Youth see science at work

CAMP Feature

ᑕᑯᓯᒃᓴᐃᑦ

photos courtesy of Actua

Kitikmeot/Baffin

Northern News Services

The Actua science camp zipped through Nunavut this summer.

Children participating in the camps learned how to observe science in everyday life in their communities. They learned how to ask questions and develop skills they already had, without necessarily knowing they had them. They learned about energy, physics, biology, robotics and much more.

Outreach instructor Travis Moffat and Dr. Luke Copland, associate professor and university research chair in the Glaciology Department of Geography at the University of Ottawa, demonstrated the process of convection current with a tub full of water and a smaller container of warm water. When food colouring was added to the cooler side, it can be seen as it mixed with the warm water and moved around in the current.

Students were tasked with making electrical connections in circuit using a puppet-like model called a Circuit Earl.

Actua is a non-profit organization that brings university science students and science professionals to the North to introduce the world of science, technology, engineering and mathematics (STEM) to young Nunavummiut.

– text by Michele LeTourneau

ᓄᑕᖃᐃᑦ **Actua**-ᑯᓐᓂ ᓯᓚᑦᑐᓴᕐᕕᓐᓄᑦ ᑕᕐᕆᔭᕐᓯᒪᕚᖓᑦ ᖃᐅᔨᓴᕐᑐᒥ ᑕᑯᖃᓐᓈᖅᑎᑕᐅᔪᑦ ᐃᑲᔪᖅᑎᐅᔪᒥᒃ ᑐᕌᕕᔅ ᒫᕕᑦᒧᑦ, ᓴᐅᒥᐊᓂ, ᐊᒻᒪᓗ ᑑᒃᑖᒧᑦ ᑑᒃ ᑯᑉᓚᓐᒧᑦ ᐃᓕᓭᖅᑕᐅᓪᓗᑎᒃ ᖃᓄᖅ ᐃᒪᖅ ᓄᕕᔭᕐᔪᐊᕐᔪᓂᕐᓗᓂ.

***Children at the Actua science camp** in Resolute Bay watch outreach instructor Travis Moffat, left, and Dr. Luke Copland explain convection current.*

ᔭᔅᑎᓐ ᑐᑕᓕᒃ ᐃᓕᓭᖅᑐᖅ ᐅᔭᕋᓐᓂᐊᕐᓯᕐᓂᒃ ᐊᒻᒪᓗ ᖃᓄᐃᑦᑐᓂᒃ ᑕᒫᓂ ᐅᔭᕋᖅᐅᕐᓂᕐᓗᓂᒃ ᒪᓂᕐᓗᓂ ᐅᕐᔪᖅᑑᒥ.

***Justin Totalik learns** about mining and geology in Gjoa Haven.*

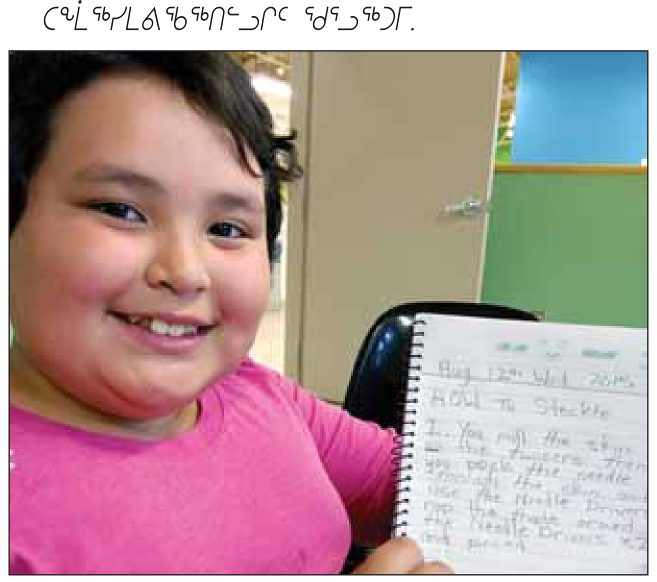
ᕿᓯ ᐊᓚᒃᑲᓐᓄᐊᖅ ᕿᒥᕈᐊᖅ ᓴᕕᕋᔅᓴᖅᓴᖅᑐᓂᒃ ᐅᔭᕋᓂᒃ ᓄᓇᒥᑦ ᐊᕙᓗᖅᑕᐅᔪᕕᓂᕐᒥᒃ ᑰᒑᕐᔪᖕᒥ.

***Casey Alakannuark examines** the mineral properties of a rock sample in Kugaaruk.*

ᓴᐃᓇ ᓇᓄᖅ ᓴᓇᓂᐊᖅᑕᒥᒃ ᑎᑎᖅᑐᕋᖅᑐᖅ ᓯᓚᒧᑦ ᖁᕝᕙᖅᑎᑕᐅᔪᓂᒃ ᐊᐅᓚᐅᑎᓂᒃ ᑕᓗᕐᔪᐊᒥ.

***Shayna Nanook works on a design** for a rocket in Taloyoak.*

ᓯᐅᕆ ᒪᒃᑖᓄᑦ ᑎᑎᕋᖅᐸᓪᓕᐊᔪᖅ ᖃᓄᖅ ᑎᒥᒥᒃ ᐱᓕᕆᓯᔪᑦ ᒥᖅᓱᐃᓱᖑᓂᕐᓂᒃ ᓯᓚᑦᑐᓴᕐᕕᓐᓂᒃ ᑕᕐᕆᔭᕐᓯᒪᕕᖕᓂᑦ ᖁᕐᓗᖅᑐᒥ.



***Sherri MacDonald takes notes** on how to properly suture at science camp in Kugluktuk.*

ᓴᒪᕋ ᓚᐃᔾ ᑎᒍᒥᐊᖅᑐᖅ (Circuit Earl)-ᒥᒃ ᓯᓚᑦᑐᓴᕐᕕᓐᓄᑦ ᑕᕐᕆᔭᕐᓯᒪᕕᐊᓂ ᑕᓗᕐᔪᐊᒥ.

***Samara Lyall holds** her Circuit Earl at science camp in Taloyoak.*

ᐃᓄᒃᓱᒃᑐᐃᑦ ᑕᑯᑎᑕᐅᔪᑦ ᓯᓚᑦᑐᓴᕐᓴᐅᑎᓂᒃ ᓴᓇᖅᑯᑎᓂᒃ

ᐋᒃᑐᐊᒃᑯᑦ ᓯᓚᑦᑐᓴᕐᕕᓐᓄᑦ ᑕᕐᕆᔭᕐᓯᒪᕕᖃᕐᓇᓚᐅᖅᑕᑦ ᓄᓇᓕᖕᓂ ᓄᓇᕗᒥ ᐊᐅᔭᖅ.

ᓄᑕᖃᐃᑦ ᐃᓚᐅᑎᑕᐅᖃᑦᑕᖅᑐᑦ ᑕᕐᕆᔭᕐᓯᒪᕕᖕᓂ ᑎᑭᔭᒥᓂᕐᒥᑦ ᐃᓕᓭᖅᑕᐅᔪᑦ ᖃᓄᖅ ᑕᐅᑐᒃᓯᑦ ᓯᓚᑦᑐᓴᕐᓂᖅ ᓴᓇᖅᑯᑎᑦ ᖃᐅᑕᒫᑦ ᐃᓅᓯᖏᓐᓄᑦ ᐊᑐᕐᓂᖏᓐᓂ ᓄᓇᓕᖕᒥᓄᑦ. ᐃᓕᓭᖅᑕᐅᓚᐅᖅᑐᑦ ᖃᓄᖅ ᐊᐱᖅᓱᕈᓐᓇᕐᓂᖏᓐᓂᒃ ᐊᒻᒪᓗ ᖃᓄᖅ ᐊᔪᐃᓐᓈᕐᓂᖃᕐᓂᖏᓐᓂᒃ ᖃᐅᔨᒪᓂᐊᖅᑕᖏᓐᓂ, ᐱᓕᒪᒃᓴᖅᑐᑎᒃ ᑯᑦᑕᖏᑦᑐᓐᓇᕋᓂᖏᓐᓂᒃ ᐊᔪᙱᑦᑐᑎᒃ. ᐃᓕᓭᖅᑕᐅᓚᐅᖅᑐᑦ ᐃᑯᒪᖅᑯᑎᓂᒃ, ᓴᓇᖅᑯᑎᓂᑦ ᐱᖅᑯᓯᖃᕐᓂᕐᒥᒃ, ᐆᒪᔪᓂᒃ, ᓴᓇᖅᑯᑎᓂᒃ ᐱᓱᒋᔭᕆᐅᖅᓴᐅᔪᓂᒃ ᐊᒻᒪᓗ ᐊᓯᖏᓐᓂᒃ ᐊᒥᓱᓂᒃ.

ᐃᖅᑲᓇᐃᔭᖅᑎᐅᔪᖅ Outreach-ᑯᓐᓄᑦ ᑐᕌᕕᔅ ᒫᕕᑦ ᐊᒻᒪᓗ ᑑᒃᑖ ᑑᒃ ᑯᑉᓚᓐ, ᐃᓕᓭᔨᐅᔪᑦ ᓯᓚᑦᑐᓴᕐᕕᐊᓂ ᐊᒻᒪᓗ ᓯᓚᑦᑐᓴᕐᕕᐊᓂ ᖃᐅᔨᓴᖅᑎᓄᑦ ᐃᒃᓯᕙᐅᑕᖑᔪᑦ ᓯᕿᓕᓐᓂᐊᒃᑯᓐᓂ ᐅᔭᕋᓐᓂᐊᖅᑎᓕᕆᔨᓐᓄᑦ ᐆᑦᑐᕋᕐᒥᐅᑦ ᓯᓚᑦᑐᓴᕐᕕᐊᓄᑦ, ᑕᑯᖃᓐᓈᖅᑎᑎᓕᐅᖅᑐᑦ ᖃᓄᖅ ᐃᒪᖅ ᓄᕕᔭᕐᔪᐊᕐᔪᓂᕐᓗᓂ ᐅᖅᓱᕐᓂᒃ ᐃᒪᕐᒥᒃ ᐅᐊᔭᓕᐊᖅᑐᒥᒃ ᐊᒻᒪᓗ ᒥᑭᓂᖅᓴᒥ ᐃᒪᖅᑎᒥ ᐅᓇᓂᖅᓴᒥᒃ ᐃᒪᖅᑐᕐᓗᓂ. ᐃᓕᔭᐅᓪᓗᓂ ᐊᒥᐊᖅᑐᒥᒃ ᐃᒪᕐᒥᒃ ᐃᒃᑯᓈᕐᓗᓂ ᑯᕕᔭᒥᒃ, ᑕᑯᔭᐅᓚᐅᖅᑐᖅ ᐅᐊᐱᓃᕐᓂᐊᖅᑐᖅ ᐅᓇᓂᖅᓴᒧᑦ ᐃᒪᕐᒥ ᐊᒻᒪᓗ ᐃᕕᖅᑭᓂᕐᒥᒃ ᑕᑯᔭᐅᓗᓂ ᐃᒪᖅ.

ᐃᓕᓭᖅᑏᑦ ᑲᐃᒪᓕ ᐅᑦᑐᖅᑎᑕᐅᓚᐅᖅᑐᑦ ᐅᐊᔭᑎᒍᑦ ᐃᑯᒪᖅᑎ ᖃᓄᐃᓕᖓᓂᖅᓴᐅᖕᒪᑦ ᐅᑦᑐᖅᑎᓂᒃ ᑕᐃᔭᐅᔪᒥᒃ Circuit Earl.

ᐋᒃᑐᐊᒃᑯᑦ ᑮᓇᐅᔭᓕᐅᖁᔭᐅᖏᑦᑐᑦ ᑎᒥᖁᑎᖃᕐᓂᖓᓂᒃ ᓯᓚᑦᑐᓴᕐᕕᐊᓂᒃ ᓯᓚᑦᑐᓴᕐᕕᐊᓂ ᐃᓕᓐᓂᐊᖅᑎᓄᑦ ᐊᒻᒪᓗ ᐃᓕᓭᔨᐅᕙᒃᑐᓄᑦ ᐅᐸᒃᑕᖅᑐᒥᒃᑕᓂ ᖃᐅᔨᓴᖅᑕᖅᑐᓄᑦ ᐃᓕᓭᔨᕆᐊᖅᑐᖅᑕᑕᕐᓗᑎ ᓯᓚᑦᑐᓴᕐᓂᐅᑉ ᐅᐸᒃᑕᖅᑐᒥᐊᓄᑦ ᓯᓚᔪᐊᕐᒥ ᐱᕙᓪᓕᐊᑎᑕᐅᓗᓂ, ᓴᓇᖅᑯᑎᓂᒃ ᓄᑖᓂᒃ ᐊᒻᒪᓗ ᓈᓴᐅᓯᕆᔭᐅᓯᓂᒃ (STEM) ᒪᑯᓄᖓ ᓄᓇᕗᒥ.

ᓯᓐᑎᐊ ᔫᐊᓇᓯ, ᓴᐅᒥᐊᓂ, ᐊᒻᒪᓗ ᔮᓃᓐ ᒫᓂᖕ ᑭᙵᐃᑦ ᓴᓇᓗᑎᒃ ᐋᕿᒃᓯᐃᓇᓯᐊᖅᑐᑦ ᐃᑯᒪᒥᒃ ᖃᐅᒻᒪᖅᑯᑎᖅᑕᖅᑐᒥᒃ RGB LED-ᒥᒃ ᐊᐅᐸᓪᓕᖅᑎᒍᓐᓇᕐᒪᔪᑦ ᐅᐊᔭᓕᐅᖅᑕᐅᓗᓂ.

***Cynthia Joanasie, left, and Janine Manning of Cape Dorset work** to change an RGB LED light to red in a circuit-making exercise.*

ᕙᓂᓴ ᑎᓇᔅᓗ ᓂᐱᑦᑕᐅᑎᒥᒃ ᐊᑐᖅᑐᖅ ᐅᔭᕋᓐᓂᐊᖅᑎᓄᑦ ᐊᑐᖅᑕᐅᕝᕕᒻᒥᒃ ᑰᒑᕐᔪᖕᒥ.

***Vanessa Tinashlu uses** a magnetic geology pen in Kugaaruk.*

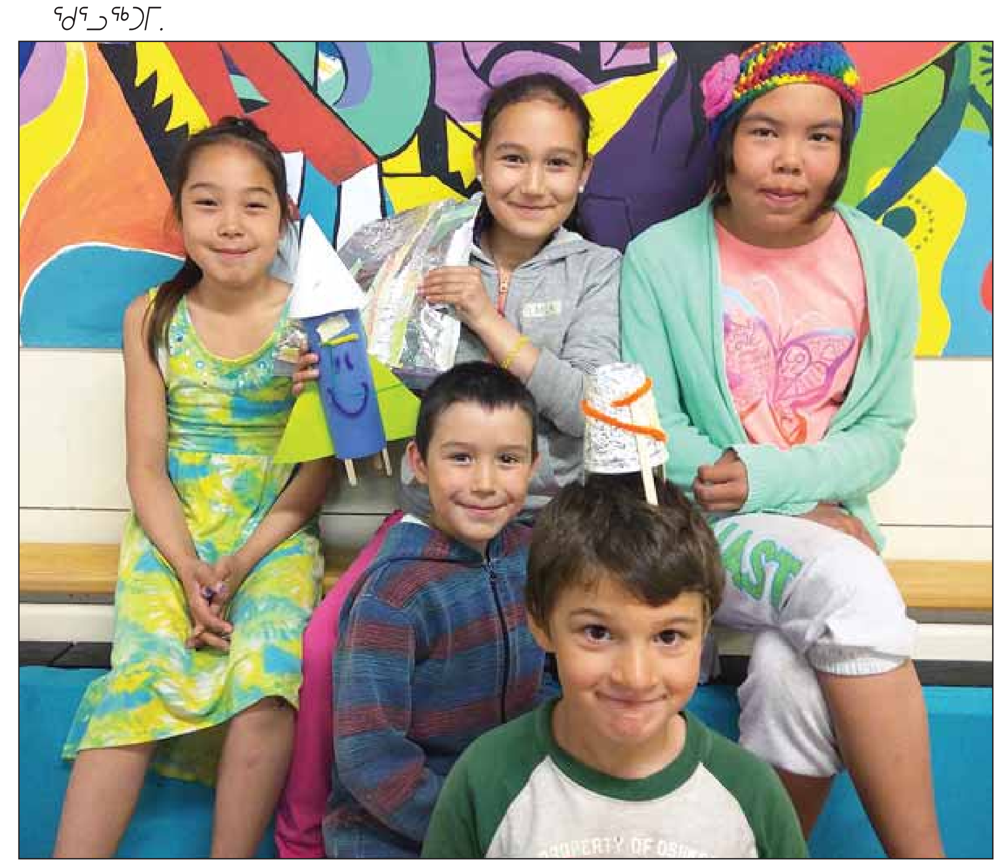
ᐃᖃᓗᒃ ᖁᕕᐊᓇᖅᑐᓕᐊᖅ, ᓴᐅᒥᐊᓂ, ᐊᒻᒪᓗ ᒍᕌᓐᑦ ᐹᓪ ᕿᒥᕈᐊᓪᓚᕆᒃᑐᒃ ᖃᓄᖅ ᐅᐊᔭᑎᒍᑦ ᐆᒻᒪᖅᑯᑎ ᐃᓚᖃᖅᓯᒪᓗᐊᕐᓂᖅ ᑭᙵᓂ.

***Iqaluk Quvianaqtuliaq, left, and Grant Paul explore** creating electrical circuits in Cape Dorset.*

ᕼᐃᐅ ᒪᒃᐃᓴᒃ, ᓄᓇᕗᑦ ᒐᕙᒪᖓᓂ ᐅᔭᕋᓐᓂᐊᖅᑎ ᑭᓇᐅᔭᓕᐅᕐᓂᒃᓴᓂᒃ ᐱᕚᓪᓕᐊᑎᑦᑎᔾᔪᑎᓄᑦ ᐃᖏᕋᔪᓕᕆᔾᔪᑎᓄᓪᓗ, ᑕᑯᑎᑦᑐᖅ ᕙᓂᓴ ᑎᓇᔅᓗᒥᒃ ᑰᒑᕐᔪᖕᒥᐅᑕᖅ ᓴᕕᕋᔅᓴᖅᓯᐅᕈᑎᒥᒃ ᐊᑐᕐᓇᓚᐅᕐᒪᑦ.

***Hugh MacIsaac, resident geologist** for the Department of Economic Development and Transportation, shows Vanessa Tinashlu of Kugaaruk how to use a metal detector.*

Actua-ᑯᑦ ᓯᓚᑦᑐᓴᕐᕕᓐᓄᑦ ᑕᕐᕆᔭᕐᓯᒪᕕᐊᓂ ᐃᓚᐅᔪᑦ, ᑐᓄᐊᓂᑦ ᐱᒋᐊᕐᓗᒍ ᓴᐅᒥᐊᓂᑦ, ᒪᕆᐊ ᐴᓪᑦ, ᓚᐃᓚ ᑎᓂᕋ ᐊᒻᒪᓗ ᒍᕆᓯ ᐆᓪᓴᓐ ᐱᖃᑎᖃᖅᖢᓂ, ᓯᕗᓂᐊᓂ ᐱᒋᐊᕐᓗᒍ ᓴᐅᒥᐊᓂᑦ, ᓅᓚᓐ ᑎᓂᕋ ᐊᒻᒪᓗ ᔨᐊᓐᑳᓗ ᑐᕆᑎ ᑕᑯᑎᑦᑎᔪᑦ ᓯᓚᒧᑦ ᖁᕝᕙᖅᑎᑕᐅᔪᓂᒃ ᓴᓇᔭᕕᓂᕐᒥᒃ ᖁᕐᓗᖅᑐᒥ.



***Actua science campers**, back row from left, Maria Bolt, Layla Denerah and Gracey Olson with, front row from left, Nolan Denerah and Giancarlo Torretti show off their rocket designs in Kugluktuk.*

ᑕᕐᕆᔭᕐᓯᒪᕕᐊᓐᓂᐅᑉ ᖁᕐᓗᖅᑐᒥ ᐃᓕᓭᖅᑕᓚᐅᕐᒪᑕ ᓯᓚᑦᑐᓴᕐᓂᖅ ᖃᓄᖅ ᖃᖓᑕᔾᔪᑎᖏᓐᓂᒃ ᑎᖕᒥᔪᑦ ᓄᓇᓕᖓᓂ.

***Campers in Kugluktuk** learn about the science of flight in their community.*