|  |  |  |  |
| --- | --- | --- | --- |
| Phenomenon | Question | What we figured out | Model Statement |
| Sugar can be big chunks, little pieces, tiny pieces, and really tiny pieces. | What would happen if we kept breaking down sugar into tinier and tinier pieces? | The sugar looked the same and tasted the same, no matter what size the pieces were. We think we could keep breaking the sugar into pieces too tiny to see.  We put the sugar in water. We couldn’t see it, but it tasted like sugar, so we know it’s still there. | 1 |
| When you mix baking soda and vinegar in a bag, the bag blows up. | What is making the bag expand? | We did the experiment on a balance with a sealed bag, and it measured the same mass before we mixed the baking soda and vinegar, and after we mixed them.  Then we did the experiment in an open container on the balance, and the balance showed less mass at the end than at the beginning.  We think that the baking soda and vinegar reacted together to make a gas made out of tiny particles that stayed in the bag, but got out of the open container.  We did some reading about matter, and we learned these tiny particles might be atoms or molecules. | 1 |

|  |  |  |  |
| --- | --- | --- | --- |
| Phenomenon | Question | What we figured out | Model Statement |
|  |  |  |  |