

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

Group: \_\_\_\_\_ Period: \_\_\_\_\_

## Ice Lab Record Sheet

- 1) Draw a sketch of your ice cube:
- 2) Record 3 observations about your cube:
  - A)
  - B)
  - C)
- 3) Which material will keep the ice solid for the longest time?

**Data Table 1:  
Styrofoam**

Time (s)	Percentage of Solid Remaining
0	100
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	

**Data Table 2:  
Plastic**

Time (s)	Percentage of Solid Remaining
0	100
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	

**Data Table 3:  
Aluminum**

Time (s)	Percentage of Solid Remaining
0	100
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	

### Data Table 4: Styrofoam

Time (s)	Percentage of Solid Remaining
0	100
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	

### Data Table 5: Plastic

Time (s)	Percentage of Solid Remaining
0	100
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	

### Data Table 6: Aluminum

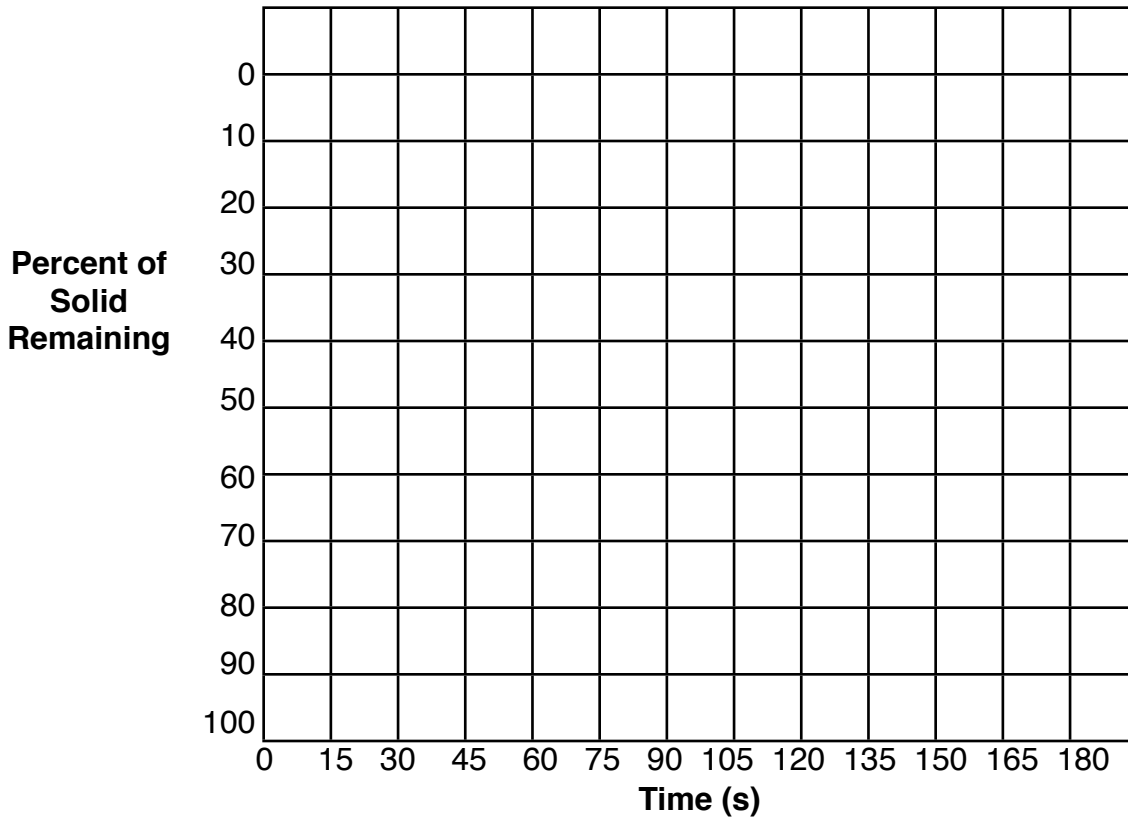
Time (s)	Percentage of Solid Remaining
0	100
15	
30	
45	
60	
75	
90	
105	
120	
135	
150	
165	
180	

#### Analysis:

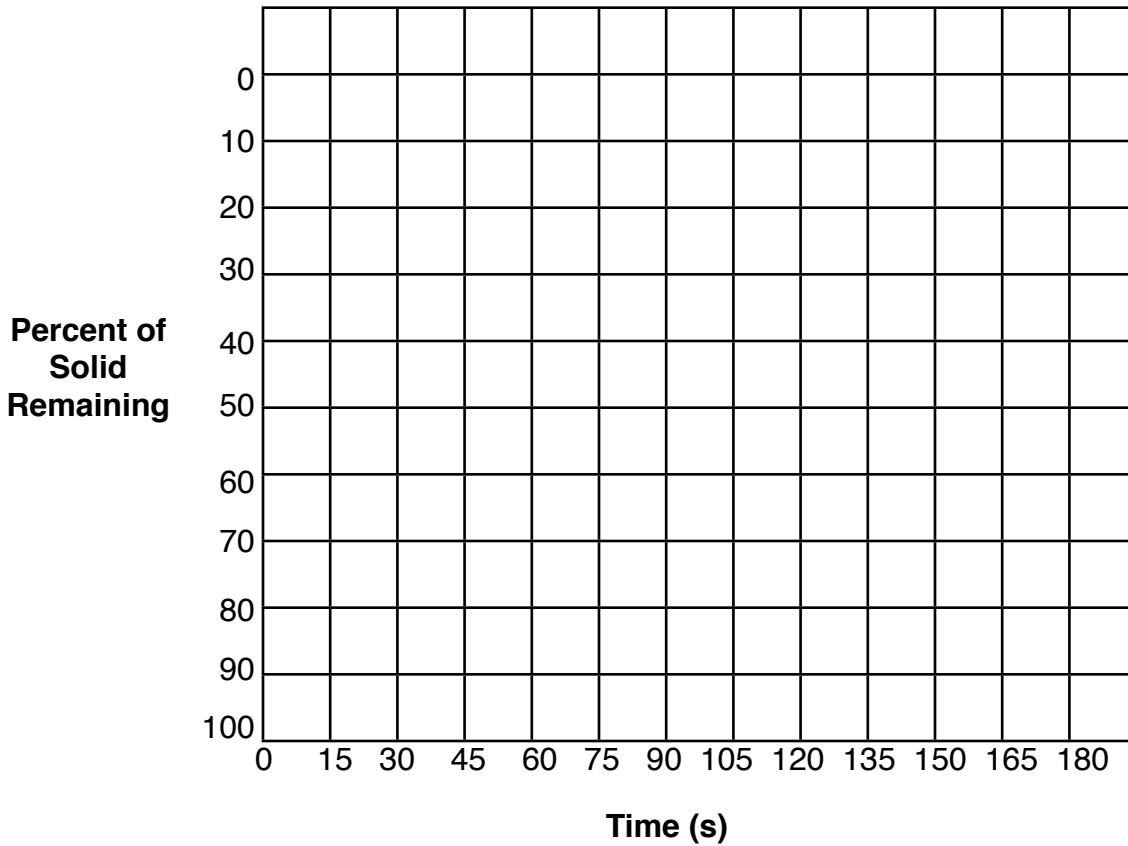
4) Begin your analysis by drawing a line graph for each of the data tables. Graph the data from tables 1, 2 and 3 on the first graph. You will have 3 different graphs on the same paper, so you will need to use different symbols for each data set.

- For data table 1 use **dots**
- For data table 2 use **triangles**
- For data table 3 use **squares**
- Plot each point on the graph and then connect the points with your line
- You should have 3 different lines on the graph
- Use the same procedure for the second graph

### Graph 1: Ice on Table



### Graph 2: Ice in Hand



- 5) Look at graph # 1, which piece of ice melted the fastest?
- 6) Look at graph # 2, which piece of ice melted the fastest?
- 7) Why do you think this is?
- 8) Compare samples from graph 1 and graph 2, overall which samples melted the fastest, those from graph 1 or those from graph 2?
- 9) How much faster did the samples melt for each of the cups?
  - A) Styrofoam:
  - B) Plastic:
  - C) Aluminum:
- 10) Why do think one graph set melted faster than the other?
- 11) What are the 4 properties of metals?
- 12) Why do you think the aluminum cup had a different effect on the melting of the ice than the others?
- 13) What was the Independent Variable?
- 14) What was the Dependent Variable?
- 15) Which material was the best at keeping the ice solid?

