

FMT: POTENTIOMETER

LESSON 5

Name: _____ Date: _____

Vocabulary: potentiometer, analog, voltage,

1. Identify the potentiometer on the FMT to the right.

Copy and upload the sketch provided to the FMT.

2. List two scenarios where a potentiometer might be used.

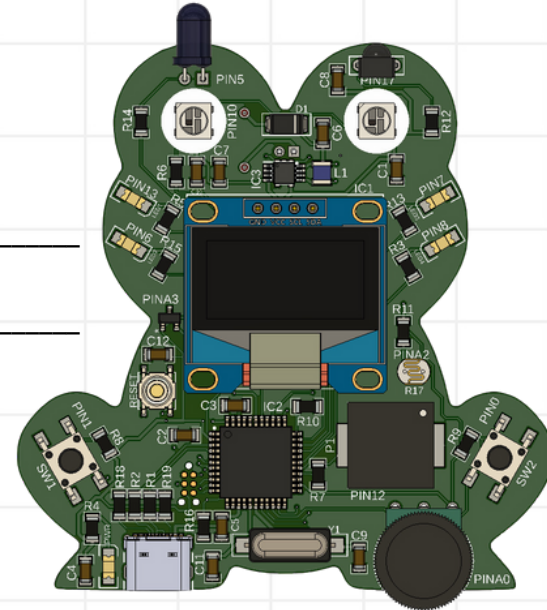
3. What does the “A” in the variable declaration mean?

4. Explain the voltage value assigned to a pin? How does the value change as they voltage changes?

5. What happens within the Serial port when you rotate the knob of the potentiometer?

6. Explain the modification you made to the sketch. What was the outcome?

7. You’ve now completed six lessons for the Frog Microcontroller Trainer. What is something you have learned?



FMT: POTENTIOMETER

LESSON 5 ANSWER KEY

Name: _____ Date: _____

Vocabulary: potentiometer, analog, voltage,

1. Identify the potentiometer on the FMT to the right.

Copy and upload the sketch provided to the FMT.

2. List two scenarios where a potentiometer might be used.

Adjusting volume on speakers or controlling brightness of lights

3. What does the “A” in the variable declaration mean?

The pin we are connecting to is an analog pin

4. Explain the voltage value assigned to a pin? How does the value change as they voltage changes?

The value assigned represents the voltage at that pin. This value is between 0-1023.

5v is 1023. 2.5v is 512 and 0v is 0.

5. What happens within the Serial port when you rotate the knob of the potentiometer?

You should see the Serial port range of values change as the potentiometer is rotated.

6. Explain the modification you made to the sketch. What was the outcome?

Answers may vary. Possible answer is to assign an LED to light up when the potentiometer reaches a certain value.

7. You’ve now completed six lessons for the Frog Microcontroller Trainer. What is something you have learned?

Answers may vary.

