

**HARI VIDYA BHAWAN**  
**Worksheet - 6**  
**Class-IX**  
**Subject- Science**  
**Session- 2020-21**  
**Ch- 1 Matter In Our Surrounding**

**Date-08/04/2020**

**Change in state of matter-**

1. By changing the Temperature
2. By Changing the Pressure.

**1. By changing the Temperature**

**Melting (fusion)** - Change of solid into liquid on heating, is called melting. The temperature, at which a solid melts at atmospheric pressure, is called its melting point.

**Boiling (Vaporization)**-Change of liquid into gas on heating, is called boiling. The temperature, at which a liquid change into gas (or vapor) at atmospheric pressure, is called its boiling point.

**Condensation**- Change of a gas (or vapor) to a liquid by cooling, is called condensation.

**Freezing (Solidification)** - Change of liquid into a solid by cooling, is called freezing.



**Sublimation**- Change of a solid directly into vapors on heating and of vapors into solid on cooling, is known as sublimation. eg- naphthalene balls, camphor etc.

**Solid**     $\longleftrightarrow$     **Vapor (gas)**

**Latent heat-** The heat energy which is required to change the state of a substance is called its latent heat.

\* Latent heat does not rise the temperature of the substance.

\* Latent heat is of two types-

**1. Latent heat of fusion-** The amount of heat energy required to change 1kg of the solid to liquid at its melting point, is called latent heat of fusion.

**2. Latent heat of vaporization-** The amount of heat energy required to change 1kg of the liquid to gas or vapor at its melting point, is called latent heat of vaporization.

**Unit of temperature-**

\* The common unit of temperature is degree Celsius ( $^{\circ}\text{C}$ ).

\* SI unit of temperature is Kelvin (K).

\* The melting point of an ice on degree Celsius is  $0^{\circ}\text{C}$  and on Kelvin scale is 273K.

$$0^{\circ}\text{C} = 273\text{K}$$

**E.g. Convert the following temperature**

(i) Kelvin scale to Celsius scale-  
450K

(ii) Celsius scale to Kelvin scale-  
 $30^{\circ}\text{C}$

**Solution:**

$$\begin{aligned} \text{(i) } ^{\circ}\text{C} &= \text{K} - 273 \\ &= 450 - 273 \\ &= 177^{\circ}\text{C} \end{aligned}$$

$$\begin{aligned} \text{(ii) K} &= ^{\circ}\text{C} + 273 \\ &= 30^{\circ} + 273 \\ &= 303\text{K} \end{aligned}$$

**2. By Changing the Pressure-**

**Liquefaction-** Gases can be liquefied by applying pressure and lowering temperature. E.g. CNG, LPG etc.

**Evaporation-** The process of a liquid changing into vapor (gas) below its boiling point is called evaporation. Volatile substances evaporate easily at room temperature. eg- Acetone, perfume, petrol etc.

**Factors affecting evaporation:-** The evaporation depends on-

- (i) Temperature- The rate of evaporation increases on increasing the temperature of liquid.
- (ii) Surface area- The rate of evaporation increases on increasing the surface area of the liquid.
- (iii) Humidity- The rate of evaporation increases is high when the humidity of air is low.
- (iv) Wind speed- The rate of evaporation increases with increasing wind speed.

**Plasma-** Plasma is a mixture of free electrons and ions. It is also considered as fourth state of matter. E.g. stars, fluorescent tubes and neon bulbs form plasma when they lighted.

**Bose-Einstein condensate (BEC)-**

It is a fifth state of matter. It is a state of gases by cooling to super low temperatures.

**Answer the following questions-**

Q.1 Convert the following temperatures to Celsius scale:

- (a) 300K (b) 573K

Q.2 What is the physical state of water at:

- (a) 250°C (b) 100°C

Q.3 For any substance, why does the temperature remain constant during the change of state?

Q.4 Suggest a method to liquefy atmospheric gases.

Q.5 Why does a desert cooler cool better on a hot dry day?

Q.6 How does the water kept in an earthen pot (matka) become cool during summer?

Q.7 Why are palm feel cold when we put some acetone or petrol or perfume on it?

Q.8 Why are we able to sip hot tea or milk faster from a saucer than a cup?

Q.9 What type of clothes should we wear in summer and why?

Q.10 Convert the following temperatures to the Kelvin scale:

- (a) 25°C (b) 373°C

Q.11 Give reasons for the following observations:

- (a) Naphthalene balls disappear with time without leaving any solid.  
(b) We can get the smell of perfume sitting several meters away

Q.12 Arrange following substances in increasing order of forces of attraction between the particles – water, sugar, oxygen.

Q.13 What is the physical state of water at:

- (a) 25°C ? (b) 0°C? (c) 100°C ?

Q.14 Give two reason to justify:

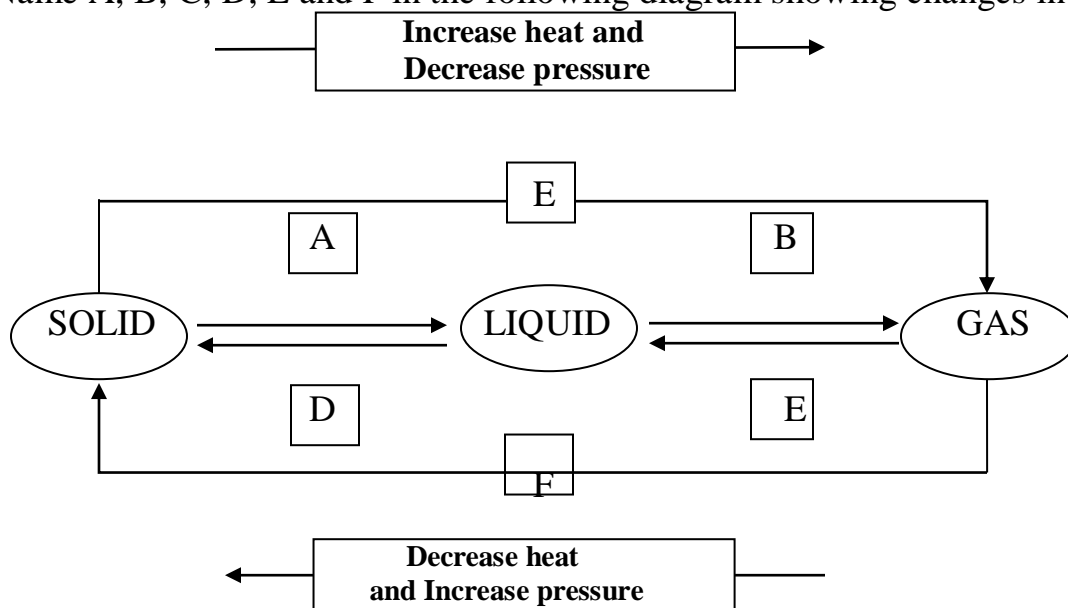
(a) Water at room temperature is a liquid.

(b) An iron almirah is a solid at room temperature.

Q.15 Why is ice at 273 K more effective in cooling than water at the same temperature?

Q.16 What produces more severe burns – boiling water or steam?

Q.17 Name A, B, C, D, E and F in the following diagram showing changes in state:



### Note-

- Above questions are given from NCERT blue box questions and exercise (page no. 9, 10 & 12). For solutions refer provided NCERT application via link:  
<https://play.google.com/store/apps/details?id=letest.ncertbooks>
- To understand Q. 5 and 6 watch the video via link:  
<https://youtu.be/SJKQI0vgSTs>
- For Q.7: <https://youtu.be/dTGd2RJMRZM>
- For Q.8 : <https://youtu.be/EYT4I0eyPOI>
- For Q.11(a): <https://youtu.be/IZTTzAkeSFQ>



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**HARI VIDYA BHAWAN**

**Subject: English**

**Class-X**

**Work sheet-6**

**Chapter 7**

**Determiners (Grammar)**

**DATE:- 08/04/2020,**

**Questions for practice:-Learn and write.**

Q 1. Write definition of Determiners.

Q 2. Write a kind of Determiners with one one example each.

**Exercise:-**

**Fill in the blanks with suitable determiners.**

- a) .....books are missing from the library.(Any, Some)
- b) She has not solved.....sums.(many, any)
- c) This book is mine but.....is yours.(that, any)
- d) .....boys have done their work.(that, these)
- e) He didn't make .....progress.(much, many)
- f) He has forgotten.....of the details.(some, many)
- g) The District Magistrate visited.....flood affected area.(every, either)
- h) .....Villa is this?(this, those)
- i) He is the.....boy who has joined this gym.(first, whose)
- j) I met her.....week.(this, those)

Link : <http://youtu.be/SrHrTUZWww4>

\*Just go on this link n watch the video and try to understand.

**Chapter 2 Tense:- Past Tense (Grammar)**

Q 1 write Past Tense-

\*Simple Past Tense,

\*The Past Progressive or Continuous Tense,

\* Past Perfect Tense

\*Past Perfect Progressive or Continuous Tense,

\*Write It's rules with one-one examples in your note book.

**Exercise:-**

Choose the right/most appropriate word from the options given below to complete the following letter.

Dear Daddy

I hope all is well with you. Everything is fine here. I am sorry I (i).....write earlier. I was busy with my coaching camp (ii).....is now over. After the annual examination most of (iii).....boarders have left for their homes. Only a few like me (iv).....left behind. I can't express how badly I miss you all. I don't know(v).....I ll be able to join you. Dad I hate (vi).....a boarder. How lonely it is to stay here(vii).....the vacation! The inmates left(viii).....not only boring but also nasty. I hope you will come to my rescue soon.

Hints:-

- |               |           |           |
|---------------|-----------|-----------|
| 1 a) couldn't | b) hasn't | c) hadn't |
| 2 a)which     | b)being   | c) to     |
| 3 a) which    | b) are    | c) the    |
| 4 a) couldn't | b)which   | c) are    |
| 5 a)am        | b) when   | c) being  |
| 6 a) being    | b) which  | c) to     |
| 7 a) during   | b) are    | c) were   |
| 8 a) is       | b) was    | c) are    |

Link :- <http://youtu.be/pXZtRZpGNck>

Just watch the videos with the help of this link.



**Hari Vidya Bhawan**  
**Worksheet-6**  
**Class-X**  
**Subject- Information Technology**

Date:- 8.4.20

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

**L-2 Self-Management Skills**

**Question and answers practice exercise – 1 & 2**

**Q.1 What five characteristics of positive sources?**

**Ans.** – When we are in positive stress, it shows many characteristics like:-

1. It motivates and focuses energy to handle difficulties.
2. Can help us achieve our goals
3. Certain level of stress helps us focus and concentrate better.
4. It feels exiting.
5. It improves performance.

**Q.2 Name any five symptoms of stress that you observe with your friend .**

**Ans.-** 1. Irritability or short temper.

2. Aches and pain.
3. Eating more or less
4. Nervous habits.
5. Anxious or facing thoughts.

**Q.3 Which of the following statement is false?**

- a) Stress is the imbalance between the demands of everyday life and ability to cope.
- b) Too much stress can affect a person's ability to function effectively.
- c) Stress is caused by external pressures, such as work.
- d) Stress can involve any interference that disturbs a person's emotional and physical well-being.

**Ans.-** Stress is the imbalance between the demands of everyday life and ability to cope statement is false.

**Q.4 How does yoga help managing stress?**

**Ans.-** As **yoga** combines several techniques used for **stress** reduction, it can be said to provide the combined benefits of breathing exercises, stretching exercises, fitness programs, meditation practice, and guided imagery, in one technique. Many of the popular techniques found to reduce stress derive from yoga:

**Q.5 How vacation or holiday helps to minimize stress?**

**Ans.-** A **holiday or vacation** should be considered as an opportunity to take a break, a rest and a respite from the **stress** in your life. It can **help** you to reduce your **stress** levels, regain your composure and recharge your energy levels.

1. Vacations Relieve Stress---Stress is a true physiological response originally meant to help us.
2. Vacations Help Prevent Heart Disease---Stress is one of the major contributors to heart disease.
3. Vacations Help Maintain Focus---Studies find chronic stress can affect the part of the brain.
4. Vacations Help Prevent Illness---There is a whole field of research called psychoneuroimmunology.
5. Vacations Strengthen Relationships--Vacationing with your family or loved ones help forge closer bonds.

### Q.6 Write five benefits of stress management technique.

**Ans.-** five benefits of stress management technique.

1. It improves our overall health status.
2. You are able to assume a more positive attitude and outlook in life.
3. It increases we're our productivity since we are able to focus clearly on our tasks.
4. We have control over our emotions and how we respond to it.
5. And more importantly, we reduce or eliminate stress in our life.

### Q.7 What are the skills are needed to work independently?

**Ans.-The skills are needed in work independently:-**

1. **Organizational skills:-** As we know working independently, probably we do not have assistant to answer the Phone, to make some copies or to remind us of urgent appointments etc.
2. **Multitasking ability:-** If we want to earn some (more) money, we often must do several things at once. We cannot just do and finish one project and then we start to look for our next project.
3. **Discipline.** The springtime could possibly influence our work as much as it did when we were inside the four walls of our boss's office ...
4. **Communication skills.** How do we tell a customer that his taste is very horrible? Or how do we ask our client to pay his unpaid bills?.
5. **Ability to deal with rejection and not to take it personally:-** Some fellow independents say that they have to make at least ten phone calls to make one lead. Sometimes we have to contact some potential clients more than three to five times before they sign a contract. Some of them reject our proposal with no obvious reason at all (at least none that makes sense). Learn to deal with rejections and do not take them personally. Remember, there are lots of other clients who want to work with us!
- 6 **Ability to compromise:-** Most people choose to work independently in order to be able to set their high standards. Compromising is a very important aspect if we want to keep clients happy and satisfied with our work and services.
- 7 **Flexibility:-** In my experience, there is (almost) no project that starts and ends exactly on time. Some clients cancel projects or they change their priorities and demands. The list is endless. Always be flexible about it.

### Q.8 Mention four benefits of self-awareness.

**Ans.- four benefits of self-awareness:-**

1. Better deal with external factors that cannot be controlled.
2. The ability to genuinely love yourself.
3. A higher level of self-awareness enables us to better predict how certain future situation will influence our state of mind.
4. Self-awareness allow us to better understand the emotions of the people around us.

### Q.9 What is public Self-awareness?

**Ans.- Public self-awareness** often emerges in situations when people are at the center of attention, such as when giving a presentation or talking to a group of friends. This type of **self-awareness** often force people to follow to social norms.

### Q.10 Name five different systems where self-regulation can implement.

**Ans.-** five different systems where self-regulation can implement:- business, schools, communities, and Financial institutions.

### Q.11 Why people Choose morning walk?

**Ans.-** A **morning walk** may help improve your mental clarity and ability to focus throughout the day. A recent study found that amongst older adults, those who started their days with a **morning walk** improved their cognitive function, compared to those who remained sedentary. **Walking** may also help you think more creatively. **morning walk** increased self-esteem and energy and it increase stamina and patience.

**Activity:- Draw or paste at least 4-5 pictures of releasing stress performing yoga and exercise in notebook.**

➤ **Click over these links to get the knowledge about Self-management skills:-**



<https://www.youtube.com/watch?v=HrZKoVGNvkc>

<https://www.youtube.com/watch?v=m-LwwMeKjIY>

Date:- 8.4.20

### L-3 ICT Skills

➤ **Note:- do all these questions of chapter-3 from your ix class book or notebook because these all questions are same as questions we have done in ix class notebook. So you have to do all these questions own-self and you all can help each other to complete these questions with sharing answers if anybody need answers of any question.**

Q.1 Write down At least three examples of word processors.

Q.2 What is the difference between file, exit and file close menu options?

Q.3 Write the steps to open a document.

Q.4 What is difference between save and save as option?

Q.5 How will you select a paragraph in Ms. Word?

Q.6 List various selection techniques in MS. Word.

Q.7 Write the methods with which you can create a table in word and mention the steps you will follow to draw a Table.