

Review #1

- 1) An Arduino is a:
 - a. Microcomputer
 - b. Sensor Reader
 - c. Solid State Relay
 - d. MicroController
- 2) Arduinos can M_____ and C_____.
- 3) An LED needs a _____ limiting resistor to protect it from burnout.
- 4) The long lead of the LED is the _____ lead.
- 5) A Resistor with the Colors (Brown, Black, Orange, Gold) is _____ Ω

Color	0	1	2	3	4	5	6	7	8	9	Multiplier	Tolerance
Black	0	0	0	0	0	0	0	0	0	0	10^0	
Brown	1	1	1	1	1	1	1	1	1	1	10^1	$\pm 1\%$
Red	2	2	2	2	2	2	2	2	2	2	10^2	$\pm 2\%$
Orange	3	3	3	3	3	3	3	3	3	3	10^3	
Yellow	4	4	4	4	4	4	4	4	4	4	10^4	
Green	5	5	5	5	5	5	5	5	5	5	10^5	$\pm 0.5\%$
Blue	6	6	6	6	6	6	6	6	6	6	10^6	$\pm 0.25\%$
Violet	7	7	7	7	7	7	7	7	7	7	10^7	$\pm 0.1\%$
Grey	8	8	8	8	8	8	8	8	8	8	10^8	$\pm 0.05\%$
White	9	9	9	9	9	9	9	9	9	9	10^9	
Gold											10^{-1}	$\pm 5\%$
Silver											10^{-2}	$\pm 10\%$

Review #1 - KEY

1) An Arduino is a:

- a. Microcomputer
- b. Sensor Reader
- c. Solid State Relay
- d. **MicroController**

2) Arduinos can **Measure and Control**.

3) An LED needs a **Current** limiting resistor to protect it from burnout.

4) The long lead of the LED is the **positive** lead.

5) A Resistor with the Colors (Brown, Black, Orange, Gold) is **10,000 Ω**

Color	0	1	2	3	4	5	6	7	8	9	Multiplier	Tolerance
Black	0	0	0	0	0	0	0	0	0	0	10^0	
Brown	1	1	1	1	1	1	1	1	1	1	10^1	$\pm 1\%$
Red	2	2	2	2	2	2	2	2	2	2	10^2	$\pm 2\%$
Orange	3	3	3	3	3	3	3	3	3	3	10^3	
Yellow	4	4	4	4	4	4	4	4	4	4	10^4	
Green	5	5	5	5	5	5	5	5	5	5	10^5	$\pm 0.5\%$
Blue	6	6	6	6	6	6	6	6	6	6	10^6	$\pm 0.25\%$
Violet	7	7	7	7	7	7	7	7	7	7	10^7	$\pm 0.1\%$
Grey	8	8	8	8	8	8	8	8	8	8	10^8	$\pm 0.05\%$
White	9	9	9	9	9	9	9	9	9	9	10^9	
Gold											10^{-1}	$\pm 5\%$
Silver											10^{-2}	$\pm 10\%$