

## TIMSS Science Public Release Lesson 1 Japan

### TIMSS Science Public Release Lesson Japan 1 Video Clip 1.2

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Time Code	Speaker	Discussion
00:00:02.23	T	Uh, when you exposed water to electricity ... Daijiro-kun.
00:00:09.25	SN	Oxygen and hydrogen.
00:00:11.04	T	Yes, it separates into to two separate substances of oxygen and hydrogen. OK, that's the conclusion, right?
00:00:25.24	B	Water → Hydrogen + Oxygen.
00:00:45.17	T	Since you expose it to electricity, you call this type of separation ... uh, Chihiro-san. What kind of separation is this called?
00:00:57.19	SN	Electrolysis.
00:00:58.11	T	Yes, electrolysis.
00:01:04.21	B	Electrolysis.
00:01:15.15	T	OK, electrolysis.
00:01:17.23	T	And this is what we did yesterday. So today, what we'll be thinking is water. Being exposed to electricity, it can be separated into hydrogen and oxygen. So what happens in the opposite?
00:01:40.06	T	What I mean is if we have hydrogen and oxygen, is it possible to make water?
00:01:48.22	T	If it was this way. How would it be if the arrow was pointing this [the opposite] way?
00:01:54.09	T	This is what I would like to consider today.
00:02:00.14	T	OK then, now discuss with your neighbors to see if you think you can make water from hydrogen and oxygen. If you suppose that you can, then talk about how you could do it.
00:02:16.06	T	So discuss in depth and think about it, please.
00:02:19.14	T	If you suppose that you can't do it, then talk about why you can't do it.