

# INPUT, PROCESS, OUTPUT AND BINARY NUMBERS

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On behalf of The World Association of Technology Teachers

## W.A.T.T.



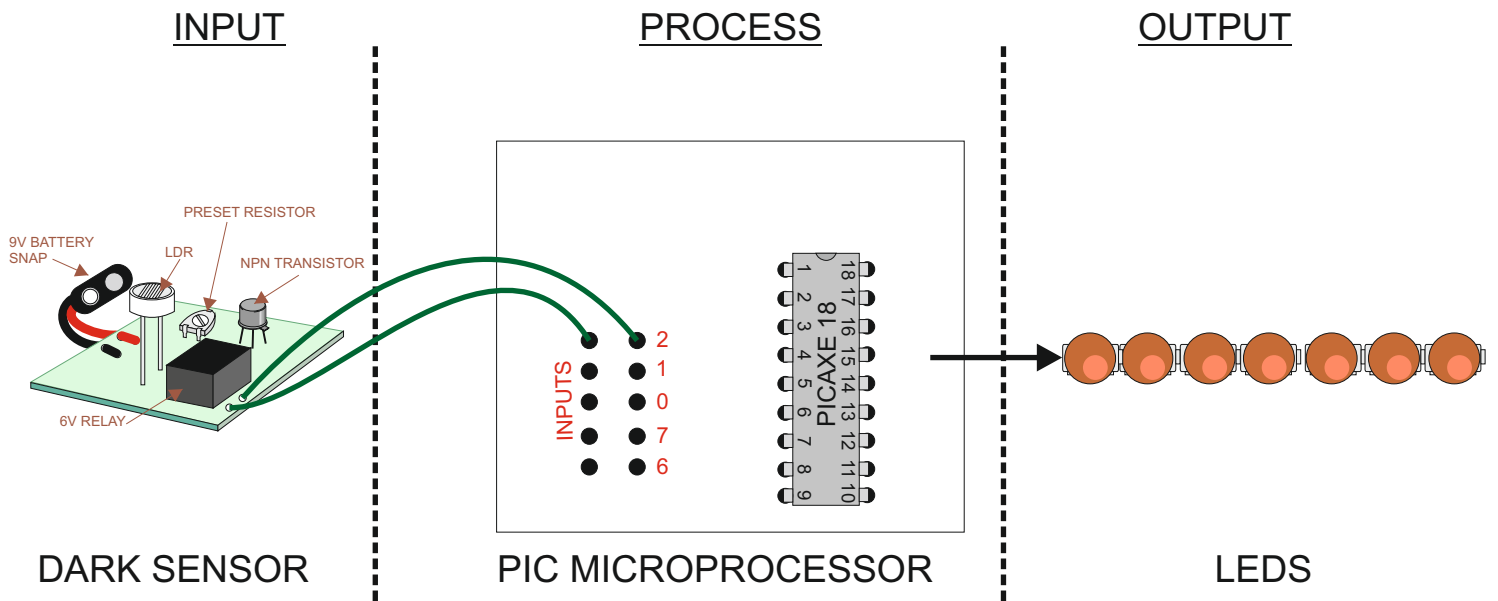
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A technology pupil has devised a cheap microprocessor based system for a model of a theme park entrance. It will count people as they enter the park. The light / dark sensor detects a drop in light level as a person passes by. The programmed microprocessor detects each input from the sensor and lights the output LEDs. The LEDs display the total number of people in the park using the binary system.



Complete the table below by writing the digital numbers as binary equivalents.

BINARY CONVERSION	64	32	16	8	4	2	1
DECIMAL 10							
DECIMAL 60							
DECIMAL 38							
DECIMAL 44							
DECIMAL 19							
DECIMAL 27							
DECIMAL 7							

Name and explain two other types of sensors or components that could be used in place of the light/dark sensor

SENSOR 1 NAME: \_\_\_\_\_

EXPLANATION: \_\_\_\_\_

SENSOR 2 NAME: \_\_\_\_\_

EXPLANATION: \_\_\_\_\_