

Name _____

Sugar Lab

Cup	Sugar Sample	Water Condition	Time (sec)	Prediction	Actual Ranking
A	Crushed	hot			
B	Cube	Hot			
C	Crushed	cold			
D	Cube	Cold			
E	Crushed	Cold, stirred			
F	Cube	Cold, stirred			
G	Crushed	Hot, stirred			
H	Cube	Hot, stirred			

1. Predict which order you think the samples will dissolve in. Why did you choose those rankings? Explain below.
2. Rate the sugar samples from fastest to slowest. Record in the actual ranking section above.
3. Were your rankings and your predictions the same? Why or why not?
4. How does particle size affect the rate in which the sugar dissolves in water?
5. What are 2 sources of error that could have affected the rate of dissolving? How did they change your results?

Food Coloring Solutions Lab

Make your observations in the table below

Substance	Water	Oil
Sugar		
Food Coloring		

Conclusions:

1. Why did food coloring and/or sugar dissolve or not dissolve in water?

2. Why did food coloring and/or sugar dissolve or not dissolve in oil?
3. Using previous knowledge what can you conclude about sugar and food coloring? Explain thoroughly.
4. What are some characteristics that affect the solubility of one substance in another? Give specific examples
5. List and explain two sources of error and their affects on this lab.
6. Explain the phrase "like dissolves like" as it relates to this particular activity.

Kool Aid Lab

1. Assigned Solution Number_____
2. Calculations for assigned solution. Watch your sig figs and box your answer.
3. After all kool aid solutions have been made compare the intensity of the solutions in relationship to their color. What does this tell you about their concentration?