

Activity 2: Keeping Track of Stuff in a Closed System

Name _____

Date _____

Class _____

Key Question

We Think

- Do you agree or disagree with the students? Explain your reasons.

Explore Your Ideas

Table: Mass Measurements		
	Dissolving Sugar in Water	Mixing Chemicals
End Mass	(After mixing) _____ g	(After mixing) _____ g
Start Mass	(Before mixing) _____ g	(Before mixing) _____ g
Change in Mass = End Mass – Start Mass	_____ g	_____ g
Class Average Change in Mass	_____ g	_____ g
Uncertainty in Mass	_____ g	_____ g
Taking into account the uncertainty in mass, does the mass <i>increase</i> , <i>decrease</i> or <i>stay the same</i> ?		

Make Sense of Your Ideas

1. What do the data in this activity indicate about mass in a closed system? Write your reasoning and include evidence from the activity.

2. How does the uncertainty in the mass measurements affect your conclusion about the experiments?

3. How do the results in this activity compare with your predictions?

4. How is it that scientists ever come to accept an idea?

Our Consensus Ideas

The key question for this activity is:



In a closed system, can interactions cause the amount of mass to change?

1. Write your best answer to the key question.

2. Record the class consensus ideas about the key question.
