

Subject-Chemistry

Activity - Matter is made up of very small particles.

Chapter-Matter in our surroundings

CLASS IX

Duration: 30 min

Nature of the Activity- Group

Learning Outcome-

Students will be able to analyse that Matter is made up of very small particles

What we have to do?

To show that Matter is made up of very small particles.

What we require?

Potassium Permanganate, Water and Beaker(100ml)

What do we need to know? :

Any substance which occupies space and has mass is known as matter. All matter is made up of very small particles that are not visible to naked eye. The characteristics of particles of matter are

- (i) Particles of matter have spaces between them.
- (ii) Particles of matter are continuously moving.
- (iii) Particles of matter attract each other.
- (iv) Kinetic energy of particles increases with increase in temperature.

How will you proceed?

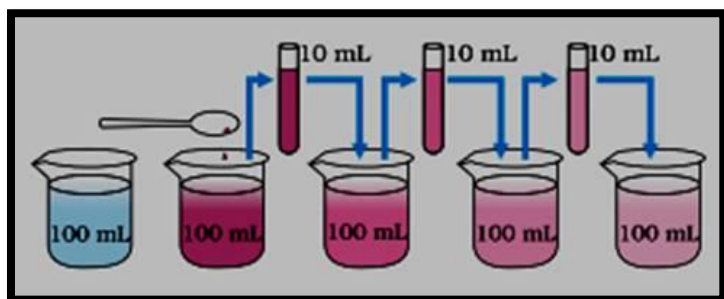
➤ **Teacher's Activity-**

Teacher will brief the activity and make necessary arrangements.

➤ **Students' Activity-**

1. Take two or three crystals of potassium permanganate and add in 100ml of water. We will see that the colour of the water gets changed.
2. Now take 10ml of this solution and add it to 90mL of fresh water

3. Now repeat this procedure three more times.



What have you observed?

This activity shows that just a _____ crystals of potassium permanganate can colour a _____ volume of water

What have you learnt?

We have learnt that there must be millions of _____ particles in just one crystal of potassium permanganate, which keep on dividing themselves into _____ particles. Therefore, we conclude that Matter is _____ continuous like a block but is made up of _____ like sand.

What would you be interested to know?

1. What is diffusion?

2. What will happen if we add a crystal of potassium permanganate to hot water? How does diffusion get affected by change in temperature?

3. Can diffusion take place from one solid to another?

