SCIENCE PT-2

CLASS 4 **ANSWER KEY**

1.Choose the correct option. (1x4=4)

i)The smallest particles which make up matter-**atoms**

ii)A gentle wind is called **breeze**

a)storm b)air c)thunderstorm d)breeze

iii)The gas present abundantly in the air - **nitrogen**

a)nitrogen b)water vapour c)hydrogen d)carbon dioxide

iv)The process by which a solid changes into a liquid on heating. **melting**

a)evaporation b)melting c)freezing d)solidification

**2.Name the following (*1x3=3)***

i)The liquid in which a solute dissolves.- **SOLVENT**

ii)A form of precipitation in which raindrops freeze into balls of ice when passed through a cold region of atmosphere. -**HAIL**

iii)Substances that can flow are called as **FLUIDS**

**3.Define (*1x3=3)***

i) Weather-It is the condition of atmosphere over a short period of time which can change anytime.

ii)Condensation -It is the process by which water vapour changes back into water on cooling.

iii)Volume-It is the amount of space occupied by matter.

**4.Give reason (1x2=2)**

i)Water is called as a universal solvent.

ANS- Water is called as a solvent because universal many substances can dissolve in it.

ii)When we add sugar to water,the level of water does not change.

ANS-This is because the sugar molecules occupy the empty spaces present between the water molecules.

**5.Classify as soluble and insoluble impurities in water. (1/2 x4 =2)**

Chalk powder,salt,mud,turmeric

|  |  |
| --- | --- |
| SOLUBLE | INSOLUBLE |
| i) salt | i)chalk powder |
| ii) | ii)mud |
| iii) | iii) turmeric |

**6.Observe the pictures carefully and answer the questions (1x 2=2)**

Bowl 1 is kept in a room and bowl 2 is kept under sunlight for 4 hours.

i)What will you observe after 4 hours? (1)

ANS-We observe that the water level in Bowl 2 has decreased /dried up.

ii)What do you conclude from the above activity? (1)

ANS- We can conclude that the rate of evaporation increases with increase in temperature.

7.

Write the properties of the above state of matter(any 3) (1x3=3)

ANS-The properties are- (any 3)

\*The molecules are loosely packed and there is little inter molecular space between the molecules.

\*They do not have a fixed shape but have a fixed volume.

\*They can flow so are called fluids .

\*They have negligible compressibility.

8 i)Identify the type of breeze in the above picture. (1)

ANS- Sea breeze

ii)Explain the breeze. (2)

ANS-During the day,the land gets heated up faster than the sea water.It heats up the air above the land.The hot air is lighter and rises up.The cool air above the sea blows quickly to occupy the space of the warm air .This breeze is called as sea breeze.

9.Diffrentiate between Physical and Chemical changes.(2 points).Give an example for each. (3)

ANS- PHYSICAL CHANGE -

i)It is a change in the shape,size or state of matter of a substance.

ii)No new substance is formed

iii)It is a temporary and reversible change.

Example-Melting of ice into waterand freezing of water back into ice,cutting of hair and paper

CHEMICAL CHANGE

i)It is a change in the chemical property of a substance.

ii)New substance is formed.

iii)It is a permanent and irreversible change.

10.i) What do you understand by ‘water cycle’? (1)

ANS-The movement of water from the earth to the atmosphere and back to the earth is called water cycle.

ii) Draw and label the water cycle. (4)