

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Temperature Tells All Activity – Temperature vs. Time Worksheet

Test: \_\_\_ First or \_\_\_ Second (place an "X" on which test this is for)

Time (minutes:seconds)	Time ID	Outside Temperature (°F)	Inside Temperature (°F)	Difference Between Inside and Outside Temperature (°F)	Change in Indoor Temperature (°F) (i.e., T2-T1 )	Qualitative Analysis (how smoky does the house look?)
0:00	T1				----	
0:20	T2					
0:40	T3					
1:00	T4					
1:20	T5					
1:40	T6					
2:00	T7					
2:20	T8					
2:40	T9					
3:00	T10					
<b>Turn off lamp and remove incense from under the platform</b>						
3:20	T11					
3:40	T12					
4:00	T13					
4:20	T14					
4:40	T15					
5:00	T16					
5:20	T17					
5:40	T18					
6:00	T19					

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**Directions**

1. Graph the Inside Temperature versus time.
2. Graph the Difference in Inside and Outside Temperature versus time.
3. Graph the **change** in Inside Temperature versus time.
4. What is the **maximum** Inside Temperature? \_\_\_\_\_ What is the **minimum** Inside Temperature? \_\_\_\_\_ What time do each occur at? \_\_\_\_\_
5. What is the **greatest** Change in the Inside Temperature? \_\_\_\_\_ What is the **smallest** Change in Inside Temperature? Between what times do these occur? \_\_\_\_\_ and \_\_\_\_\_.
6. Find where the greatest **change** in Inside Temperature occurs on the graph you made in #1. What do you notice about the line connecting the data points?

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Do the same for the smallest Change in Inside Temperature.

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7. What factors do you think affect the **rate** of Change in Inside Temperature? (materials, orientation, etc...)

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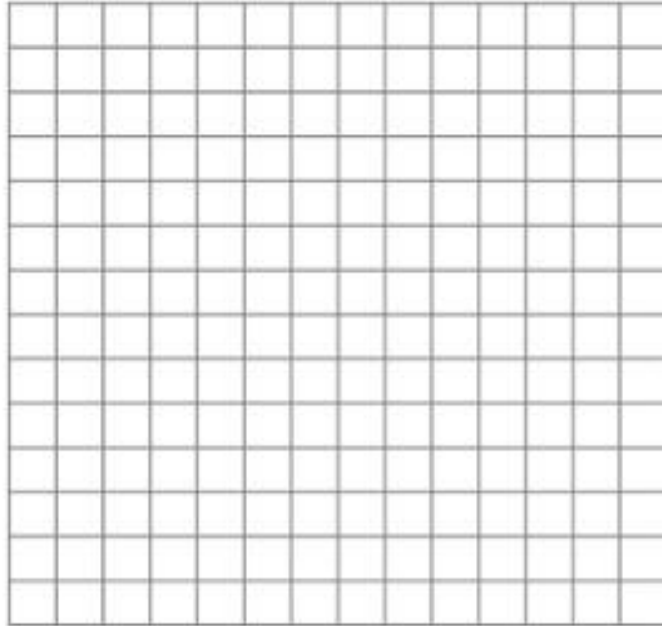
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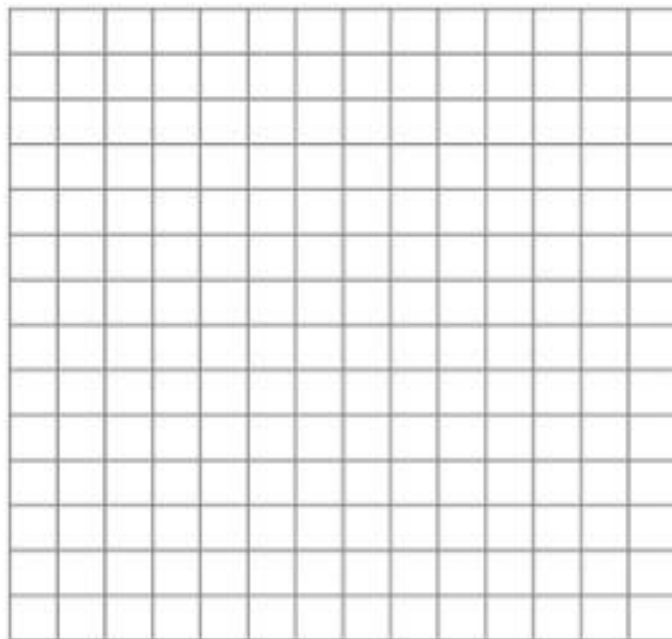
8. Compare with other groups!

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**Graph #1 - Indoor Temperature vs. Time**



**Graph #2 - Difference between Indoor and Outdoor Temperature vs. Time**



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**Graph #3 - Change in Indoor Temperature vs. Time**

