



## Lesson II: Reading Comprehension

### BEFORE YOU READ

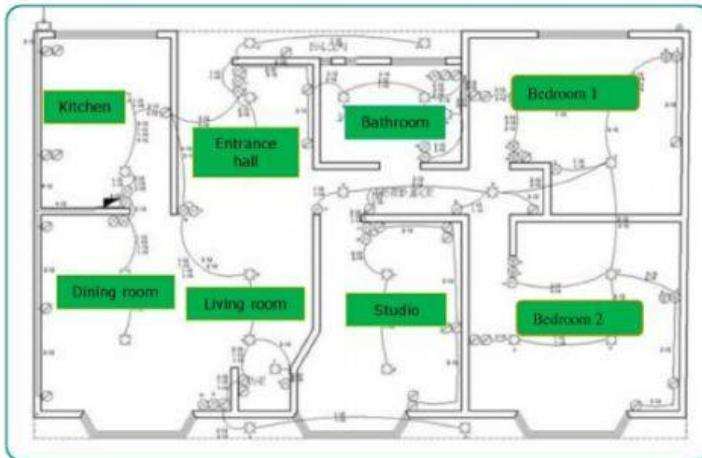
A. Look at the picture below and choose the correct alternative regarding house wiring diagrams.

#### 1. What is a house wiring diagram?

- a) It's a visual representation of an electric circuit.
- b) It's a drawing that shows furniture and devices.

#### 2. Why are there symbols? What do they mean?

- a) There are symbols because they represent different rooms from the house. Symbols have different meanings; kitchen, entrance, bedrooms, etc.
- b) There are symbols because they represent different items from a house wiring circuit. Symbols depict different items such as switches, circuit breakers, bulb sockets, etc.



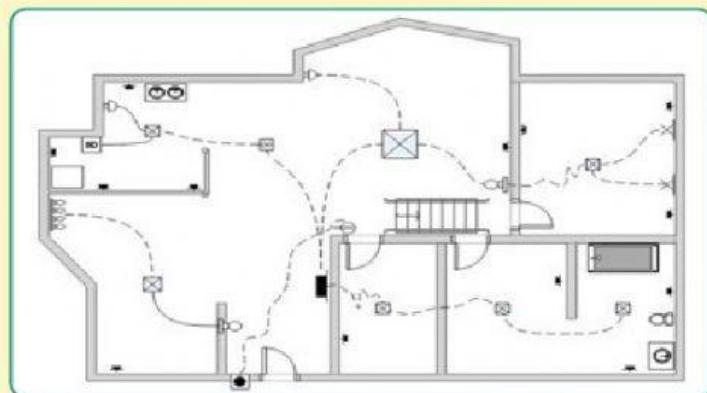
### WHILE YOU READ

B. Take a quick look at the text below. Read and answer the questions in your English notebook.

- a. What will the text be about? The text will be about...
- b. What do you know about this topic? I know that...
- c. Which concepts are familiar for you? Some concepts that are familiar for me are...

### What is a House Wiring Diagram?

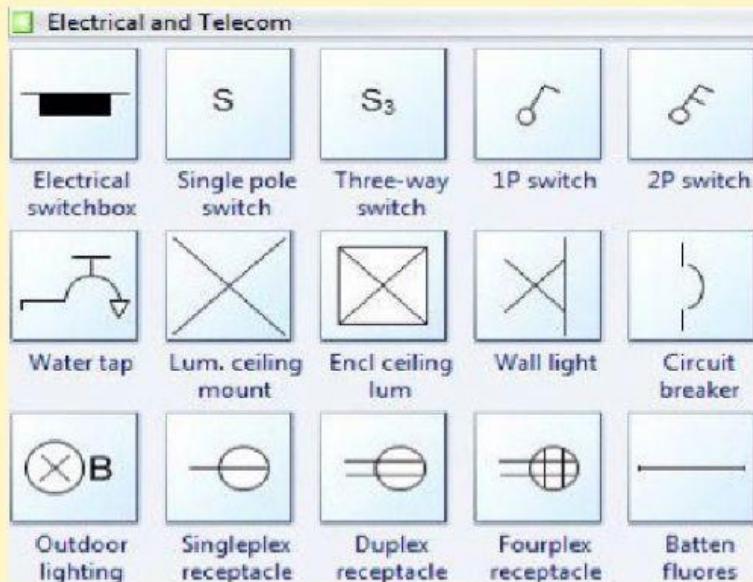
A wiring diagram is a pictorial representation of an electric circuit, where the elements of the loop and the signal connections between devices and the power source are shown in the conventional methods as simplified shapes.



It is the visual representation or design of the entire electrical wiring system or circuit of a house (or room) that helps in creating the system. The system distributes energy that can be used to power the various appliances and equipment around the house. This house wiring design and the assistance from a qualified electrical technician will ensure a proper installation and operation of the different elements included in the design such as electrical outlets, meter base, switches and breakers, and more.

### Standard Home Wiring Diagram Symbols

Wiring diagrams use an array of special symbols that represent various circuit elements like switches, bulbs, electric outlets, breakers, smoke detectors, and many more.



### Some principles of a House Wiring Diagram

While creating a house wiring diagram, one must always keep in mind a few principles.

- Understand the foundations of electricity, how it flows, the positive and negative terminals of a battery and the circuit itself.
- Try to use CAD software such as AutoCAD and SolidWorks to draw and design the diagram. It makes it easy and quick to draw up the planning.
- You need to know what the standard voltages are (220v/50Hz).
- You need to understand the meanings of the various symbols in order to place them accurately in your diagram.
- You need to specify the length and brand of the wires to be used.

Adapted from:

*House Wiring Diagram - Anything You Need to Know / EdrawMax Online. Edrawmax.com.*

<https://www.edrawmax.com/house-wiring-diagram/>

#### C. Read and write the missing words. You can underline key words to find your answers.

1. \_\_\_\_\_ is a software program that can be used to draw and design diagrams.



2. When creating a house wiring diagram, you need to specify the \_\_\_\_\_ and \_\_\_\_\_ of the wires to be used.

3. A wiring system distributes \_\_\_\_\_ that can be used to power the various \_\_\_\_\_ and \_\_\_\_\_ around the house.

#### D. Read the questions and find the answers using the underlined key words.

1. What is a house wiring diagram?



2. Which principles must be considered in a diagram?

3. Which software should you try to use in order to draw a diagram?

**E.** Read and answer the questions. Underline key words to find your answers, as in the exercise above.

1. Why do you need to understand the meanings of the symbols?



2. Which elements are part of the design in a house wiring diagram?

3. How will you ensure a proper installation?

#### AFTER YOU READ

**F.** Read the WhatsApp message and help Gaston create a house wiring diagram. Draw the diagram and symbology in your English notebook.



**G.** Share your house wiring diagram with a classmate. Use the sentence starters to express your ideas.



I placed the **triple plug outlets** here because...  
I decided to place **the bulb socket(s)** here because...  
This **triple plug outlet** was placed here because...  
This **bulb socket** looks great here because...  
This **kitchen** looks fantastic because...

