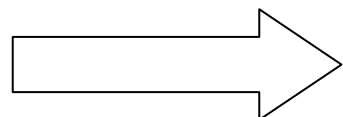
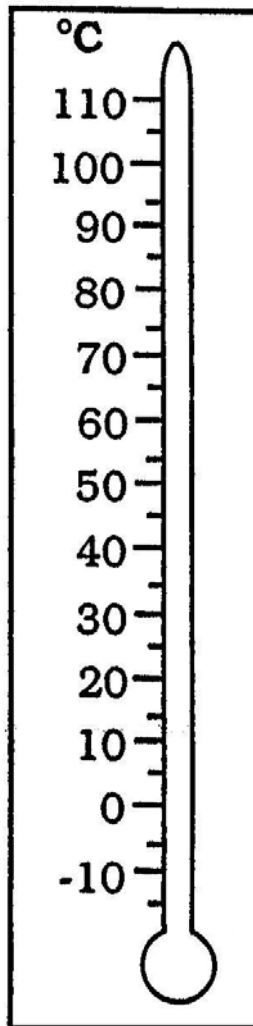


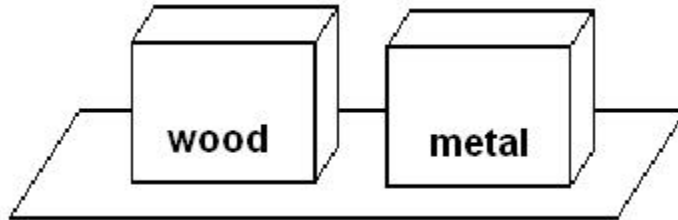
Human and Electronic Sensing

PreTest

1. Color in this Centigrade (Celsius) thermometer to show the temperature on a hot day in summer.

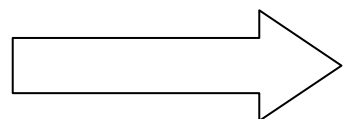


A wood block and a metal block have been sitting on a table in the same room all day.



2. What do you feel when you touch them?
 - A. They feel the same.
 - B. The wood feels warmer.
 - C. The metal feels warmer.

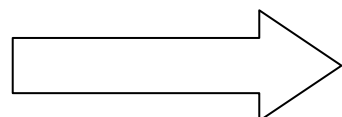
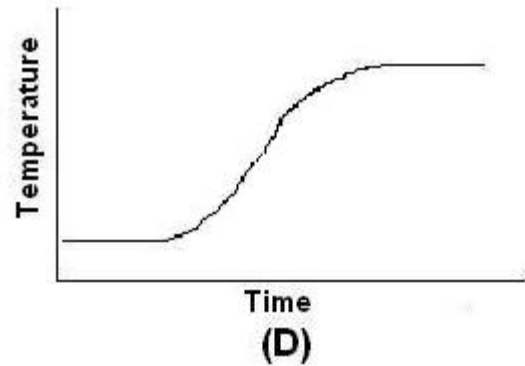
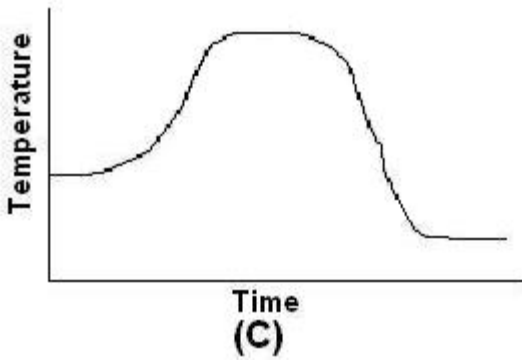
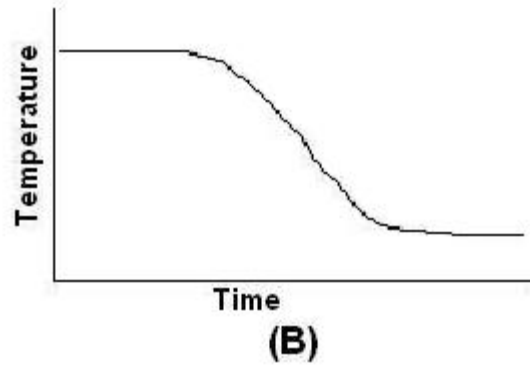
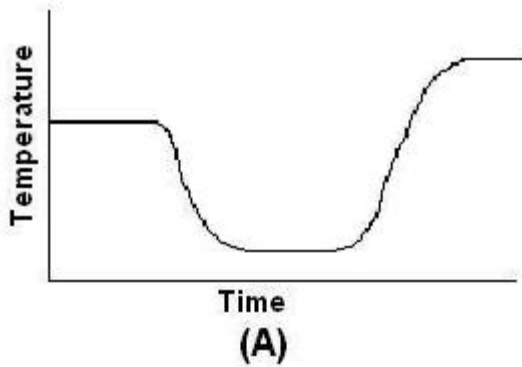
3. What do you think will happen when you measure the temperature of the blocks?
 - A. They will be the same temperature.
 - B. The block of wood will have a higher temperature.
 - C. The block of metal will have a higher temperature.



4. Claire used a temperature sensor to measure the temperature of different things. This is what she measured:

1. The air in the classroom
2. A cup of cold water
3. Her body temperature under her chin

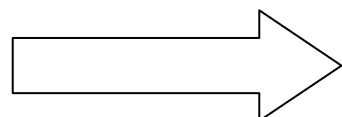
Which graph shows the data collected from the temperature sensor?



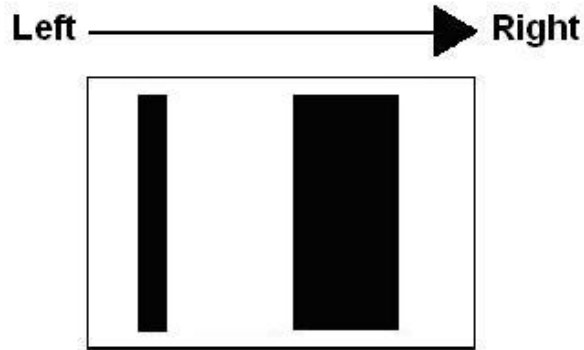
Maria tested a flashlight in two rooms. One is a dark room. One is a room with lots of light.

5. What do you think she saw?
 - A. The flashlight looks brighter in the dark room.
 - B. The flashlight looks brighter in the lighted room.
 - C. The flashlight looks the same brightness in both rooms.

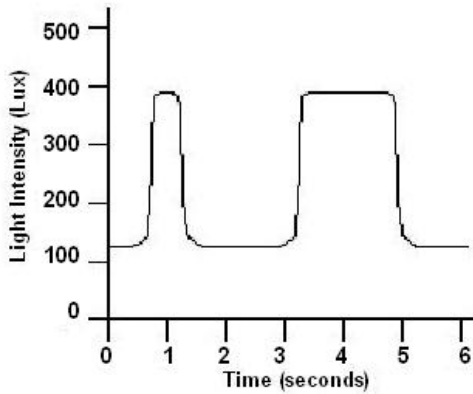
6. Maria used a light sensor to measure the brightness of the flashlight in each room. What do you think the light sensor measured?
 - A. The flashlight is brighter in the dark room.
 - B. The flashlight is brighter in the lighted room.
 - C. The flashlight is the same brightness in both rooms.



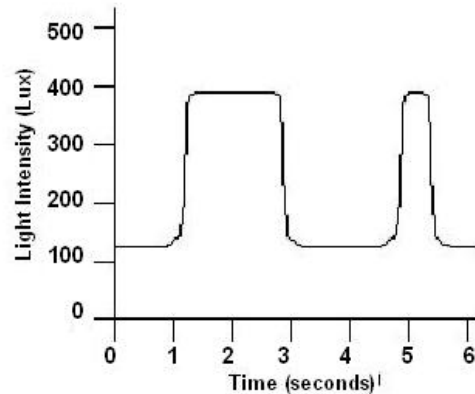
7. Jacob put one narrow and one wide strip of black paper on top of a large sheet of white paper.



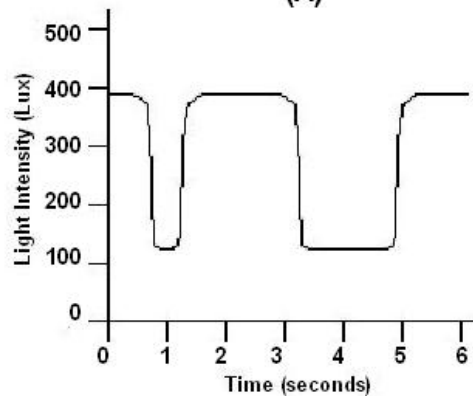
He used a light sensor to measure the brightness of the paper. He pointed the light sensor at the paper and moved it across the paper from left to right. Which graph shows the data collected from the light sensor?



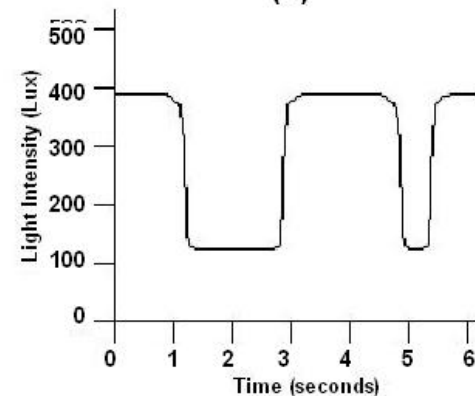
(A)



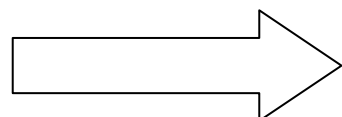
(B)



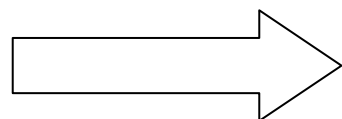
(C)



(D)



8. Mark was playing outside on a cold day. When he walked into his house the hallway felt warm. Later he went into the kitchen where it was very warm. When he walked back into the hallway he felt cold. A thermometer showed that the hallway was the same temperature all day. Why did the hallway feel different to Mark at different times of the day?



9. An eagle's eyes are close together in the front of its head.

a. What are eyes like that good for?

b. How do those eyes help the eagle survive?

A rabbit's eyes are on the two sides of its head.

c. What are eyes like that good for?

d. How do those eyes help the rabbit survive?

