Name:
Date:

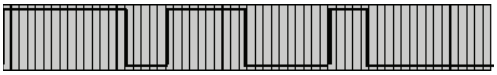
Circuit #2 Potentiometers

1.

How is this circuit, or a circuit like it, used in everyday life? Provide at least three examples.

Can you turn your LED up and down using the potentiometer? Potentiometers are also called trimpots.

2.



Describe how the potentiometer is being adjusted according to the PWM diagram above.

3.

Who invented the potentiometer and when?

4.

What basic component does a potentiometer act like when it is not being adjusted?

5.

In your own words describe what voltage dividers do.

6.

Describe how you would use potentiometers to control a marshmallow (because they are soft) launcher's trajectory. What other pieces of hardware would you need to create this marsh-mallow launcher?

Calculate percentage for each of the analogWrite values, then draw a line from the PWM code on the left to the corresponding PWM diagram on the right.

7.

analogWrite (ledPin, 0); _____%

8.

analogWrite (ledPin, 200); _____%

9.

analogWrite (ledPin, 255); _____%

10.

analogWrite (ledPin, 70); _____%

11.

analogWrite (ledPin, 100); _____%