

# Conductivity

**Spoken Tutorial Project**

**<https://spoken-tutorial.org>**

**National Mission on Education through ICT**

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**19 August 2022**



# Learning Objectives



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- ▶ **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)



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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

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- ▶ 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](https://spoken-tutorial.org/What_is_a_Spoken_Tutorial)
- ▶ It summarises the Spoken Tutorial project



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- ▶ It summarises the Spoken Tutorial project
- ▶ 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](mailto: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

**The Spoken Tutorial project is  
funded by the Ministry of Education,  
Govt. of India**



# Thank you

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

