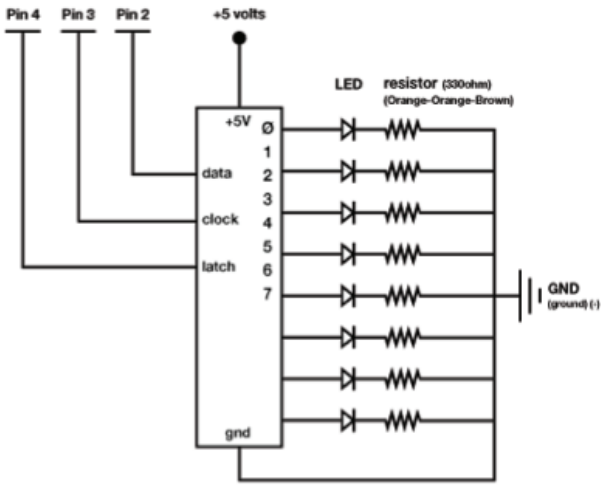
Name:
Date:

Circuit #14 Shift Register

1.

Shift Registers are used to control multiple pins using only three input pins to set the output pins. This can be useful if you want to control more than three objects using only three pins (as long as they always operate in the same order). What objects would you control using a shift register? List at least four and make sure the objects make sense together. Ex: A waffle iron, an eggbeater, a servo to pour the batter, and a timer.

Circuit:



2.

What does the RedBoard pin # 2 do in this circuit?

3.

What does the RedBoard pin # 3 do in this circuit?

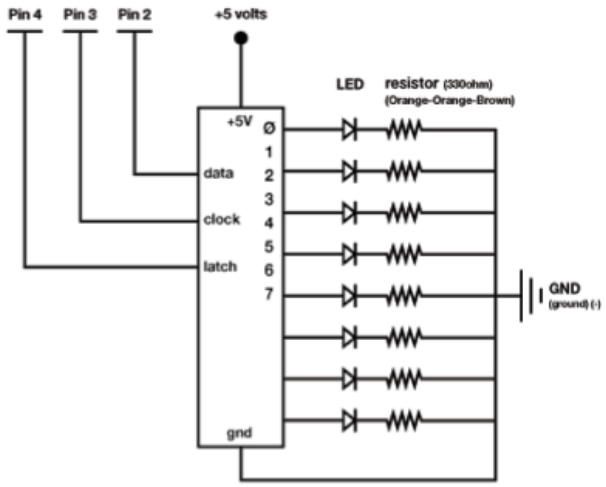
4.

What does the RedBoard pin # 4 do in this circuit?

5.

If all the LEDs are turned on, what would have to happen in order for LED # 5 to turn off?

Circuit:



7.

Using the circuit exactly as it is, with eight LEDs, what applications can you think of for the shift register? List at least three and explain what each LED would indicate.

6.

Draw a logic flow chart of the circuit here:

8.

Draw one example of how this circuit could be used in everyday life. Label all components and give it a title.