PM SHRI KENDRIYA VIDYALAYA No. 2, TAMBARAM, CHENNAI

WINTER BREAK HOLIDAY HOMEWORK

CLASS: 6

1. Prepare the lesson for PT2.

- Materials around us
- Temperature and it's measurement
- A journey through states of water.
- Methods of separation in everyday life.

2. Complete your activity notebook with all activities conducted.

3. Sow a seed (chana/pea) in 4 pots and put in under different conditions at different places in home.

- Observe the germination and fill table 10.2 in Activity Notebook.
- You have to paste pictures of this activity also in activity notebook.

CLASS: 7

I. **Write LEARNER'S DIARY for the following Chapters in an A4 sheet.**

- Reproduction in Plants
- Motion and Time
- Electric Current and its Effects
- Light

II. **Make ANY ONE Model from the given list:**

- A Sand clock
- A Pendulum
- A Model of flower with its reproductive parts

III. Poster Making- Create a poster on "Save Energy, Save the Planet"
(To be done in 1/4th Chart Paper)
(OR)
Write an essay (200-250 words) on how science helps in daily activities at home.
(To be done in Homework side of Notebook)

IV. **Prepare well for PT II Exams.**

CLASS: 8

1.construct a Model of kaleidoscope
2.Do MDP in the topic_Earthquake or Tsunami
3.complete the Worksheets.

4.Learn chapters from Reaching age of Adolescence to chemical effects of electric current.

CLASS 9

Subject Science

II. Prepare the given chapters for your PT3 Exams.

1. Atoms and Molecules
2. Structure of atoms
3. Work and Energy
4. Sound

II.SUBJECT ENRICHMENT ACTIVITY: Solve the worksheet in your Science Notebook.

SCIENCE WORKSHEET

Q1. Give three differences between acceleration due to gravity (g) and universal gravitational constant (G).

Q2. Derive expression for force of attraction between two bodies and then define gravitational constant.

Q3. State the Universal law of Gravitation.

Q4. Why is it difficult to hold a schoolbag having a strap made of a thin and strong string?

Q5. Amit buys a few grams of gold at the poles as per the instruction of one of his friends. He hands over the same when he meets him at the equator. Will the friend agree with the weight of gold bought? If not, why?

Q6. Why do we hear the sound produced by the humming bees while the sound of vibrations of a pendulum is not heard?

Q7. Draw Graph each with two separate diagrams (i) Two sound waves with equal amplitude but different frequencies?

(ii) Two sound waves with equal frequency but different amplitudes.

(iii) Two sound waves have different amplitudes and also different wavelengths.

Q8. Suppose you and your friend are on the moon. Will you be able to hear any sound produced by your friend?

Q9. Find the wavelength of a sound wave with a frequency of 220 Hz and a velocity of 440 m/s in a specific medium.

Q10. Show diagrammatically the formation of O ⟶ O^{2-} ion?

Q11. Electron attributes negative charge, protons attribute positive charge. An atom has both but why there is no charge?

Q12. Write the correct representation of an element 'X' which contains 15 electrons and sixteen neutrons.

Q13. Predict the valency of the following elements

(i) A (Atomic number 5) (ii) B (Atomic number 12)

(iii) C (Atomic number 14) (iv) D (Atomic number 17)

Q14. Find the molecular mass of H_2O.

Q15. What is Law of conservation of mass and Law of constant proportions?

Q16. Define atomicity.

Q17. A pair of bullocks exert a force of 140 N on a plough. The field being ploughed is 15 m long. How much work is done in ploughing the length of the field?

Q18. What will happen to the kinetic energy of a body if its mass is doubled?

Q19. A light body and a heavy body have the same kinetic energy. Which one will have the greater momentum?

Q20. Explain power. What is 1 watt of power? Calculate the power if the lamp consumes 1000 J of electrical energy in 10 s.