
	283	293	313	333	353
	Solubility				
Potassium nitrate	21	32	62	106	167
Sodium chloride	36	36	36	37	37
Potassium chloride	35	35	40	46	54
Ammonium chloride	24	37	41	55	66

(a). What mass of potassium nitrate would be needed to produce a saturated solution of potassium nitrate in 50 g of water at 313 K?

(b). Pragya makes a saturated solution of potassium chloride in water at 353 K and leaves the solution to cool at room temperature. What would she observe as the solution cools? Explain.

(c) Find the solubility of each salt at 293 K. Which salt has the highest

solubility at this temperature?

(d) What is the effect of change of temperature on the solubility of salt?

BIOLOGY

Q1 Match the following:

I.　　Single matching

Column I	Column II
a) Nucleus	i.　Cellulose
b) Mitochondria	ii.　Double membrane
c)　Cell wall	iii.　Cell sap
d) Vacuole.	iv.　Power house

II.　　Double matching

Column I	Column II	Column III
a)　Multicellular Organisms	i.　Lipids	1. Suicide bags

b) Plasma membrane	ii. Plants	2. Inner folded Membrane
c) Mitochondria	iii. Digestive enzymes	3. Proteins
d) Lysosomes	iv. Outer porous membrane	4. Animals.

Q2 *Amoeba* is able to engulf its food due to the flexibility of the cell membrane. What is this process called as?

Q3. Shape and size of cells are related to the function they perform. Explain with example.

Q4 Egg membranes from three eggs were carefully taken out and labeled as A, B and C. Each of these membranes were filled with 1% solution of sugar.

Membrane A was immersed in 0.5% sugar solution, Membrane B was immersed in 1% sugar solution and Membrane C was immersed in 2% sugar solution.

Predict the behaviour of the three membranes.

Q 5 What will happen :

   a.   If there are no lysosomes in cells

b.   If RBCs are kept in hypotonic solution (draw diagram)

c.   If plant cells are kept in hypertonic solution (draw diagram)

SOCIAL SCIENCE:-

Make a file on disaster management, selecting two disasters each from natural and human –made disasters.

- v Natural disasters - earthquakes, landslides, floods, cyclones, droughts, etc.
- v Human-made disasters - fires, accidents, terrorists attacks, chemical and industrial accidents etc.
- v The file should contain at least 15 pages.
- v It should be hand written.
- v No plastic file to be used. Make your own cover page. Please tie your project with a ribbon.

Page wise breakup-

1.   Cover page
2.   Page 1- contains heading of the project, name class, section and roll no.
3.   Page 2- index
4.   Page 3- acknowledgement
5.   Page 4-14- written material and pictures, maps, data representation.
6.   Page 15- bibliography

COMPUTERS:-

Q1) Watch video on water computer -
https://www.youtube.com/watch?v=IxXaizglscw&list=PLzotSHDeocWxK6r

OLolGhsJwQ8IlKmhhs&index=2&t=874s&ab_channel=SteveMould

Watch video on future of computing -

https://www.youtube.com/watch?v=NIO9F-gl9e4&list=PLzotSHDeocWxZ_Q2Xf9gBd-raTN-mS3Y-&index=1&ab_channel=Seeker

Watch video on 5 uses of neural networks -

https://www.youtube.com/watch?v=i9MfT_7R_4w&list=PLzotSHDeocWxZ_Q2Xf9gBd-raTN-mS3Y-&index=5&ab_channel=ColdFusion

Q2) Experience the magic of AI yourself and once done keep a screenshot of it (to be shared in the last question (Q3) form)-
https://quickdraw.withgoogle.com/

Q3) Fill in the Quantum Computing case study and also share the link of the screenshot for the Q2 activity in the form -
https://forms.gle/PSMjyYLA9FzzWWjz6

Extras - Those interested in learning coding can check out the resource -
https://www.youtube.com/watch?v=_uQrJ0TkZlc&t=2s&ab_channel=ProgrammingwithMosh