

# 2 Lecture - PHY301

## Important Subjective

**What is the positive polarity of a battery?**

**Answer:** The positive polarity of a battery is associated with the positive terminal, typically marked with a "+" symbol.

**What is the negative polarity of a battery?**

**Answer:** The negative polarity of a battery is associated with the negative terminal, typically marked with a "-" symbol.

**What role does the positive polarity play in circuit theory?**

**Answer:** The positive polarity of a battery determines the direction of the electrical current flowing through the circuit.

**What role does the negative polarity play in circuit theory?**

**Answer:** The negative polarity of a battery determines the voltage of the circuit.

**What is the voltage of a circuit?**

**Answer:** The voltage of a circuit is the potential difference between the positive and negative terminals of the battery, and is measured in volts (V).

**What is the function of the positive terminal of a battery in a circuit?**

**Answer:** The positive terminal of a battery is where the electrical current flows out of the battery and into the circuit, providing the energy needed to power the devices and components connected to the circuit.

**What is the function of the negative terminal of a battery in a circuit?**

**Answer:** The negative terminal of a battery is where the electrical current flows into the battery, completing the circuit and allowing the battery to function as a source of electrical energy.

**Why is it important to understand the polarity of a battery in circuit theory?**

**Answer:** Understanding the polarity of a battery is important in circuit theory because it determines the direction of the electrical current flowing through the circuit and the voltage of the circuit.

**How does the voltage of a circuit affect the amount of energy that can be transferred from the battery to the circuit?**

**Answer:** The voltage of a circuit determines the amount of electrical energy that can be transferred from the battery to the circuit. Higher voltage batteries can deliver more energy to the circuit, while lower voltage batteries may not be sufficient to power certain devices or components.

**How can understanding the positive and negative polarities of batteries help in troubleshooting problems in a circuit?**

**Answer:** Understanding the positive and negative polarities of batteries can help in troubleshooting problems in a circuit by identifying the direction of the electrical current flowing through the circuit and the voltage of the circuit, which can help pinpoint the source of any problems or issues.