

CLASS IX

CHEMISTRY

ASSIGNMENT

1. WHAT ARE THE DIFFERENCE BETWEEN 'MATTER' AND 'SUBSTANCE'?

2. GIVE THREE EXAMPLES EACH OF THREE STATES OF MATTER.

3. WRITE FOUR IMPORTANT CHARACTERISTICS EACH OF SOLID, LIQUID AND GASES.

4. AN IRON ALMIRAH IS CALLED A SOLID. EXPLAIN.

5. DEFINE THE FOLLOWING WITH.

EXAMPLE : RIGIDITY, FLUIDITY, KINETIC ENERGY.

6. WE GET THE SMELL OF HOT FOOD FROM SEVERAL METRES AWAY BUT TO GET THE SMELL OF COLD FOOD WE HAVE TO GO CLOSE. EXPLAIN.

7. DEFINE THE TERM SUBLIMATION. GIVE TWO EXAMPLES OF IT.

8. WITH THE HELP OF LABELLED DIAGRAM EXPLAIN THE SUBLIMATION OF AMMONIUM CHLORIDE.

9. CONVERT THE FOLLOWING TEMPERATURE INTO KELVIN SCALE :

25 degree C, 100 degree C.

10. WRITE FOUR POINT OF DIFFERENCE BETWEEN 'EVAPORATION' AND 'BOILING'.

DELHI PUBLIC SCHOOL

Karmik Nagar, Dhanbad

Assignment for class IX (English)

1. Comprehension

Read the passage carefully and answer the questions that follow.

Air Pollution

India's growing obsession with vehicles and failure to develop roads has increased air pollution in most cities, the country's pollution watchdog has revealed. In the past two decades, the carrying capacity of roads increased by less than 2.5 per cent whereas the number of vehicles grew at an annual rate of over 10 per cent. In 2008, in India, 12 million vehicles were plying on the 3.5 million km road network.

For people, its visible impact is the increased congestion on roads but what one didn't see was the higher air pollution. "Vehicles in major cities estimated to account for 70 per cent of carbon monoxide, 50 per cent of hydrocarbons and 30 per cent of suspended particulate matter of the total pollution load of these cities," the Central Pollution Control Board (CPCB) said in its report on Wednesday. Four metros and cities such as Bangalore, Hyderabad and Kanpur are among the worst affected.

The report said that the high concentrations of pollutants like carbon monoxide and hydrocarbons cause lung cancer and asthma, besides routine breathing problems. The sudden jump in air pollution is a recent phenomenon, with the CPCB finding that half of the two-wheelers and cars running on Indian roads have been registered in the last five to seven years. The growth phenomenon in the case of heavy vehicles has been less impressive.

The new vehicles, however, are not the sole cause of air pollution. The CPCB said that vehicles older than 10 years caused 60 per cent of vehicular air pollution. And the reason is poor maintenance and no norms in India for the expiry of a vehicle, especially private ones. Adulteration of fuel has been stated as another reason for high vehicular pollution.

So far, ironically, because of a lower level of income thresholds, the Indian market has favoured small cars and two-wheelers. As small engines use less fuel, the average fleet-wide fuel consumption is expected to be low. But already, with rising income levels, there is a steady shift towards bigger cars that use more fuel. Taking their place are biker cars in compact, mid-size and high-end segments. Therefore, standards can make a significant difference in India.

Answer the following questions:

- (a) What is the major cause of air pollution in India?
- (b) What has increased more than the carrying capacity of the roads?
- (c) What causes lung cancer and asthma?
- (d) Why do Indians favour small cars and two-wheelers?

Choose the most appropriate option:

- (e) Which word in the passage means 'mixing with inferior material'?
- (i) concentration (ii) adulteration
- (iii) phenomenon (iv) congestion

- (f) Which word in the passage means the same as 'collection'?

- (i) concentration (ii) phenomenon
 (iii) pollution (iv) growth

(g) Find the word opposite in meaning to 'achievement'.

- (i) impact (ii) failure
 (iii) expiry (iv) difference

(h) Find the word opposite in meaning to 'production'.

- (i) congestion (ii) growth
 (iii) adulteration (iv) consumption

2. Editing

The following passages have not been edited. There is an error in each line against which a blank is given. Write the incorrect word and the correction in your answer sheet against the correct blank number. The first one has been done for you as an example.

You will have your hair cut very short in the	e.g.	will	must
first month. After that you might grow it		(a).....	.....
longer but it shall never touch your collar.		(b).....	.....
Your uniform should be neat but clean too.		(c).....	.....
A student is expect to be neat and clean.		(d).....	.....

3. Omission

In the following passages given below, one word has been omitted in each line. Write the missing word along with the word that comes before and the word that comes after it in the space provided.

It must have around midnight when I drove	e.g.	have	been	around
home. As I approached the gates		(a).....	.....	.....
bungalow, I switched the headlights of the car		(b) .....	.....	.....
so that the beam wouldn't swing the bedroom		(c) .....	.....	.....
window. There was pin-drop silence in		(d) .....	.....	.....
bungalow.				

4. Complete the dialogue by choosing the correct options.

Meera: When did you come to this place?
 Sonu: (a).....
 Meera: Where were you all these days?
 Sonu: (b).....
 Meera: (c).....
 Sonu: I would stay here for a month or so.

Meera: (d).....

Sonu: I intend to come, but I am too busy right.

- (a)(i) I have come a week ago (ii) I come a week ago
(iii) I would come a week ago (iv) I came a week ago

- (b)(i) I have been in Singapore (ii) I was in Singapore
(iii) I may be in Singapore (iv) I would be in Singapore

- (c)(i) For how long have you been staying here?
(ii) For how long would you stay here?
(iii) For how long were you staying here?
(iv) For how long have you stayed here?

- (d)(i) Are you coming to meet your friends?
(ii) Do you come to meet your friends?
(iii) When you are coming to meet your friends?
(iv) Did you come to meet your friends?

5. Write a letter to the editor of a local daily highlighting the problem of insanitary condition in your locality. You are Namit/ Namita living in 234 Balco Apartments, I.P Extension, New Delhi. (120 words)

6. Write an article in about 150 words on the topic : "Prevention is better than cure".

Q1. Answer the following questions briefly:

- i) Name the countries which are larger than India in size.
- ii) What is the total area of the Indian landmass?
- iii) Name the group of islands lying in the Arabian sea.
- iv) Which island group of India lies to its south-east?
- v) Which island countries are our southern neighbours?

Q2. Answer the following questions in short:

- i) Justify the naming of Indian Ocean after India.
- ii) What is the latitudinal extent of India?
- iii) What is the significance of Suez Canal?
- iv) Which ideas and commodities of India could reach the world?

**QUESTION BANK CHAPTER WISE
CLASS IX
MATHEMATICS**

**Chapter-1
NUMBER SYSTEM**

1. Express $1.\overline{05}$ in the form of $\frac{p}{q}$ where $q \neq 0$
2. Find one rational and one irrational numbers between $\cdot 157$ and $\cdot 167$
3. Express the number $3\overline{147}$ in the form of $\frac{p}{q}$.
4. Find two rational numbers in the form $\frac{p}{q}$ between $0\cdot 343443444344443\dots\dots$ and $0\cdot 363663666366663\dots\dots$
5. Represent $\sqrt{5}, \sqrt{2}, \sqrt{3}, \sqrt{11}$ on the number line.
6. Locate $\sqrt{4.7}$ on the number line.
7. Express $5.06\overline{47}$ in the form $\frac{p}{q}$ where p and q are integers and $q \neq 0$
8. Evaluate: $\sqrt[3]{(343)^{-2}}$
9. Find the values of a and b if: $\frac{7+3\sqrt{5}}{3+\sqrt{5}} - \frac{7-3\sqrt{5}}{3-\sqrt{5}} = a + \sqrt{5}$
10. If $a = 7 - 4\sqrt{3}$, then find the value of $\sqrt{a} + \frac{1}{\sqrt{a}}$
11. If $x = \frac{\sqrt{2}+1}{\sqrt{2}-1}$ and $y = \frac{\sqrt{2}-1}{\sqrt{2}+1}$, find the value of $x^2 + y^2 + xy$
13. If $a = 7 - 4\sqrt{3}$, then find the value of $\sqrt{a} + \frac{1}{\sqrt{a}}$
15. Visualise 2.665 on the number line, using successive magnification.

POLYNOMIALS

Q1. Define: i) rest ii) motion iii) reference point.

Q2. What are scalar and vector quantities. Give four examples of each.

Q3. A farmer moves along the boundary of a square field of side 10 m in 40 s. What will be the magnitude of displacement of the farmer at the end of 2 minutes and 20 seconds from his initial position?

Q4. Give an example to show that rest and motion are relative terms.

Q5. Write four differences between distance and displacement.

Q6. What does the odometer of an automobile measure?

Q7. The odometer of a car reads 2000 km at the start of a trip and 2400 km at the end of the trip. If the trip took 8 h, calculate the average speed of the car in km/h and m/s.

Q8. The minute hand of a clock is 7 cm long. Calculate the distance covered and the displacement of minute hand of the clock from 9:00 AM to 9:30 AM.

Q9. Define: i) speed ii) average speed iii) uniform speed.

Q10. Usha swims in a 90 m long pool. She covers 180 m in one minute by swimming from one end to the other and back along the same straight path. Find the average speed and average velocity of Usha.

Q11. Can the magnitude of the displacement be equal to the distance travelled by an object? Justify.

Q12. An object travels 16 m in 4 s and then another 16 m in 2 s. What is the average speed of the object?

Q13. Which of the following is true for displacement?

a) It cannot be zero.

b) Its magnitude is greater than the distance travelled by the object.

Q14. Distinguish between speed and velocity.

Q15. During an experiment, a signal from a spaceship reached the ground station in five minutes. What was the distance of the spaceship from the ground station? The signal travels at the speed of light, that is, 3×10^8 m/s.

दिल्ली पब्लिक स्कूल धनबाद

मासिक गृह कार्य : अप्रैल

विषय : हिन्दी

CLASS - IX

- प्रश्न -1. 'दो बैलों की कथा' पाठ को पढ़कर इसके मुख्य विषय- बिन्दुओं का उल्लेख कीजिए।
- प्रश्न -2. उक्त पाठ में लेखक के द्वारा यह कहा गया है " स्वतंत्रता सहजता से नहीं मिलती है ,इसके लिए हमें संघर्ष करना पड़ता है।" इस कथन के आधार पर यह लिखें कि हम अपनी स्वतंत्रता की हिफाजत के लिए और क्या -क्या कर सकते हैं?
- प्रश्न -3. अर्थ की दृष्टि से वाक्य के आठ भेद होते हैं। प्रत्येक भेदों का दो -दो उदाहरण लिखिए।
- प्रश्न -4. निम्नलिखित वाक्यों का निर्देशानुसार वाक्य रूपांतरण करें-
- (क) वह बाजार जाता है। (संदेह वाचक वाक्य में बदलें)
- (ख) माँं सिलाई करती है। (निषेधवाचक वाक्य में)
- (ग) वह देर रात तक पड़ता है? (प्रश्नवाचक वाक्य में)
- (घ) तुम्हे बैठना चाहिए। (आज्ञा वाचक वाक्य में)
- (ङ) मेहनत करने पर सफलता मिलती है। (संकेतवाचक वाक्य में)
- प्रश्न -5. अनुप्रास अलंकार किसे कहते हैं ? उदाहरण देकर स्पष्ट कीजिए ।
- प्रश्न -6. यमक अलंकार का एक उदाहरण लिखिए।
- प्रश्न -7. निम्नलिखित शब्दों से उपसर्ग, मूल शब्द और प्रत्यय छाँटकर अलग- अलग लिखें-
- | | शब्द | उपसर्ग | मूल शब्द | प्रत्यय |
|------|---------------|--------|----------|---------|
| (क) | स्वतंत्रता--- | | | |
| (ख) | अनावश्यकता | | | |
| (ग)। | परावलंबी | | | |
| (घ) | निरोगी | | | |
| (ङ) | अनुपयोगी | | | |
- प्रश्न- 8. ' कोरोना के बढ़ते दुष्प्रभाव ' विषय पर संपादक के नाम एक पत्र लिखिए।