

HINDMOTOR HIGH SCHOOL

WORKSHEET

CLASS - 6

HINDMOTOR HIGH SCHOOL

Worksheet 3

SUBJECT-Physics Synopsis & Worksheet

Chapter-1 Measurement

Instruments Used for Measuring Mass:-

- **Beam Balance:-** A **beam balance** is an instrument used to measure the mass of a body. It measures the mass of a body by comparing it with standard known mass called **standard weights**.
Construction of Beam Balance:- A beam balance has a horizontal beam (or rod) that pivots in the middle. There is a pointer at the centre of the pivot. A metal pan is suspended at each end of the beam, at equal distance from the pointer.
Working of Beam Balance:- A beam balance works on the principle that the two pans balance each other when objects of equal masses are placed on them.
- **Physical Balance:-** a **physical balance** is a weighing instrument which helps in measuring the mass of a substance more specifically and accurately.
This kind of balance is used whenever precision is required-for instance, measuring of gold, measuring of chemicals, etc.
They are mostly used in laboratories.
- **Electronic Balance or Digital Balance:-** Electronic Balance or Digital Balance is used to measure the mass of substance very accurately, easily and instantly.
These instruments don't required standard weights for comparison.

Measurement of Temperature:-

Temperature:- It is defined as the measurement of Degree of hotness and coldness of a body.

- SI unit of temperature is **Kelvin (K)**.
- The most commonly used units of temperature are **Degree celsius (°C)** and **degree Fahrenheit (°F)**.
- The instrument used to measure temperature is called **Thermometer**.

Thermometer:-

Construction of thermometer:- A thermometer consists of a thick glass tube called **stem**.

A **capillary (very narrow tube)** runs through the middle of The stem.

The upper end of glass tube is sealed.

The lower end of the tube is attached to a glass bulb, filled with **mercury**.

Working of thermometer:- When the bulb of thermometer touches a hot body, the mercury inside it expands and rises in the capillary.

-The reading on the scale corresponding to the level of mercury in the capillary gives the temperature of the body.

-There are three different scales- **Celsius scale** (unit of measurement- °C), **Fahrenheit scale** (unit of measurement- °F) and **Kelvin scale** (unit of measurement- K).

-On each scale, readings are taken between two fixed points- **lower fixed point** and **upper fixed point**.

- On the Celsius scale, the lower fixed point is **0°C** and upper fixed point is **100°C**.

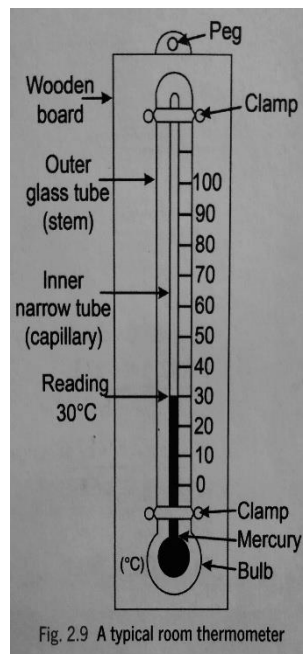


Fig. 2.9 A typical room thermometer

- On the Fahrenheit scale, the lower fixed point is **32°F** and upper fixed point is **212°F**.
- On the Kelvin scale, the lower fixed point is **273K** and upper fixed point is **373K**. (It is used in scientific measurements).

Relationship among Celsius, Fahrenheit and Kelvin Scales:-

- $[0^{\circ}\text{C} = 32^{\circ}\text{F} = 272\text{ K}]$ & $[100^{\circ}\text{C} = 212^{\circ}\text{F} = 373\text{ K}]$
- $[\text{C}/5 = \text{F}-32/9 = \text{K}-273/5]$

Exercise:-

1. Make the following conversions:-

- 100°C to $^{\circ}\text{F}$
- 50°F to K
- 50°C to K
- 373 K to $^{\circ}\text{C}$

2. Which is the most convenient device to measure mass?

3. Distinguish between beam balance and electronic balance.

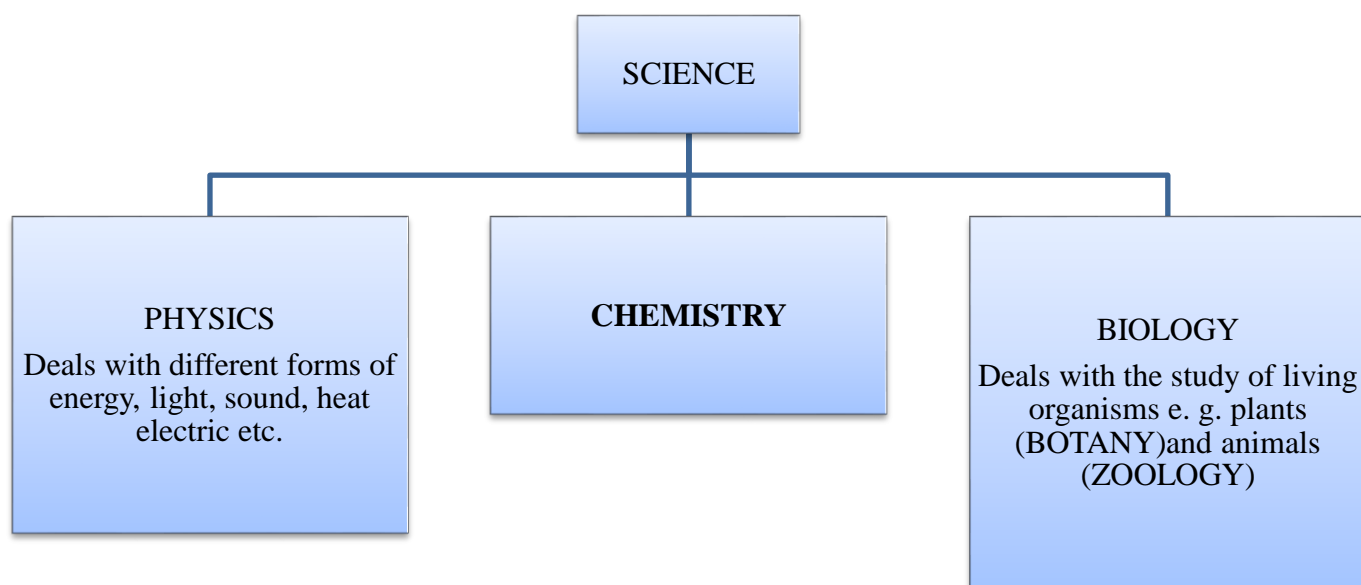
4. Explain the construction and working of beam balance.

5. Explain the construction and working of thermometer with labeled diagram.

HINDMOTOR HIGH SCHOOL
Worksheet 3
SUBJECT-Chemistry
SYNOPSIS

WHAT IS SCIENCE: The intellectual and practical activity encompassing the systematic study of the structure and behavior of the physical and natural world through observation and experiment?

CLASSIFICATION OF SCIENCE



CHEMISTRY: The branch of science concerned with the substances of which matter is composed, the investigation of their properties and reactions, and the use of such reactions to form new substances.

DEVELOPMENT OF CHEMISTRY – A HISTORICAL PERSPECTIVE:

Alchemy is the very old **study** and philosophy of how to change basic substances (such as metals) into other substances. It also studied how substances (and how they are changed into other substances) were related to magic and astrology. People who studied **alchemy** were called **alchemists**.

Alchemists could not succeed in finding the magical substance “philosopher’s stone,” but they were successful to some extent in developing process to extract metals and **alloys**.

SOME GREAT CHEMISTS:

Mendeleev – Russian chemist. Formulated the periodic law.

Antoine Lavoisier - French chemist. Father of Modern Chemistry. Showed that diamond is also form of Carbon. Disproved the phlogiston theory.

John Dalton: Gave Atomic theory.

Jabir Ibn Hayyan: Introduced a systemic and experimental approach to scientific research.

IMPORTANCE OF CHEMISTRY

Name of the field	Example or Application
Domestic	Disinfectants- mosquito repellents, Cleansing agents – soaps, Preservatives- vinegar
Cosmetics	Skin cleanser lotions, hair products – shampoo, talcum powder (mixture of hydrated magnesium silicate and cornstarch.
Clothing	After processing of animal skin, manmade fibers- rayon, nylon.
Transport	Manufacturing of automobiles and their parts
Health	Medicines such as antibiotics- ampicillin and penicillin, antipyretics- Paracetamol, aspirin, antacid- milk of magnesia.
Sports	Sports goods (made from rubber leather etc)
Agriculture	Pesticides-DDT, Insecticides-BHC, DDT, Fungicides-Copper Sulphate , Fertilisers- Urea, Sudge, Weedicides- 2- 4- D, MCPA
Construction	Bricks, Cement, Prcelin tiles, Glass Paints etc.
Food preservation	Benzoic acids
Fuels	Natural gas, kerosene, disel etc.

WORKSHEET 3

1. Answer the following:

- Explain the contribution of John Dalton to develop the Chemistry.
- Mention the contribution of Alexander Flemming in medical world.
- What did the Alchemists hope to achieve with the Philosopher’s Stone.

2. Define the following:

- a. Hypothesis
- b. Inference
- c. Investigation

3. Justify the following statements:

- a. The discovery of rubber revolutionized the import industry.
- b. Water exists in all three states.

HINDMOTOR HIGH SCHOOL
Worksheet 3
SUBJECT-Mathematics
Worksheet(Chapter-2)

1. Find the value of the following : a) $435 \times 17 + 435 \times 3$ b) $1723 \times 86 + 1732 \times 14$ c) $10001 - (726 \div 726)$
2. Rita is making 12 bouquets for a charitable function in a school. In each bouquet there are 12 roses, 10 gerberas and 5 orchids. Use the distributive property of multiplication to find the total number of flowers used in all the bouquets.
3. On dividing a certain number by 126, the quotient is 15 and the remainder is 4. Find the number.
4. Determine the product of the greatest number of three digits and the greatest number of four digits.
5. A vendor supplies 42 liters of milk to a school in the morning and 58 liter of milk in the evening. If the milk costs Rs. 45 a liter, using distributive property find how much money is due to the vendor per day?

HINDMOTOR HIGH SCHOOL

Worksheet 3

SUBJECT-Hindi

Synopsis & Worksheet

कार्य पत्रिक- 3

शब्द विचार की परिभाषा

शब्द विचार हिंदी व्याकरण का दूसरा खंड है जिसके अंतर्गत शब्द की परिभाषा, भेद-उपभेद, संधि, विच्छेद, रूपांतरण, निर्माण आदि से संबंधित नियमों पर विचार किया जाता है।

शब्द की परिभाषा

वर्णों या अक्षरों से बना ऐसा स्वतंत्र समूह जिसका कोई अर्थ हो, वह समूह शब्द कहलाता है। जैसे: लड़का, लड़की आदि।

शब्द विचार का वर्गीकरण

1. अर्थ के आधार पर
2. बनावट या रचना के आधार पर
3. प्रयोग के आधार पर
4. उत्पत्ति के आधार पर

अर्थ के आधार पर शब्द के भेद

अर्थ के आधार पर शब्द के दो भेद होते हैं :

1. सार्थक शब्द
2. निरर्थक शब्द

1. सार्थक शब्द:

वे शब्द जिनसे कोई अर्थ निकलता हो, सार्थक शब्द कहलाते हैं। जैसे: गुलाब, आदमी, विषय आदि।

2. निरर्थक शब्द :

वे शब्द जिनका कोई अर्थ ना निकल रहा हो या जो शब्द अर्थहीन हो, निरर्थक शब्द कहलाते हैं। जैसे: देना-वेना, मुक्का-वुक्का आदि।

रचना (बनावट) के आधार पर शब्द के भेद

रचना के आधार पर शब्द के निम्नलिखित तीन भेद होते हैं:

1. रूढ़ शब्द
2. यौगिक शब्द
3. योगरूढ़ शब्द

1. रूढ़ शब्द :

ऐसे शब्द जो किसी विशेष अर्थ को प्रकट करते हैं लेकिन अगर उनके टुकड़े कर दिए जाएँ तो निरर्थक हो जाते हैं। ऐसे शब्दों को रूढ़ शब्द कहते हैं। जैसे: जल, कल, जप आदि।

2. यौगिक शब्द

ऐसे शब्द जो किन्हीं दो सार्थक शब्दों के मेल से बनते हों वे शब्द यौगिक शब्द कहलाते हैं। इन शब्दों के खंड भी सार्थक होते हैं। जैसे: स्वदेश : स्व + देश, देवालय : देव + आलय, कुपुत्र : कु + पुत्र आदि।

3. योगरूढ़ शब्द

ऐसे शब्द जो किन्हीं दो शब्द के योग से बने हों एवं बनने पर किसी विशेष अर्थ का बोध कराते हैं, वे शब्द योगरूढ़ शब्द कहलाते हैं।

जैसे: दशानन : दस मुख वाला अर्थात रावण , पंकज : कीचड़ में उत्पन्न होने वाला अर्थात कमल आदि।

• बहुव्रीहि समास ऐसे शब्दों के अंतर्गत आते हैं।

प्रयोग के आधार पर शब्द के भेद

प्रयोग के आधार पर शब्द के दो भेद होते हैं :

1. विकारी शब्द
2. अविकारी शब्द

1. विकारी शब्द :

ऐसे शब्द जिनके रूप में लिंग, वचन, कारक के अनुसार परिवर्तन होते हैं, वे शब्द विकारी शब्द कहलाते हैं। जैसे:

- लिंग : बच्चा पढ़ता है। —>बच्ची पढ़ती है।
- वचन : बच्चा सोता है। —>बच्चे सोते हैं।
- कारक : बच्चा सोता है। —>बच्चे को सोने दो।

जैसा कि आप ऊपर दिए गए उदाहरण में देख सकते हैं बच्चा शब्द है यह लिंग, वचन एवं कारक के अनुसार परिवर्तित हो रहा है। अतः यह विकारी शब्दों के अंतर्गत आएगा।

2. अविकारी शब्द :

ऐसे शब्द जिन पर लिंग, वचन एवं कारक आदि से कोई फर्क नहीं पड़ता एवं जो अपरिवर्तित रहते हैं। ऐसे शब्द अविकारी शब्द कहलाते हैं। जैसे: तथा, धीरे, किन्तु, परन्तु, तेज़, अधिक आदि।

जैसा कि हम जानते हैं किन्तु जैसे शब्द लिंग, वचन कारक आदि बदलने पर भी अपरिवर्तित रहेंगे। अतः ये उदाहरण अविकारी शब्दों के अंतर्गत आयेंगे।

उत्पत्ति के आधार पर शब्द के भेद

उत्पत्ति के आधार पर शब्द के चार भेद होते हैं:

1. तत्सम शब्द
2. तद्भव शब्द
3. देशज शब्द
4. विदेशी शब्द

1. तत्सम शब्द :

तत् (उसके) + सम (समान) यानी ऐसे शब्द जिनकी उत्पत्ति संस्कृत भाषा में हुई ओर वे हिन्दी भाषा में बिना किसी परिवर्तन के प्रयोग में आने लगे, ऐसे शब्द तत्सम शब्द कहलाते हैं। जैसे: पुष्प, पुस्तक, पृथ्वी, क्षेत्र, कार्य, मृत्यु, कवि, माता, विद्या, नदी, फल, अग्नि, पुस्तक आदि।

2. तद्भव शब्द :

ऐसे शब्द जिनकी उत्पत्ति संस्कृत भाषा से हुई थी लेकिन वो रूप बदलकर हिन्दी में आ गए हों, ऐसे शब्द तद्भव शब्द कहलायेंगे। जैसे:

- दुग्ध —>दूध
- अग्नि —>आग
- कार्य —>काम
- कर्पूर —>कपूर
- हस्त —>हाथ

3. देशज शब्द

ऐसे शब्द जो भारत की विभिन्न स्थानीय बोलियों में से हिंदी में आ गए हैं, वे शब्द देशज शब्द कहलाते हैं। जैसे: पेट, डिबिया, लोटा, पगड़ी, थैला, इडली, डोसा, समोसा, चमचम, गुलाबजामुन, लड्डु, खटखटाना, खिचड़ी आदि।

ऊपर दिए गए सभी उदाहरण भारत की ही विभिन्न स्थानीय बोलियों में से क्षेत्रीय प्रभाव के कारण परिस्थिति व आवश्यकतानुसार बनकर प्रचलित हो गए हैं। ये अब हिन्दी में आ गए हैं। अतः यह शब्द देशज शब्द कहलायेंगे।

4. विदेशी शब्द

ऐसे शब्द जो भारत से बाहर की भाषाओं से हैं लेकिन ज्यों के त्यों हिन्दी में प्रयुक्त हो गए, वे शब्द विदेशी शब्द कहलाते हैं। मुख्यतः यह विदेशी जातियों से हमारे बढ़ते मिलन से हुआ है। ये विदेशी शब्द उर्दू, अरबी, फारसी, अंग्रेजी, पुर्तगाली, तुर्की, फ्रांसीसी, ग्रीक आदि भाषाओं से आए हैं।

विदेशी शब्दों के उदाहरण निम्न हैं :

अंग्रेजी : कॉलेज, पैसिल, रेडियो, टेलीविजन, डॉक्टर, लैटरबक्स, पैन, टिकट, मशीन, सिगरेट, साइकिल आदि

फारसी : अनार, चश्मा, जमींदार, दुकान, दरबार, नमक, नमूना, बीमार, बरफ, रूमाल, आदमी, चुगलखोर, आदि।

अरबी : औलाद, अमीर, कल्ल, कलम, कानून, खत, फकीर, रिश्त, औरत, कैदी, मालिक, गरीब आदि।

तुर्की : कैंची, चाकू, तोप, बारूद, लाश, दारोगा, बहादुर आदि।

पुर्तगाली : अचार, आलपीन, कारतूस, गमला, चाबी, तिजोरी, तौलिया, फीता, साबुन, तंबाकू, कॉफी, कमीज आदि।

फ्रांसीसी : पुलिस, कार्टून, इंजीनियर, कर्पूर, बिगुल आदि।

चीनी : तूफान, लीची, चाय, पटाखा आदि।

यूनानी : टेलीफोन, टेलीग्राफ, ऐटम, डेल्टा आदि।

जापानी : रिक्शा आदि।

कार्य पत्रिका 3

प्रश्न -1. शब्द किसे कहते हैं?

प्रश्न 2. रूह और यौगिक शब्द की परिभाषा उदाहरण सहित दीजिए?

प्रश्न 3. तत्सम शब्द की परिभाषा एवं उदाहरण दीजिए?

प्रश्न 4. तद्भव शब्द की परिभाषा एवं उदाहरण दीजिए?

प्रश्न 5. देशज शब्द किसे कहते हैं उदाहरण दें?

प्रश्न 6. विदेशी शब्द से क्या तात्पर्य है उदाहरण सहित स्पष्ट कीजिए?

प्रश्न 7. अर्थ के आधार पर शब्दों के भेद लिखिए।

प्रश्न 8. विकारी तथा अविकारी शब्द किसे कहते हैं उदाहरण सहित स्पष्ट कीजिए।

प्रश्न 9 विकारी तथा अविकारी शब्दों में क्या अंतर है?

प्रश्न 10. व्याकरण पाठ्यपुस्तक में दिए गए संक्षिप्त एवं बहुविकल्पी प्रश्नों के उत्तर लिखिए।

HINDMOTOR HIGH SCHOOL

Worksheet 3

SUBJECT-Geography

Ch - Understanding geography- globes and maps

Synopsis and worksheet

Today we will learn about difference between maps and globes, types of maps, parts of map and directions.

1. Maps are representations of Earth or part of Earth on a flat surface whereas globe is a three dimensional model of Earth. It rotates on its axis. In maps, a small area can be shown in detail whereas globe cannot show detail. In maps, the whole Earth can be shown at one time. But in globes; one can view only half of Earth at one time.

2. Types of maps can be. Classified on the basis of scale and on the basis of content and purpose. There can be large scale maps or small scale maps on the basis of scale. And there are physical, political and thematic maps on the basis of purpose.

3. Parts of maps- A map has five basic parts - caption, direction, scale, legend or keys and grid system

4. There are two kinds of directions, cardinal and intermediate. Cardinal directions are mainly four that is North, South, East and West. These four directions can be further divided into eight intermediate directions that is Northeast, Southeast, Southwest and Northwest. These intermediate directions can be further subdivided into sixteen directions.

1. Answer the following questions -

- a. Describe the different directions shown on a map.
- b. State the difference between a globe and a map.
- c. What are the five basic parts of a map? Name them along with brief description.
- d. Draw the conventional signs for international, state and district boundaries.
- e. Fill in the blanks-
 1. A ----- is used by travellers and navigators to help them to find the right direction.
 2. A ----- map shows countries, states, capitals, districts and important towns clearly depicting their boundaries.
 3. ----- are easily taken anywhere and ----- are difficult to carry around.
 4. A ----- introduces the map.

HINDMOTOR HIGH SCHOOL
Worksheet 3
SUBJECT-English Language
Chapter- Countable and Uncountable Nouns

- 1) **Countable Nouns**- Nouns that can be counted and take the plural form. When you have the answer of the question, 'How many?' of that particular noun, that is countable noun.
Example- Mango. "How many mangoes do you have? Answer- 4". That means you can count mangoes and tell the answer which is 4. So 'Mango' is a countable noun.
- 2) **Uncountable Nouns**- Nouns that cannot be counted and do not take the plural form. When you don't have the answer of 'How many?', but you have the answer of 'How much?' of that particular noun, that is uncountable noun.
Example- Water. "How much water do you want to drink now? Answer- a glass of water".
Thus water itself is not countable. Uncountable nouns do not have plural form. They are paired with words that show the quantity of the noun.

Assignments:

a) Underline the countable nouns and circle the uncountable nouns in the given sentences:

- i) Your book is on the kitchen table.
- ii) She took a lot of photographs on my birthday.
- iii) Most kids like milk, but Ronn hates it.
- iv) She has a long, black hair.
- v) Michael can play several different musical instruments.

b) Correct the errors in these sentences and rewrite them:

- i) Please call a local police immediately.
- ii) I heard these news at night.
- iii) How many bananas did you buy?
- iv) Rita wants to work with the poors.
- v) How many money does he earn?
- vi) I have received no informations about the theft.
- vii) Please pack your luggages on time.
- viii) I hope you didn't go through many trouble to get here.

HINDMOTOR HIGH SCHOOL
Worksheet 3
SUBJECT-Bengali

“অদ্ভুত আতিথেয়তা” গল্পটির মূলভাব :-

এই গল্পটি ইশ্বরচন্দ্র বিদ্যাসাগর মহাশয়ের লেখা গল্প সংগ্রহ থেকে নেওয়া। ইব্রাহিম প্রাণদণ্ডের ভয়ে কুফা নগরে উপস্থিত হন। সেখানে এক ধনী ব্যক্তির বাড়িতে আশ্রয় লাভ করেন। আরবদের রীতি এই যে, তাঁরা অতিথির কোনো পূর্বপরিচয় না জেনেই তাঁকে আশ্রয় দেন। দেখা যায়, ইব্রাহিম ওই আশ্রয়দাতা ধনী ব্যক্তির পিতাকেই হত্যা করেছেন। গৃহস্বামী এই পরিচয় পেয়ে ইব্রাহিম কে হত্যা করতে উদ্যত হন। কিন্তু আরবদের রীতি অনুযায়ী তা করলে গৃহস্বামী অধর্মগ্রস্ত হবেন। সুতরাং নিজেকে সংবরণ করে ইব্রাহিম কে তৎক্ষণাৎ একশো স্বর্ণমুদ্রা দিয়ে বিদায় করেন। নিজের পিতার হত্যাকারী জেনেও গৃহস্বামী কোন প্রতিশোধ নিতে পারলেন

না। বরং অতিথির অসম্মান হয় – এই আশঙ্কায় হত্যাকারী কে যথাযোগ্য সন্মানসহ বিদায় দেন। আতিথেয়তার এই অনন্য দৃষ্টান্ত গল্পটির কেন্দ্রীয় ভাব।

সঠিক উত্তর টি বেছে নাও:-

১) ইব্রাহিমের বাবার নাম

ক) সেলিম খ) সলিমন গ) ইউনিস

২) ইব্রাহিমের প্রচ্ছন্নবেশে উপস্থিত হয়েছিলেন

ক) কুফা নগরে খ) বাগদাদে গ) মদিনা নগরে

৩) আরবদের রীতি হল -

ক) অতিথি শত্রু হলে হত্যা করা খ) অতিথি শত্রু হলে তাড়িয়ে দেওয়া

গ) অতিথি শত্রু হলেও আশ্রয় দেওয়া

৪) ইব্রাহিম কিছুদিন পূর্বে এক ব্যক্তিকে হত্যা করেছিলেন, এই ব্যক্তি

ক) গৃহস্বামীর পিতা খ) গৃহস্বামীর বন্ধু গ) গৃহস্বামীর পরিচিত

৫) গৃহস্বামী ইব্রাহিমকে বিদায় দিলেন

ক) এক লক্ষ স্বর্ণমুদ্রা দিয়ে খ) দুশো স্বর্ণমুদ্রা দিয়ে গ) একশো স্বর্ণমুদ্রা দিয়ে

একটি কথায় উত্তর লেখো :-

ক) 'অদ্ভুত আতিথেয়তা' গল্পে অতিথি কে?

খ) ইব্রাহিম প্রচ্ছন্ন বেশে থাকতেন কেন?

গ) গৃহস্বামী প্রতিদিন কোথায় যেতেন?

ঘ) কে, কার পিতার প্রানহন্তা?

ঙ) গৃহস্বামী পাথের স্বরূপ অতিথিকে কী দিয়েছিলেন?

তিনটি করে সমার্থক বা প্রতিশব্দ লেখো :-

ক) আকাশ খ) সূর্য গ) আলো ঘ) নদী ঙ) জল চ) আগুন ছ) পাহাড় জ) চন্দ্র ঝ) রাত্রি ঞ) ফুল ট) বাগান

HINDMOTOR HIGH SCHOOL

Worksheet 3

SUBJECT-English Literature

Chapter- Paper Boats

Summary:

This poem is on a childhood experience of the poet. It narrates the child's experience of floating his paper boats one by one down the running stream. He writes his name and address in big black letters with the intention that they would reach some distant lands. He fondly hopes that somewhere someone will find them and know him. He also loads his boats with shiuli flowers from his garden and hopes that the boats will carry the flowers safely to the distant land in the night. He imagines that he has a friend in the sky, thinking that the other child sends white clouds down the air to compete with his boats. At night he sees dreams in his sleep. He dreams about his paper boats and is happy to know that angels are sailing in his boats.

The poem is thus Tagore's keen insight into the child's mind.

1) Explain the given lines:

I launch my paper boats and look up into the sky and see

The little clouds setting thee white bulging sails.

I know not what playmate of mine in the sky sends them
Down the air to race with my boats!
When night comes I bury my face in my arms and dream
That my paper boats float on and on under the midnight stars.

2) Answer the following questions:

- a) What does he see when he looks up at the sky?
- b) What does he think about the clouds?
- c) What does the poet dream of?
- d) What will someone in some strange land find?

HINDMOTOR HIGH SCHOOL
Worksheet 3
SUBJECT-Computer
Synopsis & Worksheet

Chapter - Computer Language (Part-2)

Assembler: An **assembler** is a program that converts assembly language into machine code. It takes the basic commands and operations from assembly code and converts them into binary code that can be recognized by a specific type of processor.

Compiler: A compiler is a software program which is used to convert a program written in high level languages to machine languages. It compiles the whole program at once. A list of errors (if occurs) is generated at the end of the program, which can be removed later.

Interpreter: An interpreter is a software program which is used to convert a program written in high level language to machine language. The difference between compiler and interpreter is that compiler compiles the whole program at once but interpreter processes one line at a time. It stops where an error occurs which is to be removed immediately.

Fourth Generation Language: A fourth generation language is non procedural languages which are designed to build specific programs. There is less requirements of coding than low level programming languages. They are accessible to people without proper training as a programmer. Multiple common operations can be performed by writing a single command. Most 4GLs are used to access databases using commands. In such languages the user just needs to specify the required result and the computer will determine the set of instructions which will produce result.

Ex: SQL, NOMAD, FOCUS etc.

Advantages:

- 1) It has simplified programming process.
- 2) System development is faster.

Disadvantages:

- 1) They are far less efficient during program execution than high level languages.
- 2) The program developed using this language needs more memory space.

Fifth Generation Language: These languages are used to allow the computer system to solve a given problem without a programmer. The user needs to tell the problem to be solved and condition. He doesn't need to burden about the program or algorithm to solve the problem. These languages are mainly used in Artificial Intelligence. It provides visual or graphical interface called a visual programming environment for creating source codes. People can talk to computers and the voice recognition system converts spoken sounds into written words.

Ex. Prolog, Mercury etc.

Advantages:

- 1) It helps to develop decision making machine.
- 2) System automation which allows the system to function without manual intervention.

Disadvantages:

- 1) Programs continue to become more complicated and system is not able to sort it through original algorithm.

W o r k s h e e t

Short Answer Questions:

- 1) List two disadvantages to machine languages.
- 2) Which language is considered to be the fourth generation languages?
- 3) What is assembler?

Long Answer Questions:

- 1) Write a short note about compiler and interpreter. What is the difference between these two?
- 2) Write a short note about 5GLs and its advantages and disadvantages.

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Worksheet 3

SUBJECT-Biology

Chapter – 1, Plant Life

Synopsis or key point for solving this worksheet

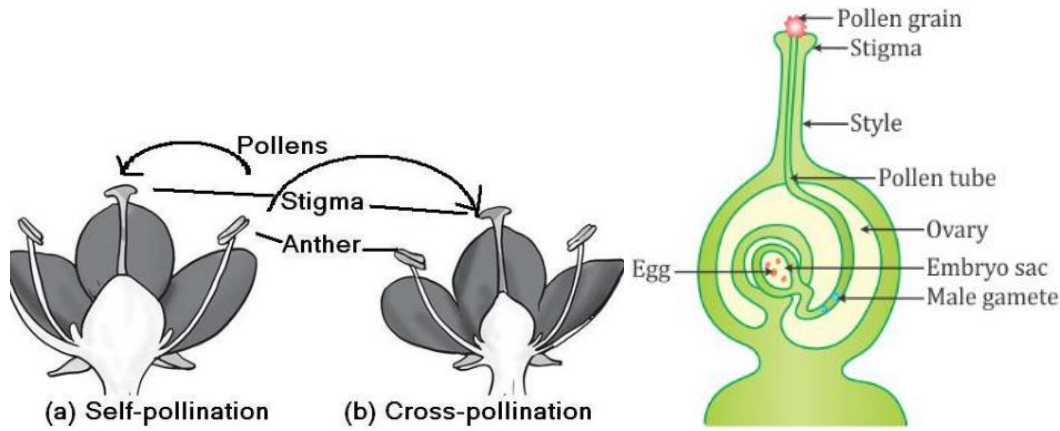


Fig: Pollination

Fig:-Process explaining Fertilization.

Key points-

Agents of pollination-

- 1) Insects, 2) winds, 3) water, 4) animals

Conditions for germination

- 1) Air
- 2) Water
- 3) Optimum temperature

Fertilization

The fusion of male and female cells to form zygote.

Pollination

Transfer of pollen grain from anther to stigma

Worksheet 3

1. What do you understand by the term of self – pollinations and cross – pollinations?
2. Name some agents of pollinations.
3. What is fertilization?
4. Differentiate the monocotyledonous and dicotyledonous seeds.
5. What are the necessary conditions for seed germination?
6. Draw a whole plant with its different parts using colour?

HINDMOTOR HIGH SCHOOL

Worksheet 3

SUBJECT-History

Synopsis:-

We study history to know about the gradual changes in man's life from pre historic time, the social cultural and religious life of people, the achievement of kings and people of different land their custom, politic, economy etc. Religious literature gives us significant information about the social life and value system of a particular period. For example Ramayana, Mahabharata, Vedas etc. Accounts of foreign travelers like Writing of Hiuen Tsang, Fa Hien, Ctarih-E-Hind by Alberuni, Indica by Megasthenis etc. From this we get to know about the religious life and value system, administration, architecture, foreign policy, war policy, diplomacy of a particular period. Secular literature focus on non-religious facets, music, dance, painting, architecture and administration of a historical period. Writings on rocks, pillars, clay tablets, copper plates and palm leaves where forms of early writing.

1. Why is the study of history important for us?
2. Name the earliest inscriptions of India?
3. Write a note on the religious literature of India?
4. Write a note on the foreign travelers whose written accounts serve as good sources of historical information on India.
5. What do we learn from secular literature?
6. Which excavated objects help us to know about early life?
7. Name some forms of early writing?