A POSTERIORI

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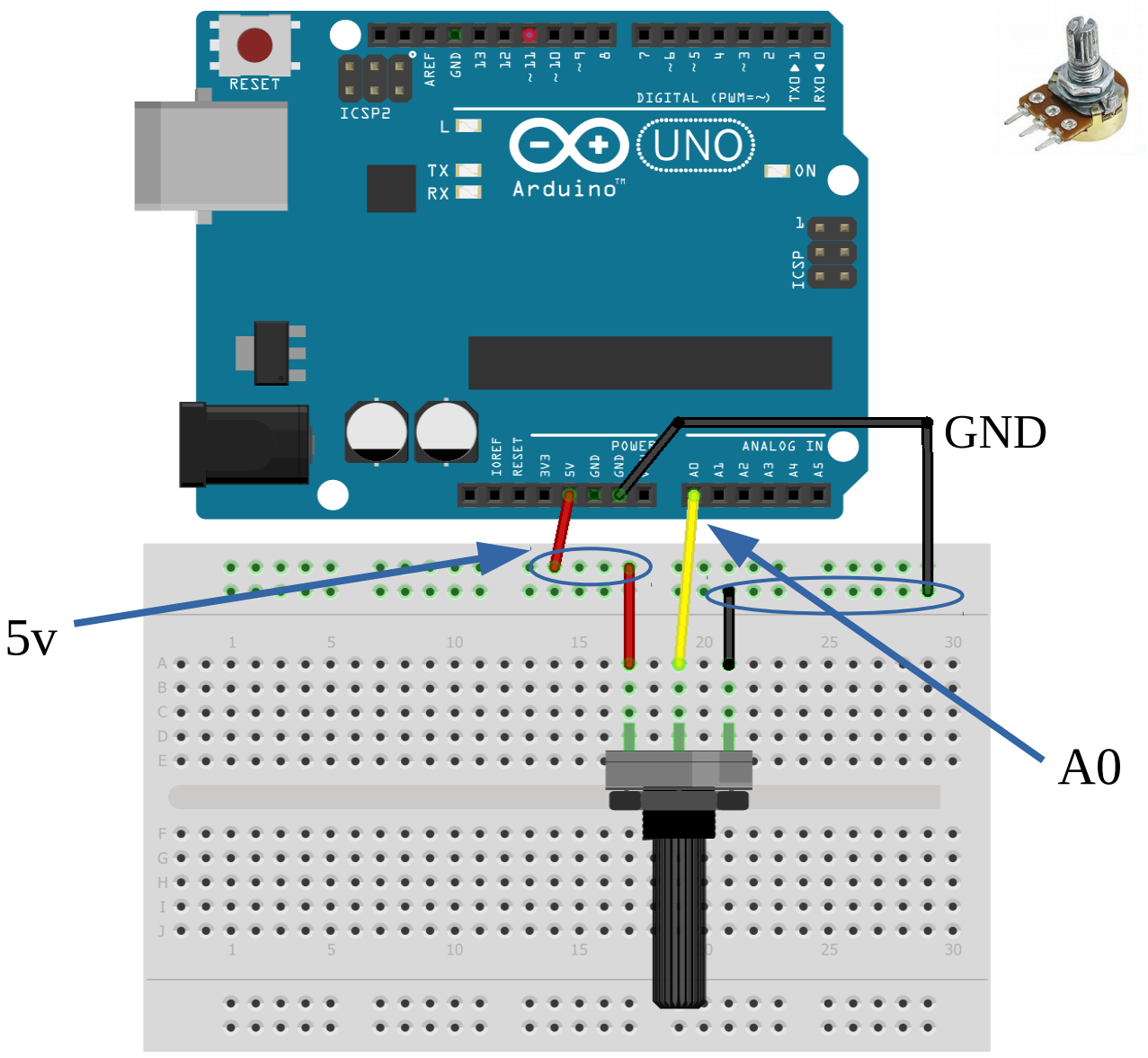
Name:		Class:	

Lesson 3 (Analog Input)

https://a9i.sg/huayi – look for Lesson 3 Slides

Exercise 3a (Read from A0

Connect this Circuit! Make sure to get a Potentiometer...



3a)

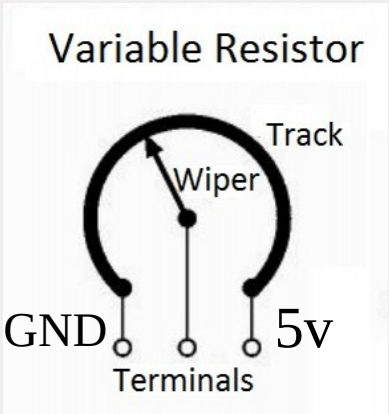
** What is the range of values you can read from A0?*

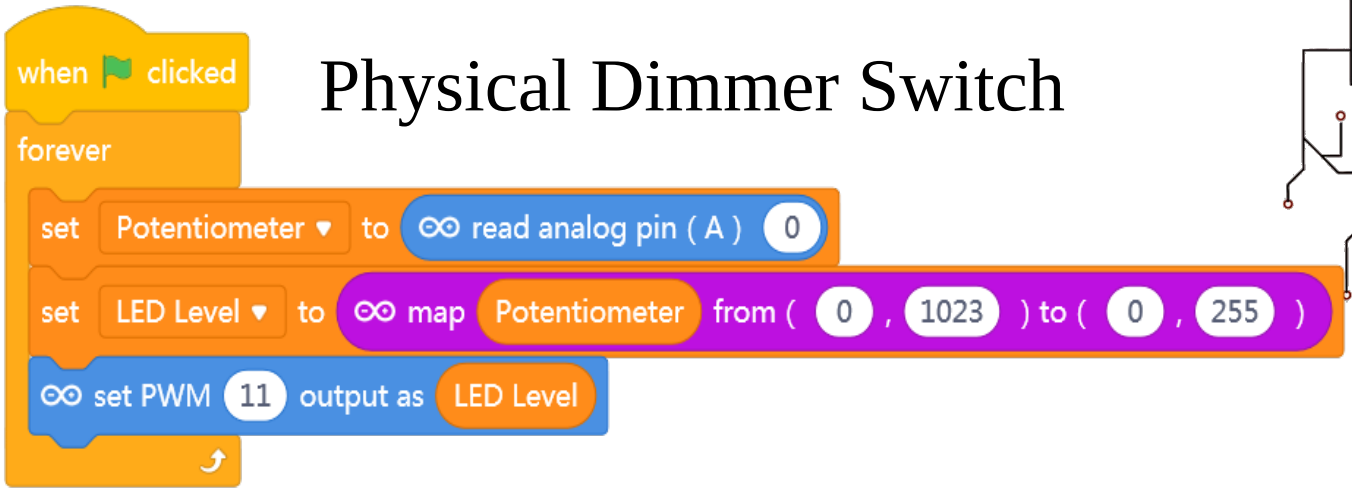
Min: _____ Max:_____

** Extend the program above:*

1) checks if Potentiometer wiper is
closer to GND or closer to 5V (A0 > _____ ?)

2) if closer to GND
Panda says “GND”
else
Panda says “5V”

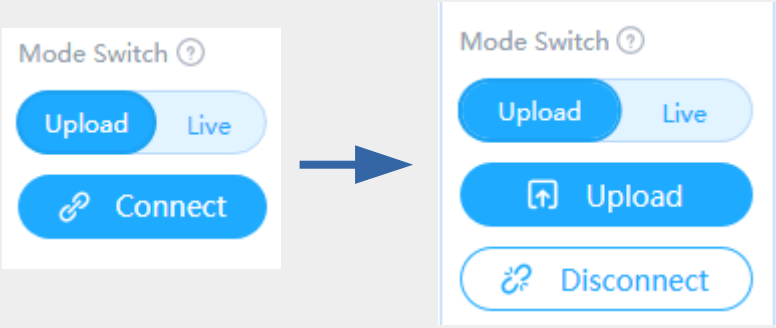




Physical Dimmer Switch

3b)

* Try to Upload the program to the Arduino for a smoother Dimmer Effect.



* Change the program such that the Potentiometer controls how fast the LED blinks, instead of brightness.

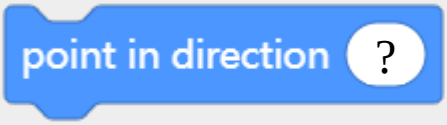
For instance:

A0	LED
0	1 blink a second
512	25 blinks a second
1023	50 times a second

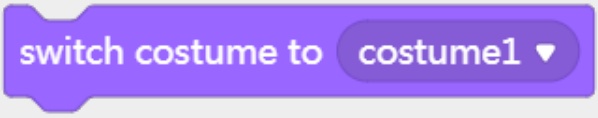
Simple Joystick

3c) Extend Above Program

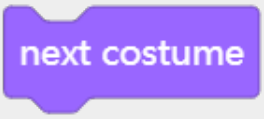
** Make Panda point towards the new X*



** Make Panda look like it's walking by changing costumes*



OR



** Add a second Potentiometer to control Y.*
Like an Etch-a-Sketch!