English -
1-Creative Writing

Topics:

"A Day in the Life of a Tribal Child in Arunachal Pradesh": write fictional diary entries or short stories.
2-Collage or Poster with a Write-Up

 create posters or collages highlighting the culture, festivals, or landmarks, accompanied by a written explanation.
3-Design a travel brochure or write a blog inviting tourists to explore the state.

Include pictures and persuasive language to make it attractive.
Maths – Solve exercise 9.1,9.2,9.3[tillQ7] of circles from NCERT
Science-
Physics

1. State law of conservation of energy.
2. Prove that $v = f\lambda$, where v is speed , f is frequency and λ is wavelength of wave.
3. What are conservative forces ? Give an example.
4. What is work done by the force of gravity on a satellite moving around the earth ? Justify your answer.
5. When a wave travels from one medium to other, the wavelength changes but not the frequency. The wavelength of sound disturbance is 30 cm in air and the wave velocity is 340 m/s. What will be wavelength of this disturbance in Helium ? The speed of sound in helium is 970 m/s .
6. Derive an expression for kinetic energy. At what height will its kinetic energy and potential energy be equal ?
7. A person is listening to a tone of 500 Hz sitting at a distance of 450 m from the source of the sound . What is the time interval between successive compressions from the source ? speed of sound in air = 330 m/s.
8. An object of mass 40 kg is raised to height of 5 m above the ground. What is its potential energy? If the object is allowed to fall , find its kinetic energy when it is half the way down ?
9. Which of the following have same units ?
   (a) Power and energy (b) power and work (c) work and energy (d) none of the above
10. When we put our ear to the railway track, we can hear the sound of an approaching train even when the train is far off but its sound can not be heard through air. Why ?
11. Define 1 watt of power .
12. What do you mean by mechanical waves and electromagnetic waves ?
13. Why are the sound waves are called mechanical wave ?
14. A mass of 10 kg is at a point A on a table . It is moved to point B. If the line joining A and B is horizontal,What is the work done on the object by the gravitational force ? Explain your answer .
15. The kinetic energy of an object of mass m moving with velocity of 5 m/s is 25 J. What will be its kinetic energy when its velocity is (a) doubled (b) three times.

Chemistry-

1. **44 g of CO_2 at NTP will occupy volume equal to –**
   A. 44 mL
   B. 44 L
   C. 22.4mL
   D. 22.4 L

2. **Number of molecules present in 0.18 g H_2O are –**
   A. $0.18 \times 6.023 \times 10^{23}$
   B. $18 \times 6.023 \times 10^{23}$
   C. 6.023×10^{22}
   D. 6.023×10^{21}

3. **Which of the following sample contains the maximum number of atoms ?**
   A. 1mg of C_4H_{10}
   B. 1 mg of N_2
   C. 1 mg of Na
   D. 1ml of water

4. **The volume of 7g of N_2 at N.T.P. is –**
   A. 11.2 L
   B. 22.4 L
   C. 5.6 L
   D. 6.5 L

5. **A piece of sodium weighs 0.023 g. The number of atoms present in it are –**
   A. 6.023×10^{20}
   B. 60.23×10^{22}
   C. 6.023×10^{21}
   D. 6.023×10^{19}

6. **4.4 g of CO_2 and 2.24 litre of H_2 at STP are mixed in a container. The total number of molecules present in the container will be -**
   A. 6.023×10^{23}
   B. 1.2044×10^{23}
   C. 2 mole
   D. 6.023×10^{24}

7. **The total number of protons , electrons and neutrons in 12g of $_6C^{12}$ is –**
   A. 1.084×10^{25}
   B. 6.022×10^{23}
   C. 6.023×10^{22}
   D. 18

8. **Which postulate of Dalton's atomic theory suggests the law of conservation of mass ?**
   A. Atom cannot be divided.
   B. All the matter is made up of very small particles called atoms.
   C. Elements consist of atoms combined in a fixed ratio.
   D. Atoms can neither be created nor be destroyed.

9. **The number of atoms present in a molecule of element is called its –**
   A. molecularity
   B. atomicity
   C. valency
   D. reactivity

SECTION – 2

1. **An element X has a valency of 4 whereas other element Y has a valency of 1. What will be the formula of the compound between X and Y ?**
2. **What is the difference between the molecule of an element and the molecule of a compound ?**
3. Give one example of each.
4. **What do we call particles which have –**
   1. **More electrons than the normal atoms ?**
   2. **Less electrons than the normal atoms ?**
5. **Name the following compounds. Also write the symbols and formulae of the ions present in them.**
   A. $CuSO_4$
   A. $(NH_4)_2SO_4$
   B. Na_2O
   C. Na_2CO_3
   D. $CaCl_2$

2. **What is the mass of 0.2 mole of oxygen atoms ?**
3. **Calculate the number of aluminium ions present in 0.051 g of aluminium oxide (Al_2O_3).**
   [Atomic mass : Al=27u ; O=16u]
4. **What weight of oxygen will contain the same number of molecules as 56 g of nitrogen gas ?**
   [Atomic mass : O=16u ; N=14u]

Biology-

IMPROVEMENT IN FOOD RESOURCES
WORKSHEET -I

1. Mention the three different ways in which crop plants can be attacked by insect pests. Suggest one control measure and two preventive measures against pests.
2. What is irrigation? Explain any two kinds of water resources available to supply water for irrigation.
3. Farmers should use quality seeds, adopt irrigation, use fertilizer if needed and use crop protection measures. Justify the statement giving reasons.

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4. Which one is not a source of carbohydrate?
   a) Rice   b) Millets   c) Sorghum   d) Gram _____.
5. State two objectives of organic farming.

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   _____

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6. Choose the correct options given about manure: (i) Manure contains large quantities of organic matter and small quantities of nutrients. (ii) It increases the water holding capacity of sandy soil. (iii) It helps in draining out of excess of water from clayey soil. (iv) Its excessive use pollutes environment because it is made of animal excretory waste.
   a. (i),(ii)& (iv)   (b) (i), (iii)&(iv)   (c) (i),(ii) and (iii)   (d) only(iv)
   _____

7. What are weeds? Mention any two methods of preventing the growth of weeds?

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   _____

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   _____

8. Fill in the blanks :
   a. Kharif crops are cultivated from _____to _____.
   b. Rabi crops are cultivated from _____to_____.
   c. Paddy, maize, green gram, soyabean, cotton, pigeon pea, ground nut and black gram are _____crops.
   d. Wheat, gram, pea, mustard, linseed, barley, potato, tomato, cumin, oat and fenugreek are _____ crops.
9. What is a GM crop? Name any one such crop which is grown in India.

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   _____

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10. State the two major factors to be considered while aiming for optimum yields in crop production.

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11.

FIG: A   **FIG:B**

FIG:C

Arvind returned to his village in agra after completing his M.Sc in Agricultural sciences. He saw the condition of the storage of food grains shown in **fig.A**. He suggested the simple method shown in **fig.B** as immediate remedial method but later after educating farmers, he wants to at least introduce the method shown in **fig.C**.

a) List the two factors responsible for the loss of food grains shown in **fig.A**.

_____
_____
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_____ b) Give two values which are inculcated in Arvind's attitude towards the villagers.

_____
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_____ c) List two preventive and control measures to be used before grains are stored for future use in **fig.C**.

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_____

Social Studies -
1. Name the most popular Club of France
2. Which period in the history of France is Reign of Terror?
3. Who was the composer of national anthem of France?
4. Explain the conditions of France before 1789.
5. How was the French society organised?
6. Explain the features of the French constitution 1791.
7. Who was Robespierre? Explain his policies.
8. Analyse the role of women in France during revolutionary years.
9. Describe the impact of French Revolution in everyday life.
10. Write short notes on Triangular slave trade.
11. Describe the main features of democracy
12. Write merits and demerits of democracy.
13. Why is democracy a better form of government?
14. Activity work:-
A.Draw or paste political symbols of French Revolution.
B.Locate the following places on the Map of France Bordeaux, Nantes, Ruffex, Marseilles, Paris.
NOTE: All the work needs to be done in Social Science notebook.

Hindi – शीतकालीन अवकाश गृह कार्य

कक्षा - 9

1 पत्र लेखन-

कुछ नव प्रकाशित पुस्तके मगाने के लिए नेशनल बुक ट्रस्ट, नई दिल्ली के व्यापार प्रबंधन को पत्र लिखिए।

2 अनुच्छेद लेखन

मेट्रो रेल- महानगरीय जीवन का सुखद सपना आपके जीवन में किस प्रकार साकार हुआ अपनी किसी मेट्रो यात्रा का वर्णन चित्र सहित स्पष्ट कीजिए।

3 अलंकार

शब्दालंकार के भेद के 10-10 उदाहरण स्पष्टीकरण सहित व्यक्त कीजिए।

Computer –
Create a project file using Ooo. Calc
Topic: Population of Arunachal Pradesh

Artificial Intelligence – Activity 1: Share a minimum of five ideas about Smart Home and write in the notebook.   Activity 2: How do you think Artificial Intelligence can help you as you go about your daily life? Write them in the notebook.
Activity 3: Write any five uses of Generative A.i. with examples in notebook.