

TWINCLE UNIT I

Eito Takeuchi¹, Kageaki Inoue², Kazuya Kuga³, Masaru Matsumoto¹

¹Graduate School of Electrical and Electronic Engineering, Chiba University

²Graduate School of Advanced Integration Science, Chiba University

³Faculty of Educations, Chiba University

Place Visited: University of Indonesia, SMAN 3 Depok, SMAN 70 Jakarta

Duration : 24th August – 4th September 2015

Science lesson - What is LED ? -

Contents

- What's LED
- Details of the LED
- LED has various color
- Let's see the spectrums

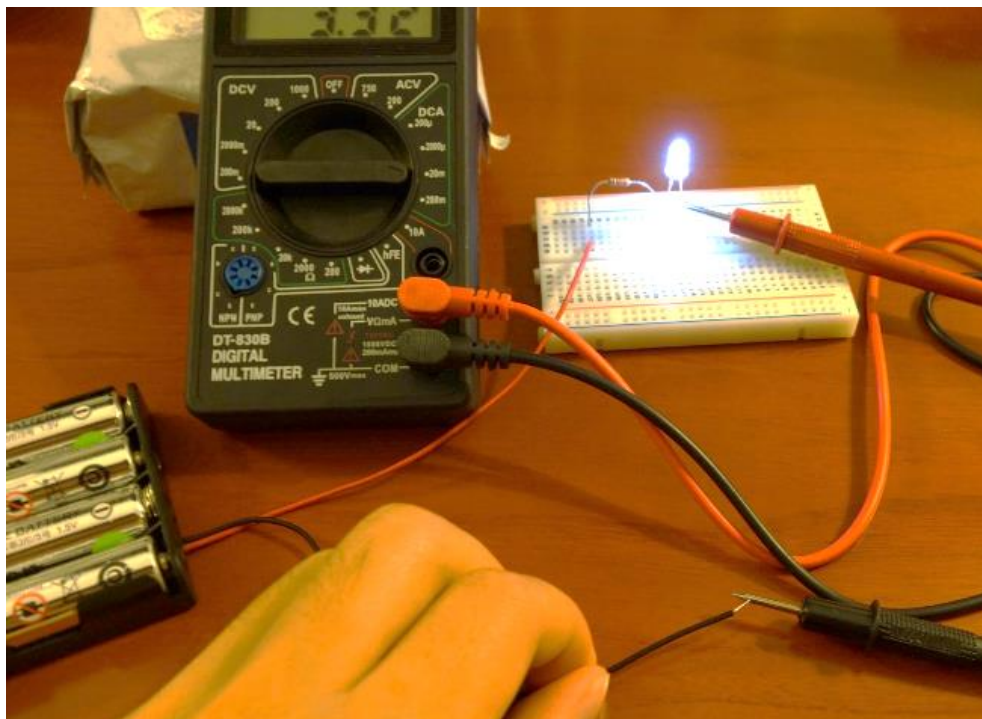
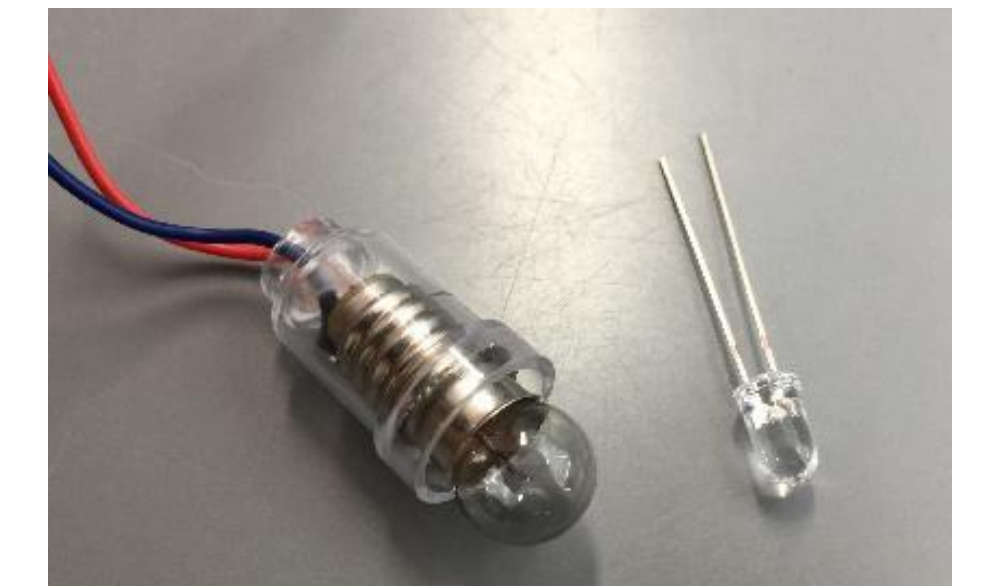



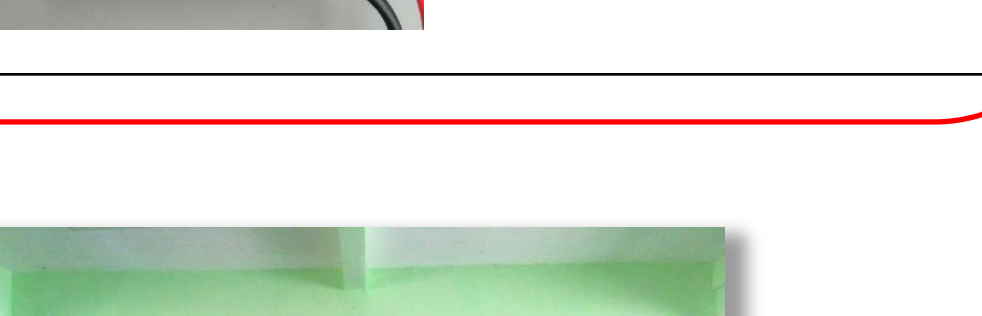


Objectives

By the end of the lesson, students should be able to:

- Understand the advantages of using LED compare with regular lump
- Consider how developing LED technology in the future



Flow of Lesson

Time Allotment	Activity	Teaching Materials
15 mins	<u>Introduction</u> - About Japan - Ourselves - LED	
20 mins	<u>Experiment1</u> - Let's shine LED and normal lamp - Compare	
5 mins	<u>Explanation</u> - How to glow lamp - How to emit LED	
15 mins	<u>Experiment2</u> - Let's check several colors	
5 mins	<u>Explanation</u> - Why color is different	
10 mins	<u>Experiment3</u> - Let's watch some spectrums	
5 mins	<u>Explanation</u> - About spectrums difference	
5 mins	<u>Conclusion</u> - Possibility of the LED - Future technology	

Ingenuity

- We handed out the print wrote in detail the experimental method.
- For taking it easy, we attached a name tag to the tool.

Realizations

Good points

- Student enjoyed the experiment
- Students ask us some questions about detailed reasons of experimental result

Improved point

- Because the handouts was blurred, we should check in advance.



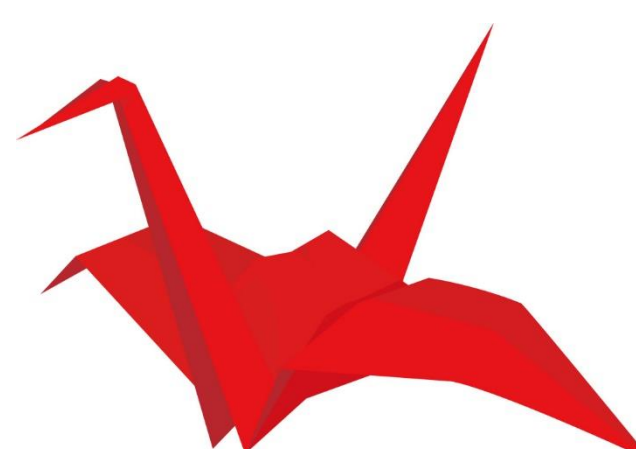
Lesson of Japanese Culture - ORIGAMI -



Objectives

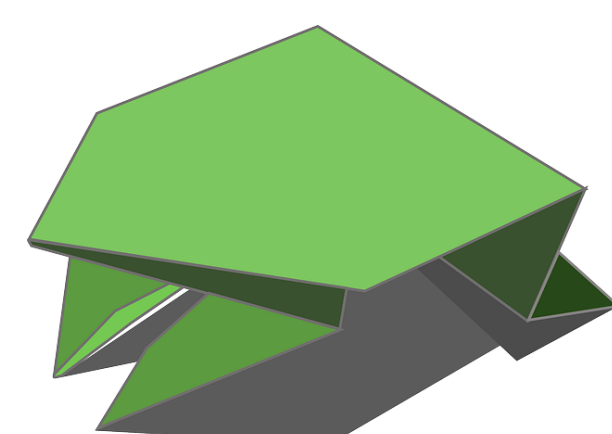
We introduced ORIGAMI in Japanese culture

- Making a bard, frog and SYURIKEN
- Explanation of the culture of the origami



Student's Reactions

Most students do origami for the first time and worked happily



Realizations

Good points : We can become friendly

Improved point : We should bring the ORIGAMI from Japan. For example, traditional Japanese paper etc...

Our life in Indonesia

Food

The taste is spicy or sweet but it is good

Traffic

Traffic jam always happen and all members of family sometimes ride one motorbike!!

Islam

On Friday, muslim wear batik and pray at noon. Muslim's morning is very early. So they wake up before the sun rises.

Climate

Indonesia has the dry season and the wet season. The dry season is very hot but and drying. It likes Okinawa.



Finally

If you take part in TWINCLE, you can enjoy wonderful experience and make a lot of international friends.

Thank you for your attention