



Solar Energy Lab

Question: Do soil and water heat at different rates?

Data Table:

Surface	Temperature under light					Temperature in the dark				
	2 min	4 min	6 min	8 min	10 min	2 min	4 min	6 min	8 min	10 mi
Soil										
Water										

Graph: Graph the data using two different colors. Make a key.



Questions:

1. By how many degrees did the temperature of each surface in the light change during the 10-minute time period?

Soil

Water

3. By how many degrees did the temperature of each surface in the dark change during the 10-minute time period?

Soil

Water

3. Which surface was the warmest (had the largest temperature gain) at the end of 10 minutes?

Why do you think this happened? (Hint: Look this up in your textbook if you aren't sure.)

4. Which surface was the coolest (had the smallest temperature gain) at the end of 10 minutes?

Why do you think this happened? (Hint: Look this up in your textbook if you aren't sure.)

5. What conclusions can you reach about the amount of heat energy soil and water absorb from the sun? (**Hint:** Look back at the Lab Question.)
(Hint: Look this up in your textbook if you aren't sure.)

6. In what ways does the relationship between the type of surface and amount of solar radiation absorbed affect people's lives?

7. Circle the picture on the front of this page that you think absorbs the **most** solar radiation. What is your evidence? (How do you know?)