

INTERNATIONAL INDIAN SCHOOL, RIYADH.

SAI WORKSHEET-2015-16

SUBJECT: Chemistry

STD:IX

Lesson 1- Matter in Our Surroundings:

1. What is matter? State two characteristics of each Solid, Liquid and Gas.
2. Define the following terms: Rigidity, Compressibility, Density, Diffusion, Sublimation, Fluidity, Condensation
3. Convert into Kelvin: 25 C, -40 C, 373 C, 30 C
4. Convert into Celsius: 300K, 273K, 573K, 300K
5. Give reasons:
 - i.) Why does ice float on water
 - ii.) Why does gas fill completely the vessel in which it is kept.
 - iii.) A wooden table should be called solid.
 - iv.) We can easily move our hand in air but to do the same through a solid block of wood, we need a karate expert.
 - v.) The smell of hot sizzling food reaches you several metres away, but to get the smell from cold food you have to go closer.
 - vi.) Naphthalene balls disappear with time without leaving any solid.
 - vii.) A desert cooler cools better on a hot dry day.
 - viii) We are able to sip hot tea or milk faster from a saucer rather than a cup.
6. For any substance why does the temperature remain constant during the change of state?
7. You are provided with a mixture of naphthalene and ammonium chloride by your teacher. Suggest an activity to separate them with well labeled diagram.
8. It is a hot summer day. Priyanshi and Ali are wearing cotton and nylon clothes respectively. Who do you think would be more comfortable and why?

9. What is evaporation? What are the four factors which increase the rate of it.
10. Give the difference between boiling and evaporation.
11. How will you show by experiment that air contains water vapour.
12. Draw a cyclic figure to show interconversion of states and explain fusion, vapourisation, condensation, solidification, and sublimation.
13. Nikita's fond of dark chocolates. It has been found that dark chocolates with a cocoa content of 70% or higher contain resveratrol, which lowers blood sugar. Truffles, soufflés and even hot chocolates can be good source of resveratrol and cocoa phenols . (flavonoids). Reema takes lot of sweets every day.
 - i. Why does Nikita prefer dark chocolates?
 - ii. What is the formulae of cane sugar? Should we eat excess of sweets like Reema?
 - iii. What will happen if your blood sugar is high?
 - iv. What precautions should be taken after eating chocolates?
 - v. Is cocoa good for health?
 - vi. What value is not possessed by Reema?