

## UNIT 4: CIRCUITS



### LESSON 1:

ACTIVITY 1: Match the words to the picture.

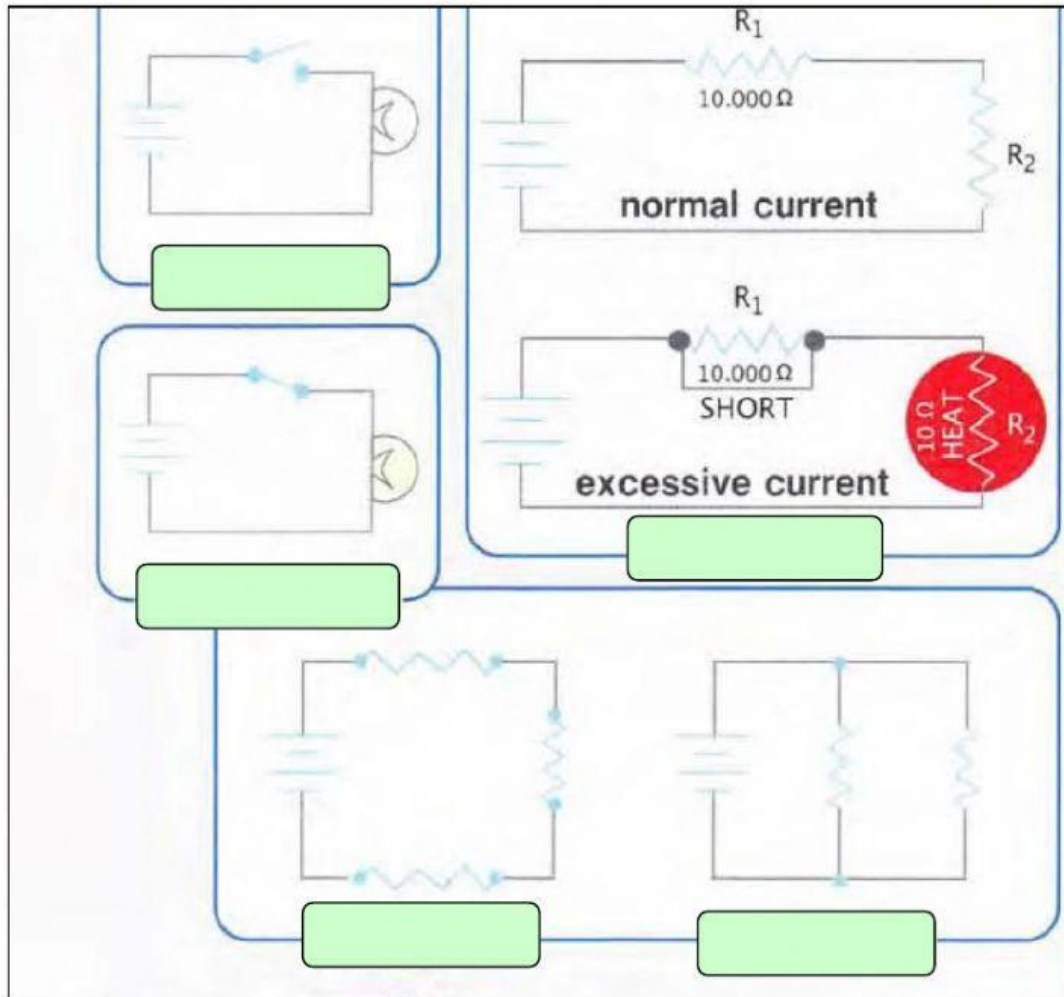
CLOSED CIRCUIT

OPEN CIRCUIT

IN PARALLEL

SHORT CIRCUIT

IN SERIES



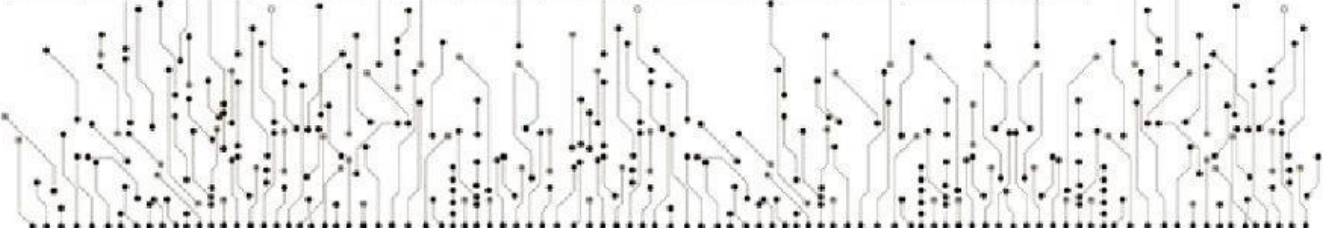
ACTIVITY 2: Before you read, answer these questions.

1. What is the opposite of a closed circuit?

\_\_\_\_\_

2. What is one problem that can affect circuits?

\_\_\_\_\_



**ACTIVITY 3: Read and choose the correct answers.**

Class EE151

## Electronic Circuits

Lecturer:	Professor Andrew Moore
Lectures:	Monday-Wednesday-Friday, 10am-10:50am
Prerequisites:	This is a level 1 course. No prior background knowledge is needed.
Credits:	3 units, letter grade only

### Course Description

This course offers an introduction to electronics, focusing on circuit operations

- Learn about current **origin** and circuit **component** functions
- Learn about **closed** and **open** circuit loops and the different **legs** of a circuit.
- Discover how circuits work **in parallel** and **in series**.
- Understand how electrical voltage is **rectified** for home use. Learn about the role of **reservoirs**.
- Explore the causes of **short circuits** and how to deal with **shorted** equipment.
- Gain hands-on experience. Learn how to **wire** a circuit and do basic repairs.
- Take apart electronics equipment. Examine **active elements** and analyze **stages**.

### Grading

Homework = **15%**. Penalties apply to students who turn in homework late.  
Midterm exam and weekly quizzes = **30%**  
Final exam = **55%**

- 1 What is the purpose of the passage?  
A to outline the course content  
B to announce an exam  
C to describe course levels  
D to introduce a professor
- 2 What will students NOT learn in this class?  
A the reasons that short circuits happen  
B the importance of reservoirs  
C the correct way to wire a circuit  
D the circuit operations in a home
- 3 What kinds of hands-on experience do students receive?  
A opening and closing circuit loops  
B creating a series of parallel circuits  
C labeling electronics' active elements  
D making repairs to damaged circuits

**ACTIVITY 4: Match the words (1-8) with the definitions (A-H).**

- |               |   |
|---------------|---|
| 1 closed      | A a section of an electrical circuit.   |
| 2 in parallel | B stopping current from traveling from one end of the power source to the other.                |
| 3 in series   | C to connect long, thin metal threads inside a piece of electrical equipment.                   |
| 4 leg         | D when several components are connected across the power source's two terminals.                |
| 5 open        | E the place where current comes from.   |
| 6 origin      | F causing current to skip over part of a circuit and flow to the other end of the power source. |
| 7 shorted     | G allowing current to travel from one end of the power source to the other.                     |
| 8 wire        | H when current has to pass through one circuit component before it can pass through any others. |