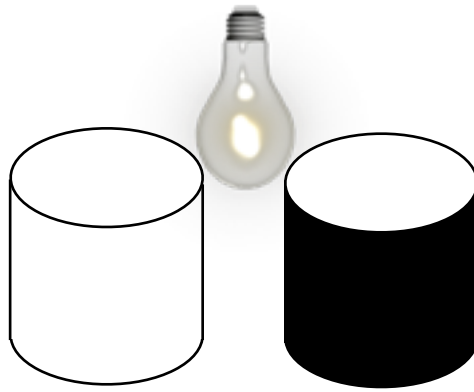


Heat Transfer Lab

Experiment #1



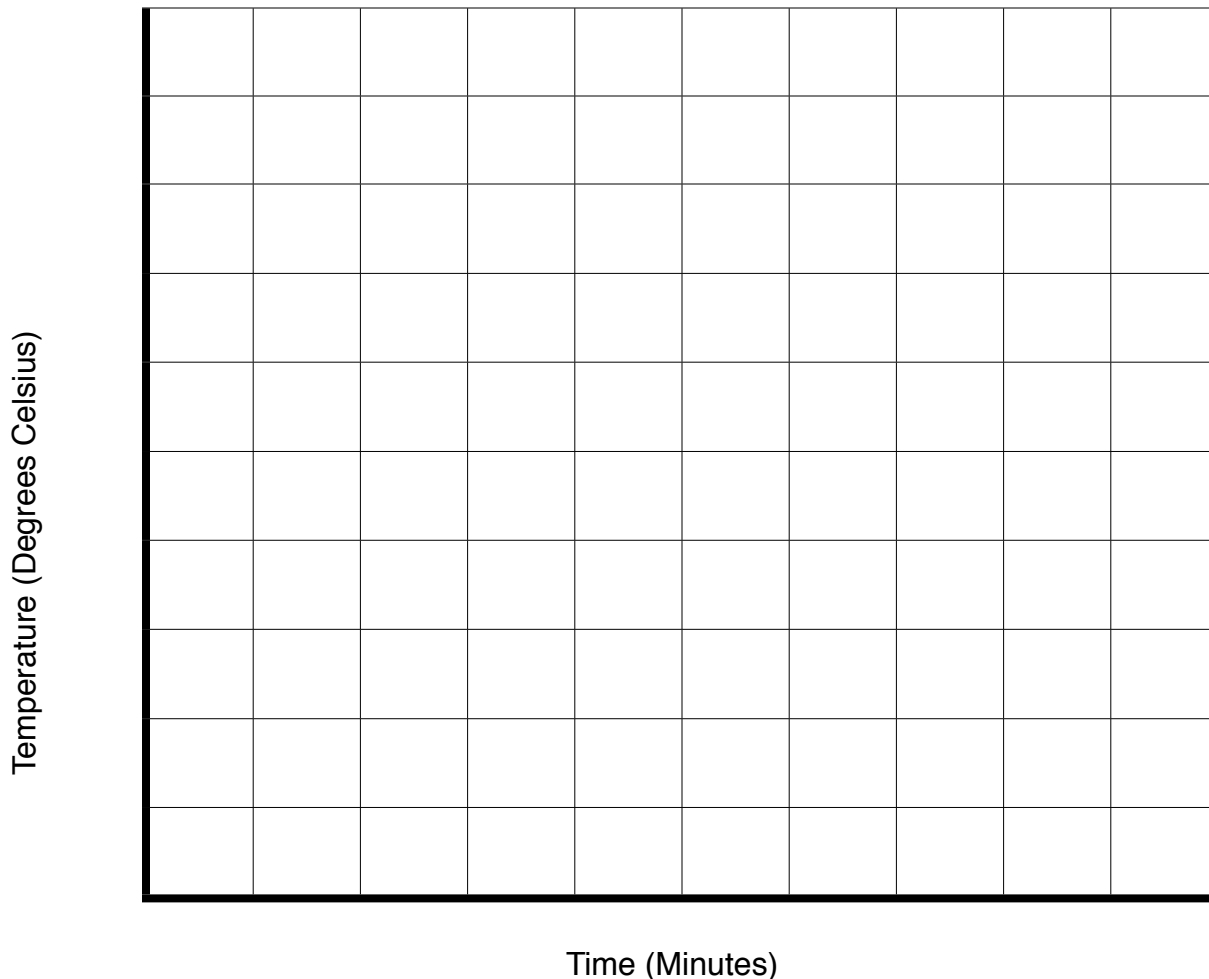
What type of energy transfer is occurring here?

Which can will heat up faster?

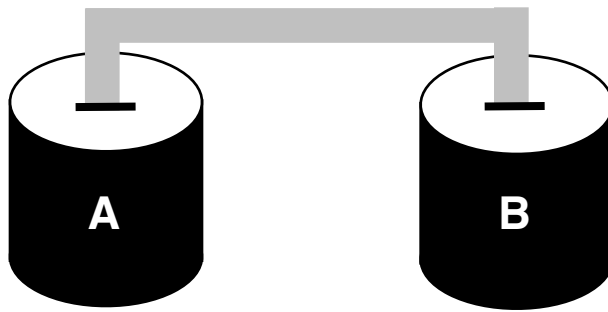
Record the temperatures of the water in the silver can and in the black can once a minute for ten minutes.

Time (minutes)	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
Silver Can Temp.																				
Black Can Temp.																				

Plot the data on the axes below. Use a different color for each curve.



Experiment #2



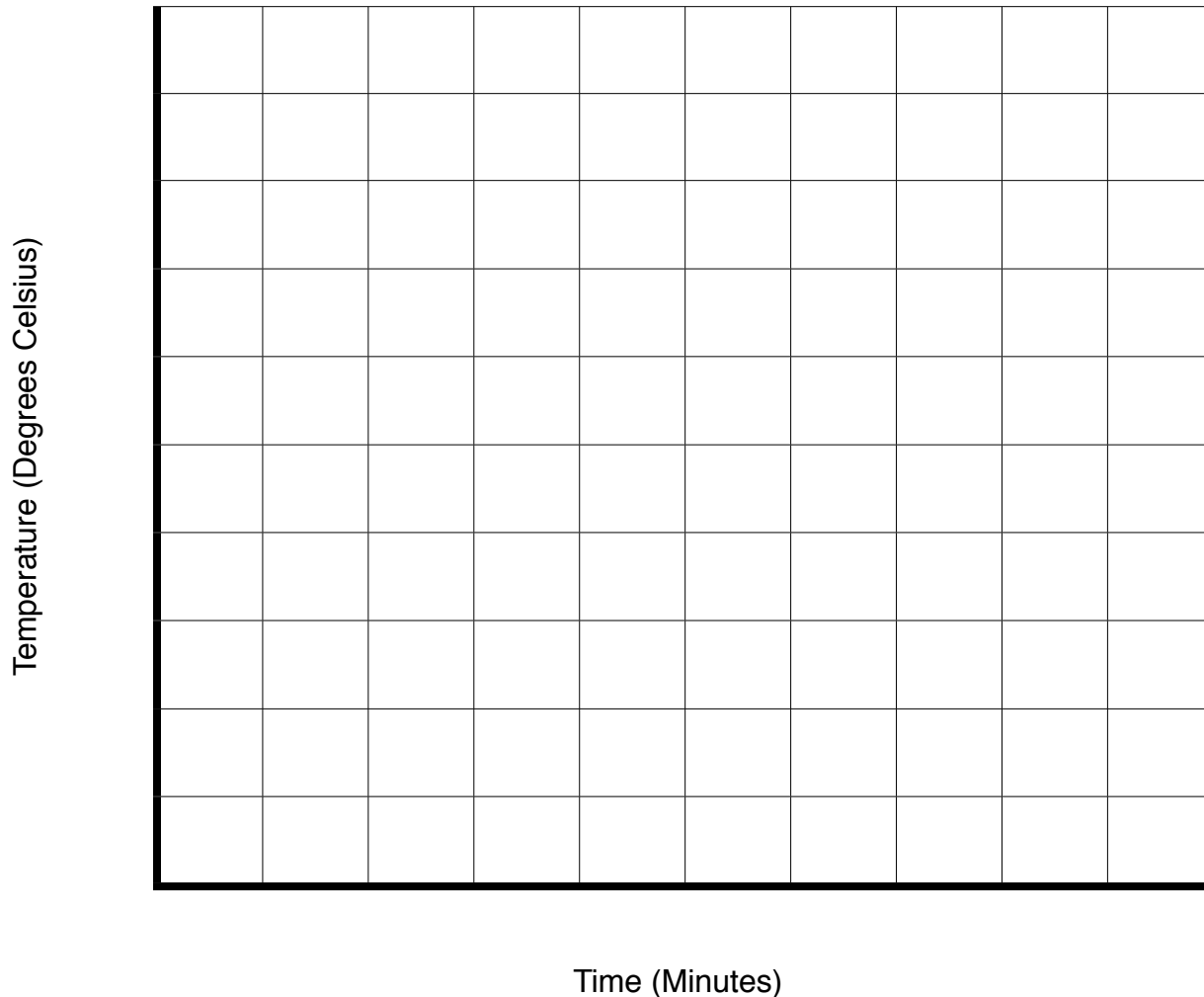
What type of energy transfer is occurring here?

How will the temperatures Change?

Record the temperatures of the water in can A and can B once a minute for ten minutes.

Time (minutes)	0	1	2	3	4	5	6	7	8	9	10
Can A											
Can B											

Plot the data on the axes below. Use a different color for each curve.



Name: _____ Date: _____ Period: _____

Experiment #1 Questions

1. Which can absorbed energy more quickly? _____
2. Why did we remove the heat source after nine minutes? _____
3. Which can radiated heat more quickly after the heat source was removed? _____
4. Which can had the greatest rate of change throughout the experiment? _____
5. If you know that a surface is a good absorber of energy, what can you infer about its ability to radiate energy? _____

Experiment #2 Questions

6. In what direction did heat energy flow? _____
7. How does your graph show that there is a change in the *rate* of the heat lost or gained as time passed?

8. If the experiment were left standing for 24 hours, what predictions could you make about the temperatures of the cups?

