

Conductivity

Spoken Tutorial Project

<https://spoken-tutorial.org>

National Mission on Education through ICT

Vidhi Thakur

FOSSEE, IIT Bombay

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Learning Objectives



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We will learn how,



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We will learn how,

- ▶ Change in voltage makes the electrons move in the circuit



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- ▶ Large band gap in plastics do not allow conductivity



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We will learn how,

- ▶ Change in voltage makes the electrons move in the circuit
- ▶ Large band gap in plastics do not allow conductivity
- ▶ Shining light on a photoconductor causes it to conduct electricity



System Requirement



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Here I am using,



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Here I am using,

▶ **Windows 11 (64 bit)**



System Requirement

Here I am using,

- ▶ Windows 11 (64 bit)
- ▶ Java version 1.8



Prerequisites



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- ▶ **Learner should be familiar with topics in high school science**



Prerequisites

- ▶ Learner should be familiar with topics in high school science
- ▶ Please use the link below to access the tutorials on PhET Simulations
<https://spoken-tutorial.org>



PhET Simulations



PhET Simulations

- ▶ Please use the given link to download the PhET simulation
<https://phet.colorado.edu/en/simulations/conductivity/about>



Summary

We have learnt how,

- ▶ Change in voltage makes the electrons move in the circuit
- ▶ Large band gap in plastics do not allow conductivity
- ▶ Shining light on a photoconductor causes it to conduct electricity



Assignment



Assignment

Check if,

- ▶ The conductivity of a metal changes when light is shined
- ▶ Photoconductors conduct electricity when voltage is decreased after shining the light



About the Spoken Tutorial Project

- ▶ Watch the video available at https://spoken-tutorial.org/What_is_a_Spoken_Tutorial
- ▶ It summarises the Spoken Tutorial project



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- ▶ If you do not have good bandwidth, you can download and watch it



Spoken Tutorial Workshops

The Spoken Tutorial Project Team

- ▶ Conducts workshops using spoken tutorials
- ▶ Gives certificates to those who pass an online test
- ▶ For more details, please write to contact@spoken-tutorial.org



Answers for THIS Spoken Tutorial

- ▶ Questions in THIS Spoken Tutorial?
- ▶ Visit <https://forums.spoken-tutorial.org>
- ▶ Choose the minute and second where you have the question
- ▶ Explain your question briefly
- ▶ The Spoken Tutorial project will ensure an answer



Acknowledgements

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Thank you

- ▶ **This is Vidhi Thakur, a FOSSEE summer fellow 2022, IIT Bombay signing off**

