

2 0 1 1 F E B R U A R Y
S C I E N C E
N E W S L E T T E R

8 grade
SCIENCE *comes alive*

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



DATES

March 9th - Hopson Middle School Science Fair (Library)

March 18-19 State Science Fair in Anchorage (Begich M.S.)

March 26th State Science Olympiad Competition in Anchorage (UAA)



Community Opportunities

Students had the chance to enter this year's wildlife poster contest! This year's theme is the circle of life.



Lab Activities: The Ramp

As students explored topics in the area of physics they built ramps to show the difference in potential and kinetic energy. Working in teams of 4, students designed their ramps and then tested them out.



CATAPULT INTO ACTION ACTIVITY

Catapults were built and used by students to understand the concept of energy transfer. Working in teams to problem solve, students designed, built,



and tested their catapults. They used math skills once they completed this activity to measure height and distance.

Group Problem Solving is Important to Learning

By working in small teams, students learn how to work cooperatively with others to reach a solution or common goal. This skill transfers into their everyday life out on the ice or tundra as well as on the basketball court.





Scientists in the Classroom

🕒 Dr. Yeager from the University of Georgia along with Miss Lollie from Texas ventured up to Barrow to collect data on carbon dioxide emissions and nitrification of the ocean. While up here they came to Hopson to work with the eighth grade science students.

🕒 Students role played the carbon cycle. Taking on the role of ocean currents, sun, atmosphere, the equator, trees, and industrial activities, students passed carbon dioxide cards around watching the distribution and build up of CO₂ emissions and their global impact.



Light Spectrum Activities

Using “spectra-goggles” students broke apart several different types of light from from candles, florescent bulbs, and bunsen burners. This enabled students to better understand the characteristics of light and how visible light fits into the electromagnetic spectrum. Students then used the information to figure out how astronomers classify stars by color and composition.

Electrical Energy Transfers

Given a pile of batteries, wires and electrical tape students constructed circuits causing a flow of electrons. To prove that their circuits worked, their light bulbs had to turn on!



Wind Energy Transfers

So how do you take wind energy and turn it into something that you can use to run appliances in your house? Students explored wind energy with a turbine where they could change the angles of the blades. This way they could start to measure the efficiency of wind energy as it turned the turbine thus tuning the generator and ultimately creating electrical current.

