ODM EDUCATIONAL GROUP
Changing your Tomorrow

MATTER AND IT'S COMPOSITION

SUBJECT-CHEMISTRY

CHAPTER NO- 1

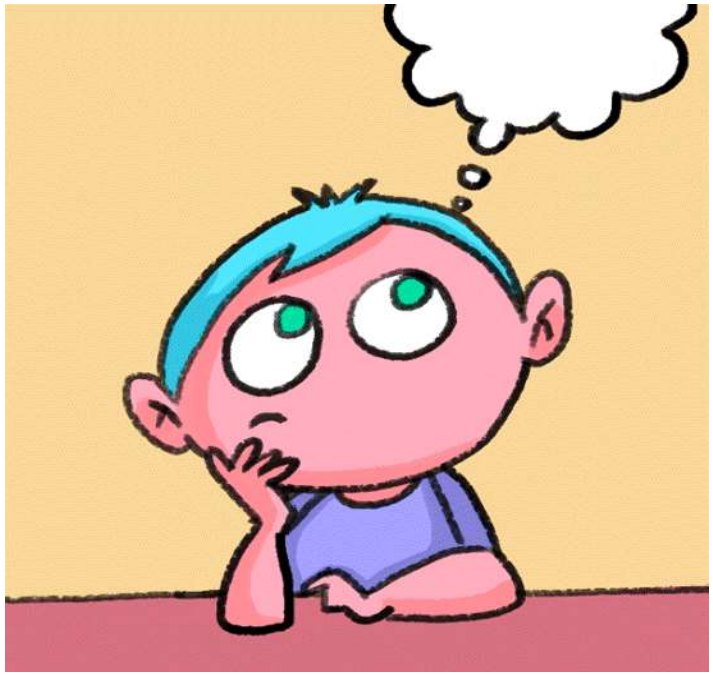
Characteristics of particles of matter

PERIOD-3

Website: www.odmegroup.org
Email: info@odmps.org
Toll Free: 1800 120 2316
Sishu Vihar, Infocity Road, Patia, Bhubaneswar- 751024

LEARNING OBJECTIVE

- Students will be able to
- Familiarise with the following characteristics of the particles of matter
- Particles of matter have space between them
- Particles of matter are always in random motion
- Particles of matter attract each other.



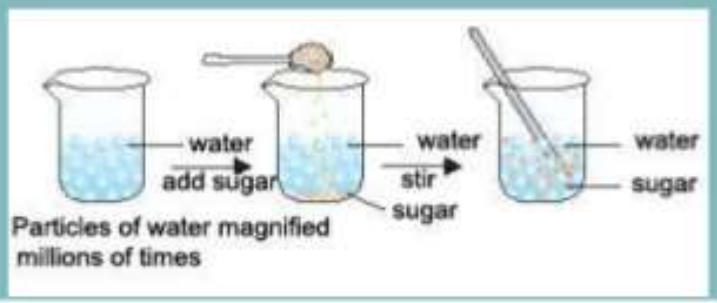
WARM UP QUESTIONS

- Recapitulation of the previous topic by asking the following questions.
- What do you mean by atoms?
- What do you mean by molecules?
- A nitrogen molecule is made up of how many nitrogen atoms?
- A carbon dioxide molecule is made up of how many carbon atom and oxygen atom?

Particles of matter have space between them

3. The particles of matter have space between them

Activity :- Take some water in a beaker and note its level. Dissolve some salt or sugar in it with the help of a glass rod. The salt dissolves in the water but the level of water does not change. This is because the particles of salt get into the space between the particles of water.



- Particles of matter have space between them

- https://youtu.be/fUzKozeqDPo

Particles of matter are always in random motion

Particles of matter are in motion

If you add a few drops of potassium permanganate to water you will observe that the color of the entire solution will change even if you don't stir the solution.

This is because **particles of matter are always in motion**.
Particles of a solid vibrate in their place while those of liquid and gas can move about more freely.

Particles of matter are always in random motion

https://youtu.be/_tbgGgxA29s

Particles of matter attract each other

5. Particles of matter attract each other :-

Activity :- Take an iron nail, a piece of chalk and a rubber band. Try breaking them by hammering, cutting or stretching. It is more easier to break the chalk, less easier to break the rubber band and difficult to break the iron nail. This is because the particles in the iron nail are held together with greater force than in the rubber band or chalk.

Particles of matter attract each other

- https://youtu.be/_-7jrmV5Yrw

HOME ASSIGNMENT

Exercise-5,6

Q. Write an activity to explain that particles of matter have space between them.

Q. How can you explain that particles of matter are always in random motion?

Q. Give any one example to explain particles of matter attract each other.

THANKING YOU

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