KJHS OBJECTIVES: complete a temp/time graph for four different insulators on your chromebook. THERMAL ENERGY: same as heat energy LATENT HEAT: Heat stored in molecules motion - Seen when changing phases. TEMPERATURE The measure of the average kinetic energy in molecules. EX: Cup of coffee has a high temperature, but low amount of latent heat. EX: Bathtub has a lower temperature, but low amount of latent heat. 1) Fahrenheit Scale: Used in the United States. 2) Celsius Scale: Used in most other countries 3) Kelvin Scale: Based off of absolute zero. (Where all molecular motion stops = ABSOLUTE ZERO) Heat is measured in several different units. CALORIE: amount of heat needed to raise 1 gram of water 1 degrees Celsius. INDEPENDENT VARIABLE (1): DEPENDENT VARIABLE (2): HYPOTHESIS: If we change the, then I think the	Physical Science		Н	eat energy		Date	Period
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Time	Metal	Styrofoam	Paper	Glass
0:00	100 ° C	100 ° C	100 ° C	100 ° C
2:00				
4:00				
6:00				
8:00				
10:00				
12:00				
14:00				
16:00				
18:00				
20:00				

 After 20 minutes of data is recorded, clean up: empty cups and set up lab station for next class (leave it as you found it).
GRAPH: FOLLOW THESE DIRECTIONS CAREFULLY AND STEP BY STEP
Put away all lab materials before anyone in your lab group takes out a chromebook
You must have a chromebook - if you do not, you need to finish this on your own tonight. CREATE -> SPREADSHEET ->
A COLUMN: time, 0,2,4,6,8,10, minutes count by 2
B COLUMN: metal, 100, and the rest of the data
C COLUMN: Styrofoam, 100, and the rest of the data
D COLUMN: Paper Cup, 100, rest of the data
E COLUMN: Glass, 100, and the rest of the data
INSERT → CHART → click "use row 1 as headers" → click on "use column A as lables" → click "more charts" → click "line graph" and choose the first choice (just lines) Then go to "Customize" tab:
title chart (Heat energy Lab), choose a dark color if you like.
Click "AXIS" -> "Horizontal" and Label horizontal axis: "time (minutes)"
Click "AXIS" again and select "left vertical axis title" and title is "temperature Celsius"
1. Does your hypothesis match your results? Explain your results
2. You must share you graph with me to get FULL credit for this lab - no shared document, no credit! itoal@petk12.org ****time stamp - you must share it by midnight tonight ©
FEEDBACK: Please state your argument about using a chromebook to graph your data in science. (at least 25 words)