First and Second Grade Chemistry Lesson

The science unit planned for Seabury's 1st – 4th graders this spring was on chemistry – matter, physical and chemical changes, atoms and molecules and more. Teachers have taken their school plans and turned them into an at-home kitchen chemistry unit that is turning our students into both chemists and bakers!

In our first grade class, students started from their overarching concept for the year -Transitions. Curriculum at Seabury is built around overarching concepts that pull ideas together across the curriculum and foster more sophisticated, higher level thinking. In introducing the study of chemistry, students thought about things that change and what kinds of changes they make. That led into an exploration of states of matter and of physical and chemical changes.

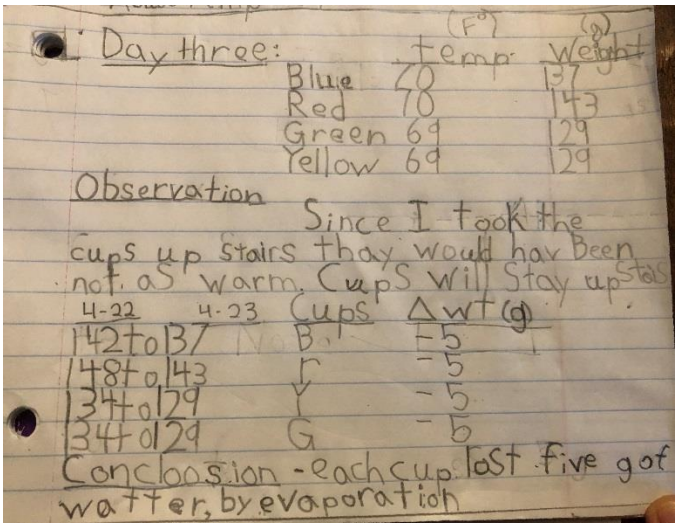
In their exploration of states of matter, students did an experiment in which they made salt water and then left it out to see what would happen. As the water evaporated (changed states) students talked about what happened to the water and explored what was left behind. Students all started by dissolving 1 tsp of salt in water, but in their Zoom class meeting, students thought about other solutions they could test – more salt, Epsom salts, sugar, and one student even tested M&Ms! As is true for all scientists, their discoveries led to new questions and new explorations.

In another experiment on physical vs. chemical changes, students were encouraged to bake something with and without a raising agent. One of the students worked with his family to make pizza crust – one version with yeast and one without. He observed how the yeast made the dough rise and the crust fluffier. He preferred the unleavened crust, but his mom liked the yeasted dough best. Another made beignets and observed that there must be a chemical change taking place because the dough changed color as it browned and puffed up with air trapped inside.

Part of students' routine at school is the question of the day, and one of the chemistry questions that came out of a previous class discussion was, "How is Epsom salt different from table salt?" Responses included:

1. It is completely different than table salt.
2. It is known as magnesium sulfate
3. It's made of sulfur, magnesium and oxygen
4. It is $MgSO_4$
5. NaCl is table salt. $MgSO_4$ is Epsom salt. The elements are different. Table salt is used for eating, but Epsom salt is used to help plants grow or to make bath salt and in medicine.

We encourage kids to explore their own questions at Seabury. One student, whose recent science fair project was titled, “Can I Float?” was inspired to learn more about how Epsom salts affect how easily something floats. He added 12 bags of Epsom salts to his bath to see if that would allow him to float in the tub!



Chemistry, whether at home or at school is messy. Hands on, inquiry-based learning is messy. But it is what Seabury students need to challenge and stretch their thinking. Distance Learning: Seabury Style is messy, engaging, and fun. It also makes us so grateful to our family partners at home who are allowing their kitchens and bathrooms to become laboratories for our budding scientists!

Seabury School challenges gifted children in a community that cherishes each individual and fosters a love of learning, discovery and creativity.

– Seabury Mission Statement

SEABURYSCHOOL
1801 53RD STREET NE / P: 253.952.3111 / OFFICE@SEABURY.ORG
TACOMA, WA 98422 / F: 253.952.1758 / WWW.SEABURY.ORG