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 ** 120 Micro Electronics**

 Assignment #1

 Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Read pages in opening part of the Manual through to page 11
2. Identify the 18 Components from the “Parts Bin” Name, Drawing, Symbol. Draw the component 2D figures, Go back to the Components page and draw each Symbol.

|  |  |  |
| --- | --- | --- |
| Component Description | Symbol | Pic or Drawing |
| 1 Capacitor2 Diode3 Zener Diode4 LED5 Resistor 6 Potentiometer7 Push Button8 SPST Switch9 Relay10 Amplifier11 NPN Transistor12 Photo Transistor13 SCR14 Regulator15 FET16 Speaker17 Transformer18 4 Logic Gates |  |  |

2. Discovering how the Bread Board is laid out. Draw the lines to show the paths of continuity.



1. Draw and Identify the POLARITY of the following;
2. LED

B. Capacitor

C. Diode

1. Read the following resistors

YELLOW - VIOLET - BROWN - GOLD is

BROWN - BLACK - RED - GOLD is

ORANGE - ORANGE - RED - GOLD is

BROWN - BLACK - ORANGE - GOLD is

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_33,000 Ω (or 33 kΩ) with 5% tolerance

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_100,000 Ω (or 100 kΩ) with 5% tolerance

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_1,000,000 Ω (or 1 MΩ) with 5% tolerance