LIVEWORKSHEET – Basic Electronics Vocabulary & Reading

Name: _____.

A. Match the words with the correct meaning (Arrastrar y soltar)

1. Circuit →

2. Power →

3. LED →

4. Switch →

5. Input →

6. Output → AND Gate →

7. OR Gate → Wire →

8. Simulate →

9. NOR →

10. NAND →

11. Closed circuit / Open circuit →

12. TRUE / FALSE →

13. Components Panel →

14. Work Area →

A circuit is a path for electric current.

Energy supplied to a system.

A small light-emitting diode.

A device used to open or close a circuit.

The signal that enters a system.

The signal that leaves a system.

A logic gate that needs two TRUE inputs.

A logic gate that needs one TRUE input.

A conductor used to connect components.

To test a circuit virtually.

Closed = current flows; Open = no flow.

Logic values in digital systems.

A section where components are selected.

The space where you build the circuit.

A gate that outputs TRUE only when all inputs are FALSE.

A gate that outputs FALSE only when all inputs are TRUE.

B. Reading: "Building a Simple Circuit in the Future"

Read the text and answer the questions.

Next week, my class **is going to build** a simple digital circuit in the simulator, **and** we **are going to use** the Components Panel to choose all the parts. We will need a **wire**, an **LED**, a **switch**, **but** we also want to test logic gates, **so** we **will** add an **AND gate** and an **OR gate**.

The instructor **will check** if the circuit is **closed or open**, **for** we must understand how **input** and **output** signals work. Later, we **are going to simulate** the circuit, **and** we **will** write a short report about the results.

C. Reading Comprehension:

1. **What** is the class going to build?

   a) A robot
   b) A digital circuit
   c) A power supply

2. **Which** components will they use?

   a) Only wires
   b) AND and OR gates
   c) Only resistors

3. **Why** will the instructor check the circuit?

   a) To choose colors
   b) Because they must understand inputs and outputs
   c) To turn off the LED

4. **What** will students do after simulating?

   a) Write a short report
   b) Build a motor
   c) Create a 3D model

D. Complete with _will_ or _going to_

1. We _____ use the simulator to test the circuit.

2. The class _____ build the circuit next week.

3. The instructor _____ help us check the signals.

4. We _____ add a switch and an LED on Monday.

E. FANBOYS – Complete the sentences

(Use: **for, and, nor, but, or, yet, so**)

1. The LED is off, _____ the circuit is open.

2. We need a wire _____ a switch for this activity

3. The AND gate needs two TRUE inputs, _____ the OR gate needs only one.

4. You can test the circuit now, _____ you can check the Components Panel first. → or