

STEPHENS

INTERNATIONAL PUBLIC SCHOOL



WINTER BREAK

Holidays' Homework

Session – 2024-25

Class : 9th

Note: The assigned task of all the subjects is to be done on assignments sheets.

Subject : English

1. Write inspirational quotes of famous Indian personalities. (Any five)
2. List various literary devices used in literature and give their examples as well. (Any ten)
3. Write a poem/article/short story/set of jokes or anything interesting to be included in the school magazine. Make sure that the writing is original, not copied from any source.

Subject : Hindi

- प्र:1. गणतंत्र दिवस के आगमन हेतु एक रंगीन पृष्ठ पर किसी प्रसिद्ध रचयिता की कुछ पंक्तियों का उहाहरण लेते हुए स्वयं रचित कविता सुंदर ढंग से लिखें।
- प्र:2. उपसर्ग सम्, अध, परि, बद तथा दुर् का प्रयोग करते हुए शब्दों का निर्माण करें। हर उपसर्ग का प्रयोग करते हुए कम-से-कम पाँच-पाँच नवीन शब्द बनाएँ, जिसे वृक्ष बनाते हुए शाखाओं के रूप में सुंदर ढंग से बनाएँ।

Subject : Mathematics

Activities

1. To show that area of triangle = $\frac{1}{2} \times \text{base} \times \text{height}$
2. To prove Mid-point Theorem
3. Angles in the same segment of a circle are equal.
4. Opposite angles of a cyclic quadrilateral are supplementary.
5. To draw histogram for classes of varying widths

Subject : Science

PHYSICS

1. Describe the production and propagation of sound waves. Explain how sound waves travel through different mediums.

2. What is the difference between longitudinal and transverse waves? Explain with examples. How do sound waves fall under one of these categories?

3. What do you mean by the terms:-

(i) Frequency

(ii) Wavelength

(iii) Speed

(iv) Amplitude

(v) Pitch

(vi) Loudness

Explain each term with examples.

Q4. What is the audible range of human hearing? Explain the limitations of human hearing.

Q5. Make a list of different types of musical instruments and discuss which part of the instrument vibrates to produce sound.

CHEMISTRY

Q1. Make a flow chart of first 20 elements along with their symbol, atomic number, atomic mass and valency.

Q2. Write the valencies of various monoatomic and polyatomic ions and build up the formula of various compounds.

Q3. Draw the diagrams depicting the discovery of electron, proton and neutron.

Q4. Explain the characteristics of cathode rays and anode rays.

Here are some practical-based questions on colloids and suspensions for class IX:

Q5. Observation-Based Questions:

Tyndall Effect:

(i) Shine a beam of light through a glass of milk (colloid) and through a glass of saltwater (solution).

(ii) What do you observe? Which system shows the Tyndall effect?

(iii) Why does the Tyndall effect occur only in one of these systems?

BIOLOGY

Q1. Differentiate between

- (a) Macronutrients and Micronutrients
- (b) Manures and Fertilizers

Q2. Write the advantages of the following:-

- (a) Vermicomposting
- (b) Green manure

Q3. Compare Capture fishing mariculture and aquaculture.

Q4. Draw flowchart showing various fields of animal husbandry.

Q5. Green revolution in 1960's and 70's contributed to immense increase in food production however it also has certain demerits. Why?

Q6. Draw well labelled diagram of the following:-

- (a) Plants and animal cell
- (b) Structure of neuron
- (c) Breeds of bees used for apiculture

Subject : Social Science

Q1. Write an article on the cause and growth of population.

Q2. Explain the issue of Over Population and Human Population growth control.

Q3. On the political map of India, locate and label the following with appropriate symbols.

- (a) the state having lowest density of population
- (b) the state having highest density of population

Q4. Explain the major components of population growth.

Q5. Distinguish between Population growth and population change.

Note : Kindly revise all the syllabus done in the class.

**Happy
Holidays!**