

ACTIVITY NO. 14 – YOU SHALL NOT PASS

Subject	Science
Class	VIII
Chapter/Unit	Chemical Effects of Electric Current
Topic	Good conductors and Poor conductors
Time	30 minutes
Nature of Activity	Group

What will I learn (Learning Outcome)?

To classify the materials as good conductors or poor conductors after testing their conduction of electricity.

Skills: Applying, Analyzing and Creating

What I have to do?

To test the conduction of electricity through vinegar and other liquids.

What do I require?

Plastic or rubber caps, vinegar, tester, tap water, RO water, oil, milk.

What do I need to know?

When the liquid between the two ends of the tester allows the electric current to pass, the circuit of the tester becomes complete. The current flows in the circuit and the bulb glows. When the liquid does not allow the electric current to pass, the circuit of the tester is not complete and the bulb does not glow.

➤ Teacher's Activity

Teacher will-

1. explain the concept of good conductors and poor conductors.
2. make arrangements for the activity
3. make pairs of the students and will explain the steps of the activity.
4. ensure that each participant of the pair performs the activity on his/her own.

How will I proceed?

➤ Student's Activity

1. Collect a few small plastic or rubber caps of discarded bottles and clean them.
2. Pour one teaspoon of vinegar in one cap.
3. Bring your tester over this cap and let the ends of the tester dip into vinegar.
4. Take care that the ends are not more than 1 cm apart but at the same time do not touch each other. Record the observations.
5. Repeat the same with other samples and record the observations.

What have I observed?

S. No.	Name of the Sample	Bulb glows (Yes/ No)	Good conductor/ Poor conductor
1.	Vinegar		
2.	Tap water		
3.	RO water		
4.	Oil		
5.	Milk		

What have I learnt?

1. Vinegar and Tap water will _____ electricity because they _____.
2. RO water, oil and milk will _____ electricity because they _____.

What am I curious to learn?

- Let us test the conduction of electricity through various fruits and vegetables. Display your result in a tabular form.

Let me evaluate myself

1. Why some liquids conduct electricity while other don't?

2. Explain why a bulb glows on passing current.

3. We add a small amount of sugar to distilled water, the resulting solution will be a good conductor or a poor conductor? Explain why?

4. Why is it right to say poor conductors instead of bad conductors?

5. There are two different solutions in set up P and Q as shown in figure. The bulb in the set up P glows more brightly as compared to that of the set up Q. What are the possible causes for this?
