



# ÉCOLE GLOBALE

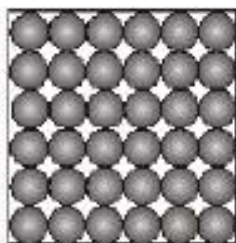
## INTERNATIONAL GIRLS' SCHOOL

### Dehradun

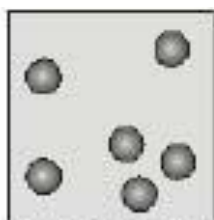
## HOLIDAY HOMEWORK - CLASS IX B Chemistry

### Matter In Our Surroundings

1. We can get the smell of perfume sitting several meters away, why?
2. A rubber band is a solid, but it can change its shape. Why ?
3. When salt or sugar are poured into different kinds of vessels, why do they take the shape of vessel ?
4. Sponge is a solid, yet we are able to compress it. Why ?
5. How does the diffusion of honey varies with the diffusion of ink and why ?
6. Does the rate of diffusion change with temperature ? If so, why ?
7. Arrange the following substances in increasing order of forces of attraction between the particles -water, sugar, oxygen.



Arrangement of molecules in a solid



Arrangement of molecules in a gas

8. The diver is able to cut through water in a swimming pool.
9. Ice is at 273 K more effective in cooling, than water at the same temperature, why?
10. What produces more severe burns, boiling water or steam?

## IS MATTER AROUND US PURE

1. What is tincture of iodine?
2. Any idea about 'concentration of a solution'?
3. State the principle for separation of immiscible liquids?
4. Why a mixture is an impure substance?
5. Define aerosol.
6. What is meant by solubility of a solute?
7. How to differentiate between sol, solution and suspension?
8. What is meant by chromatography?
9. Define emulsion with example.
10. How to separate ammonium chloride+ sodium chloride. Explain briefly.

## ATOMS AND MOLECULES

1. Name the scientist who gave two important laws of chemical combination.
2. What is law of conservation of mass? Describe with an activity.
3. State the law of constant proportion. Give example.
4. Write the postulates of Dalton's atomic theory.
5. What is the difference between 2N and N<sub>2</sub>?
6. What is the difference between an atom and molecule?
7. If 100g of water is decomposed, how many grams of oxygen and hydrogen are obtained?
8. Write symbols of: (a) copper (b) mercury (c) iron (d) silver (e) gold (f) argon (g) zinc (h) cobalt (i) lead (j) potassium (k) silicon