

# 8 grade SCIENCE *comes alive*

\*\*\*\*\*INQUIRY THROUGH ACTION\*\*\*\*\*



## Slime Time

*Students were challenged to make revise a slime recipe to make the bounciest slime they could. This was a great way for students to be introduced to the concept of polymers and the scientific method.*

Students did a comparative study between the anatomical structure of a frog and human. Students discovered and humans share many similar traits with frogs. Both frogs and humans have hearts, lungs, similar skeletal structures and muscular structures. They also found

## Lab Activities on Volume

*Students worked on figuring liquid volume and volume through displacement.*

## ✕ Hands-on Opportunities ✕

*Science is a way of life. It is life. Everything is science. This semester students have had many opportunities to experiment and to explore the world around them. Highlights from the semester are summarized in this news letter. Ask your child about other activities they did in class this semester! Take a look at their science notebook, too!*

### Lab Activities: Finding Mass

Using triple beam balances, students found mass of a variety of common objects. Students defined mass, learned to think in grams and to use the balances correctly. They then used this skill to figure out density of whale organs.



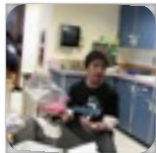
### FROG DISSECTION LAB



that the eyes and brains of both organisms are very much alike. Students then looked at how the organisms differed from each other. This included the extra eyelid a frog has to see underwater.

Using beakers and graduated cylinders, students learned how to read a meniscus, measure accurately and use the micro units of milliliters to calculate volumes of liquids as well as irregularly shaped objects. They then figured density.





## 5 ft Fetal Whale Dissection

First semester students focused a great deal on anatomy. They had the opportunity to participate in a fetal whale dissection. Students dissected out all the organs so that they could better understand whales. Students made measurements just like the ones made at a traditional whale harvest. They found the volume of the brain and the brain cavity. Students rendered oil from the blubber and they found the density of each organ. Mary Brower, an elder from the community, helped kids with the Inupiaq name for all the parts of the whale. Eyes, ears, bone structure, and the tongue were studied along with the skeleton, jaw, muscle structure, and all systems of the whale. Students even figured out the sex of the whale. Thanks go to Wildlife, the Kaktovick Crew, and community members who supported this activity.



### *Measuring Freeze-up of the Active Layer*

Is climate change real? As students delve into world issues, they are collecting data about the Barrow environment. One thing students were involved in this semester was measuring the freeze-up of the active layer of soil. In August students probed down to find the depth of the permafrost behind the school. Throughout the fall students went outside to collect data on the freeze-up. Data will be compared to last years freeze-up data.

### *Water Quality Testing*

Students monitor the pH, Oxygen content, temperature, and overall health of the lagoon behind the school.



### *Pellet Dissection*

The Snowy Owl population rises and falls periodically around Barrow. In science students dissected owl pellets and reconstructed skeletons of the organisms they found in the pellets. Discussions then focused on what may contribute to the change in local owl population size from year to year. This activity focused on the local food web of the tundra.

