

HARI VIDYA BHAWAN
Worksheet - 5
Class-IX
Subject- Science
Session- 2020-21
Ch- 1 Matter In Our Surrounding

Date-04/04/2020

Matter:- Anything which occupies space and has mass, is called matter.
E.g. - Air, water, soil etc.

Physical nature of matter:-

- *All the matters are made of particles. These small particles are known as atom.
- * These particles (atom) are too small and cannot be seen by naked eyes.

Characteristics of matter:-

- * **Particles of matter are very, very small.**

E.g. When a small crystal of potassium permanganate dissolve in water. It turn water into pink color. Means each crystal is made up of millions of small particles, which occupies space between the particles of water.

- * **Particles of matter have space between them.**

E.g. when we mix some salt in water and stir it, the salt disappears but the water level remain same, because the salt particles occupy the space between the particles of water.

- * **Particles of matter are constantly moving.**

In liquid and gas Particles of matter are constantly moving, this movement is known as Brownian movement.

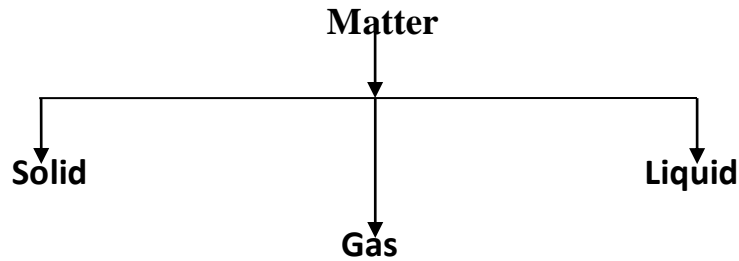
E.g.1. Fragrance of an incense stick spread in the whole room quickly. 2. When a few crystal of copper sulphate are placed at the bottom of a beaker containing water, then water in the whole beaker turns blue slowly.

- * **Particles of matter attract each other.**

There are forces of attraction between the particles of matter which bind them together. It is different in different matter. E.g. when we break a piece of chalk, a ice cube and an iron nail by a hammer. Then a chalk is easily broken down into pieces, an ice cube requires more force to break, but an iron nail does not break at all even a large force. Because the force of attraction between the particles of chalk is weak and in iron nail is very strong.

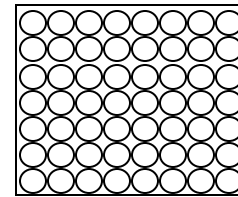
Classification of matter:-

On the basis of physical state all the matter can be classified into three states-



Properties of solids-

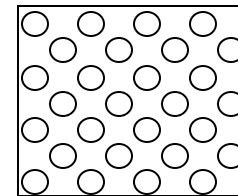
- * Solids have a fixed shape and a fixed volume.
- * Solids cannot be compressed much.
- * Solids have high density.
- * Solids do not flow.
- * Diffusion is slowest.
- * Inter particles space is very low.
- * High attraction force between the particles.
- * E.g. wood, coal, stone, iron etc.



Solid

Properties of liquids-

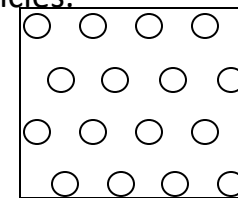
- * Liquids have a fixed volume but they have not a fixed shape.
- * Liquid can be compressed more than solids.
- * Liquids have less density than solids but higher than gas.
- * Liquids flow easily, because of kinetic energy of particles.
- * Diffuse easily.
- * Inter particles space is higher than solids.
- * High attraction force between the particles than gas but less than solids
- * E.g. water, milk, oil, juice etc.



Liquid

Properties of Gases-

- * Gases have neither a fixed shape nor a fixed volume.
- * Gases are highly compressible.
- * Gases have very low density.
- * Gases flow very easily, because of high kinetic energy of particles.
- * Inter particles space is very high.
- * Force of attraction is negligible.
- * Diffusion is fastest.
- * E.g. oxygen, nitrogen, carbon di oxide, steam etc.



Gas

Diffusion:- Mixing of substance with another substance due to motion of its particles is called diffusion.

*The rate of diffusion increases on increasing the temperature.

* Diffusion is fastest in gases and slowest in solids.

* E.g. Smell of perfume or an incense stick or food being cooked in kitchen reaches to several meters away.

Answer the following questions:-

Q.1 Which of the following are matter?

Chair, air, love, smell, hate, almonds, thought, cold, cold drink, smell of perfume.

Q.2 Give reasons for the following observations:-

The smell of hot sizzling food reaches you several meters away but to get the smell from cold food, you have to go close.

Q.3 A diver is able to cut through water in swimming pool. Which property of matter does this observation show?

Q.4 The mass per unit volume of a substance is called density (density=mass/volume). Arrange the following substance in order of increasing density:

Air, exhaust from chimney, honey, water, chalk, cotton and iron.

Q.5 Comment upon the following:

Rigidity, Compressibility, fluidity, filling a gas container, shape, kinetic energy, and density.

Q.6 Give reasons:

(a) A gas fills completely the vessel in which it is kept.

(b) A gas exerts pressure on the walls of the container.

(c) A wooden table should be called a solid.

(d) We can easily move our hand in air but to do the same through a solid block of wood, we need to be a karate expert.

Q.7 Liquids generally have lower density as compared to solids. But you must have observed that ice floats on water. Find out why?

Note:

- **Above** questions are given from NCERT blue box questions (page no. 3 & 6). For solutions refer provided NCERT application via link: <https://play.google.com/store/apps/details?id=letest.ncertbooks>

- To understand the physical nature of matter see the video via link:
<https://youtu.be/OjEIFVfHdWs>
- <https://youtu.be/CBCc014OAJE>
- To solve question 1-5 see the link:
https://youtu.be/iBOiknZ8_ig
- To solve question 6 see the link:
<https://youtu.be/EXi7KW2uG8I>

HARI VIDYA BHAWAN

Subject: English

Class-X

Work sheet-5

Grammar-Reading (Section-A)

DATE:- 04/04/2020

Q 1- Read the passage given below and answer the question that follow:-

Today budgies-often called lovebirds in India -are the most popular pet birds in the world. All the adored cage birds of today are the descendants of parrots. They are one of the smallest of the world's 330 parrot species which have come down from a plucky little bird in rural Australia. Some appear to be about 30 cm long from tail tip to crown, with bulbous, fluffy foreheads, barrel chests and deep-set eyes. Their colours are striking; vivid shades of blue, grey and green as well as violet and white. Most startling of all are the yolk- yellow birds, called Latinas that are like splashes of luminous paint. The first colour mutations in captive birds were blue and yellow. Today, breeders raise birds with rainbow of colours.

Love birds stay near water when it's dry, but when there's a lot of rain they spread out. They are sometimes seen nestling on top of tall eucalyptus trees. While some of the caged varieties would have difficulty flying across a room, wild budgies travel hundreds of kilometers at speeds of up to 50 kilometers per hour to seek seed and water. Even in prolonged droughts, the budgie has an extraordinary ability to withstand dehydration. When deprived of water, budgies can reportedly exist with little weight loss for more than a month at an average air temperature of 30 degrees. At 20 degrees, some can apparently survive' indefinitely without water, provided they are getting some moisture from food.

Male budgies can be excellent mimics and can develop huge vocabularies. Hens may whistle and can learn a few words, but they are not nearly as loquacious as males. Budgies are diamorphic upon sexual maturity. Adult males of most colours, except albino and the very pale pastels, develop a blue colour. Hens have a lilac or tan colour that turns brownish upon maturity.

Attempt following question on the basis of the passage you have read:-

- (a) Name the most popular pet birds in the world?
- (b) Who were the ancestors of the caged birds?
- (c) Where do love birds stay during dry weather?
- (d) What do you know about the travelling capacity of budgies?
- (e) Why according to the author, are budgies tough birds?

Q2. Read the passage given below and answer the question that follow:-

- 1) Bhoodan (land gift) is one of the most inspiring movement of past –independent India, started by Acharya Vinoba Bhave(1894-1982). A favourite disciple of Mahatma Gandhi, young Vinoba when only 10 years old vowed to remain a Brahmachari and served his country. He was greatly moved by the pitiable plight of the landless peasants and made it his life's mission to improve their conditions.

- 2) In 1951, Vinoba Bhave began his padayatra for Bhoodan from Pochampalli village in Andhra Pradesh. He appealed to the land-rich Zamindars to donate one sixth of their land for the landless families. "I have come to rob you with love," he said to them at his meeting, "I want you to with your surplus land for the landless."
- 3) His appeal had a tremendous response. In eighteen years, this 'walking saint' collected 4.2 million acres as gifts from 6,00,000 donors.
- 4) The Bhoodan movement has paved the way for several land reforms. Laws have been passed stipulating a ceiling on land holdings.
- 5) Vinoba Bhave was a linguist and a gifted scholar. His best known work, talks on the Gita, is a collection of discourses which he delivered to prisoners during his imprisonment in British jail.

Attempt following question on the basis of the passage you have read:-

- 1) What does the term 'Bhoodan' mean?
- 2) What was Vinoba Bhave's mission in life?
- 3) What did Vinoba Bhave appeal to the Zamindars of Andhra Pradesh?
- 4) How can you say that his appeal had a tremendous response?
- 5) What is Vinoba Bhave's best known work?

Hari Vidya Bhawan
Worksheet-5
Class-X
Subject- Information Technology

Date:-4-4-20

Note:- (Do all questions & answers in computer notebook and draw double line at the end of all questions and answers)

L-1 Communication Skills

Question and answers practice exercise – 4, 5, 6

(page no.-32, 41, 48)

Q.1 Define effective communication.

Ans. – An effective communication is a communication between two or more persons wherein the intended message is successfully delivered, received, and understood.

Q.2 Mention 7C's of communication.

Ans.- 7C's of communication:-

1. **Clear:** The message should be clear and easily understandable to the recipient. The purpose of the communication should be clear to sender then only the receiver will be sure about it. The message should emphasize on a single goal at a time and shall not cover several ideas in a single sentence.



Draw this figure in 2 answer with all points

2. **Correct:** The message should be correct, i.e. a correct language should be used, and the sender must ensure that there is no grammatical and spelling mistakes. Also, the message should be exact and well-timed. The correct messages have a greater impact on the receiver and at the same time, the morale of the sender increases with the accurate message.
3. **Complete:** The message should be complete, i.e. it must include all the relevant information as required by the intended audience. The complete information gives answers to all the questions of the receivers and helps in better decision-making by the recipient.
4. **Concrete:** The communication should be concrete, which means the message should be clear and particularly such that no room for misinterpretation is left. All the facts and figures should be clearly mentioned in a message so as to substantiate to whatever the sender is saying.
5. **Concise:** The message should be precise and to the point. The sender should avoid the lengthy sentences and try to convey the subject matter in the least possible words. The short and brief message is more comprehensive and helps in retaining the receiver's attention.
6. **Consideration:** The sender must take into consideration the receiver's opinions, knowledge, mindset, background, etc. in order to have an effective communication. In order to communicate, the sender must relate to the target recipient and be involved.
7. **Courteous:** It implies that the sender must take into consideration both the feelings and viewpoints of the receiver such that the message is positive and focused at the audience. The message should not be biased and must include the terms that show respect for the recipient.

Q.3 Write five characteristics of effective communication.

Ans.- five characteristics of effective communication:-

1. **Use simple language:-** The language used in the communication should be simple and Understandable.
2. **Clearness:-** The communication should be clear in his mind about the objective of his communication. There should not be any ambiguity in language.
3. **Completeness:-** The message delivered should be complete. It should be supported by facts and observations.
4. **Adequacy of information:-** It should contain adequate information and should be complete in all respect; otherwise it will not serve the purpose of communication.
5. **Proper medium of communication:-** The communicator should select the proper media of communication by considering such factors as the nature of communication, urgency of communication, distance between the communicator and recipient of communication.
6. **Accurate and conciseness:-** An effective communication should be accurate and should be concise. It should not include any unnecessary details.
7. **Proper feedback:-** Whether the message sent by the sender is understood in same terms by the receiver or not can be judge by the feedback received. The feedback should be timely and in personal.

Q.4 Why proper feedback is essential in effective communication?

Ans.- Effective feedback has benefits for the giver, the receiver, and the wider organization. Here are five reasons why feedback is so important:-

- a) **Feedback is always there:-** In actuality, feedback is around us all the time. Every time we speak to a person, employee, customer, vendor, etc., we communicate feedback. In actuality, it's impossible not to give feedback.
- b) **Feedback is effective listening:-** Whether the feedback is done verbally or via a feedback_survey, the person providing the feedback needs to know they have been understood (or received) and they need to know that their feedback provides some value.
- c) **Feedback can motivate:-** By asking for feedback, it can actually motivate employees to perform better.
- d) **Feedback can improve performance:-** The best find of feedback that can help to formulate better decisions to improve and increase performance.
- e) **Feedback is a tool for continued learning:-** Invest time in asking and learning about how others experience working with your organization. Continued feedback is important across the entire organization in order to remain aligned to goals, create strategies, develop products and services improvements, improve relationships, and much more. Continued learning is the key to improving.

Q.5 As per your knowledge, which of the following are the characteristics feature of communication?

- a) Communication involves exchange of ideas, facts and opinions.
- b) Communication involves both information and understanding.
- c) Communication is a continuous process.
- d) Communication is a circular process.

Ans.- _ As per our knowledge all these four characteristics are the features of communication.

Q.6 Determine the kind of sentences:-

- | | |
|---|----------------------|
| a) Bring me that book. | <u>Imperative</u> |
| b) Yaman distributed chocolates. | <u>Declarative</u> |
| c) You look adorable! | <u>exclamatory</u> |
| d) How do you know this? | <u>Interrogative</u> |
| e) I am feeling tired. | <u>Declarative</u> |
| f) Can you please ask him for the dinner? | <u>Interrogative</u> |
| g) May god bless you! | <u>Imperative</u> |

- h) I will go to Canada next year.
- i) Open the gates.
- j) Is it for free?
- k) He will play with me.
- l) Sit down and be quiet!

Declarative
Imperative
Interrogative
Declarative
Imperative

Q.7 Fill the appropriate articles (a, an, or the) for the following:

- a) She has a parrot.
- b) What is the name of the next station?
- c) Can I have an airplane?
- d) The earth is round.
- e) Dibesh is wearing a blue dress with red shoes.
- f) Would you like to see the film?
- g) Is there the cash machine near here?
- h) She is an English teacher.
- i) Christmas comes once a year.
- j) I recommend you try the tomato soup at this restaurant.
- k) Kartik and yash went to the party last night.
- l) This is an easy question.
- m) Payal could speak a little louder.
- n) May I ask you a question?
- o) Do you have the dictionary that I can borrow?
- p) Sudhir is an engineer.
- q) Shrihari is the best teacher in our school.

➤ **Click over these links to get knowledge about communication skills**



https://www.youtube.com/watch?v=px_N3wPni6A

https://www.youtube.com/watch?v=2g6l_vs0hGE

<https://www.youtube.com/watch?v=LKk9oo-fwF4>