



STAR WARS

Unit Final Project

Death Star Cheese Ball



When we first convinced of the Death Star cheese ball, we never dreamed that it would be this great.

We love everything about our final product – the crackers, the taste and the look (before we ate it for lunch).

A special shout out to Ms. Showalter for the idea.

Learning
Journal Page
47, April 23

If we had to name
a favourite part of
the project – this
would be it.

These twin-ion engine fighters
are working hard to defend
the empire's new weapon
against the rebels.



In the Star Wars unit, we constructed a Death Star model from a cheese ball to investigate the movie's theme of life and death. However, our project also taught us that material tools are critical in the production and acquisition of knowledge. The impressive spherical shape was designed to inspire awe in the citizens of the dark side's power. The elegance of the Death Star design is impossible to appreciate without sculpting it yourself. The selection of cheese was critical to this appreciation; it is soft enough to easily form into a sphere but solid enough to hold surface details. Currently, I am raising my first backyard bee colony. The choice of wood has been as critical to my understanding of beehives as the choice of cheese was to understanding Star Wars imagery. In the future, I now understand that my material tools and their properties are extremely important in determining what I will be able to learn. This means that material selection will become an important part of my investigation phase.

A groundhog is standing upright in a field of green grass. It is facing right, holding a small, bright orange bird in its front paws. The groundhog's fur is dark brown on top and lighter on the bottom. The background is a soft-focus green field.

Wildlife Mini-Assignment Photography Unit



Chunk, the groundhog, eating a carrot in my garden.
September 2021

In the photography unit, during the mini-wildlife assignment, I took an excellent picture of a groundhog placidly chewing one of the carefully tended carrots from my garden. The picture also made me realize that organizing knowledge into different subjects really limits how we see the world. Normally, the nature of light would be studied only in physics, backyard wildlife exclusively in biology, composition solely in art and the working of the camera in technology. However, in STEAM, we combined all forms of knowledge, allowing me to take this amazing wildlife shot. I have extended this into my real-life too, specifically into backyard water-gun fights. If you combine strategy, physics, art and playfulness together, you can make some epic shots. In my future courses, even when knowledge is taught separately, I won't be limited by the classification of knowledge. I will bring in content from other subjects allowing the creation of more complex and meaningful projects.



Social Media Unit

LOL cats

This is supposed to be the first lolcat that was created.

Clay Shirky (Cognitive Surplus) points out a number of characteristics of a lolcat:

- Cute cat
- Cut cat expression
- Bad grammar
- Poor spelling
- Marginal joke quality

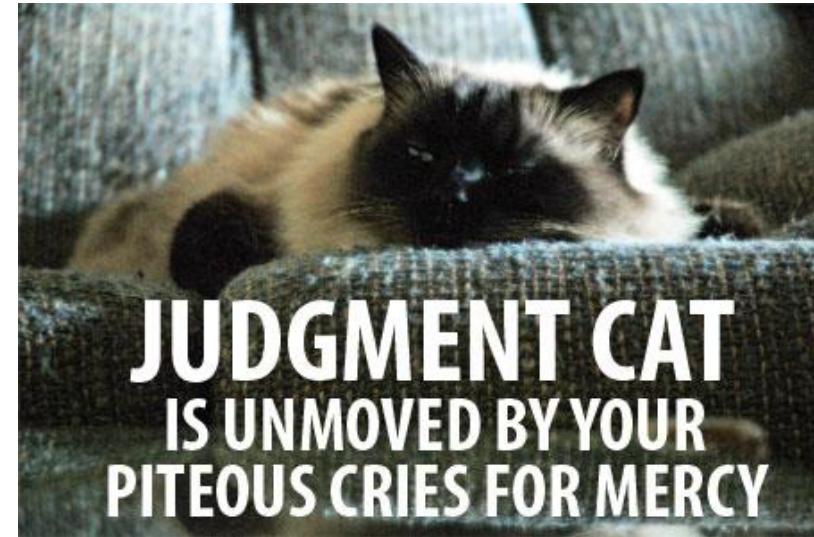
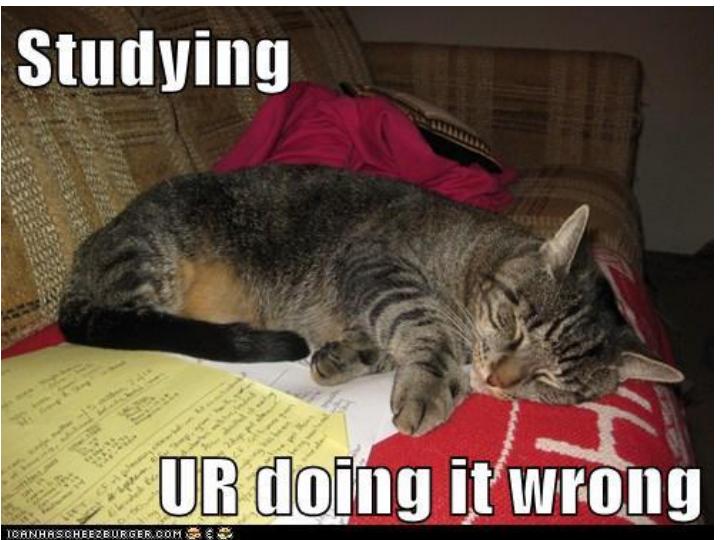
Shirky nominates lolcats for “the stupidest possible creative act.”



We loved this one because the cat is so cute. And that is exactly what it was thinking.



Again, cats are awesome. And being able to sleep all day would also be awesome.



Not a perfect lolcat, because judgement cat can spell, but still funny.



All characteristics of a lolcat are present:

- Cute cat
- Cute cat expression
- Bad grammar
- Poor spelling
- Marginal joke quality



The first in our lolcat series. This is my cat "Buttons". Stripes is looking on.

My favourite unit in STEAM was social media history. Our unit project was a lolcat series. While constructing our lolcats, we thought about how many students are passive consumers of technology. Lolcats and other memes are important because, as Clay Shirky states in Cognitive Surplus, “the real gap is between doing nothing and doing something, and someone making lolcats has bridged that gap.” Social media memes, with their low creative entry point, can help to re-engage students, to stop them passively consuming and to start engaging in the world around them. In a related example, my little cousin is obsessed with geo-caching. This is an activity that anyone can participate in; both in hiding a cache and finding them. I have learned that I can’t be a passive consumer of media. The act of creation and participation is powerful and transformative.

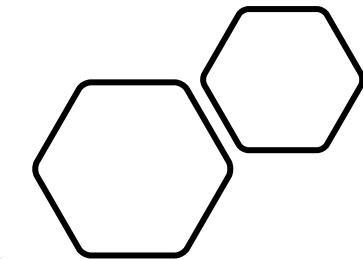
A photograph of a natural landscape. In the foreground, a white canoe is beached on a rocky and grassy shore. A wooden paddle lies on the ground next to the canoe. The middle ground shows a calm body of water with a small, dark bird on the surface. The background is filled with a dense forest of tall evergreen trees under a sky with heavy, dark clouds.

Canoe Trip Outdoors Unit

Learning
Journal Page
56, May 25

Our site in Algonquin, Lake
Opeongo.





Learning Journal Page 52, May 21

Packing:
This was a picture
of Mr. Paterson's
gear.

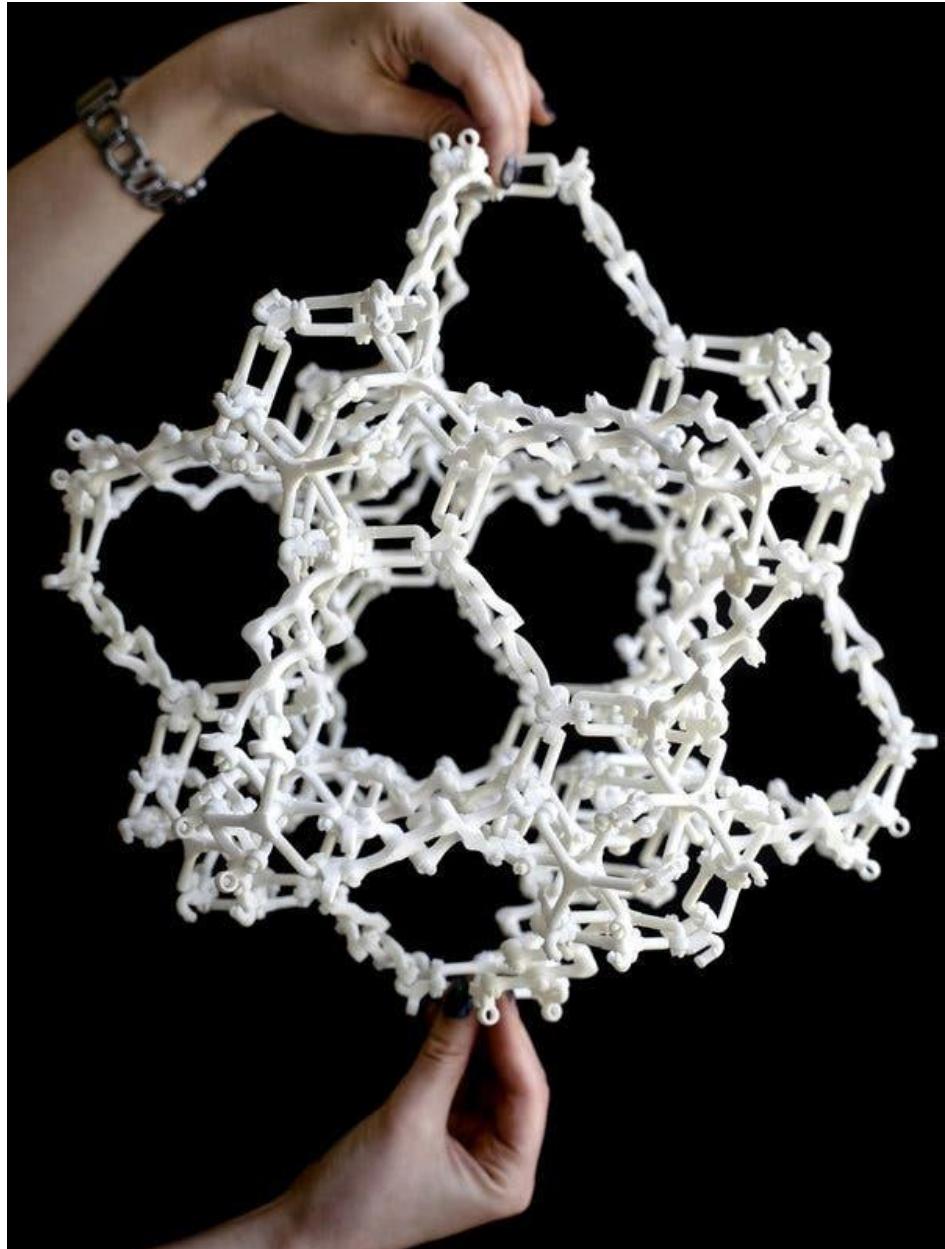
It was lightweight, minimalistic and had just what we needed.

In the outdoors unit, our final project was the Algonquin canoe trip. We were responsible for planning the trip's food, shelter, route and supplies. The most difficult part of the trip was paring down to the essentials. Without that step, portaging would have been impossible. There is no way this would have been successful without the guest lectures from Mr. Paterson and Mr. Renderio. The experience showed me that my practical knowledge depends on my interactions with other knowers. The advice from two experienced canoe trippers was better than any other source. A place that I have been able to apply this type of learning is in my garden. My gardening success is due to my mother's advice; her knowledge has been acquired through 60 years of practice and countless lectures and seminars. In the future, I have learned just how important it is to seek out knowledgeable people and listen to their practical suggestions.

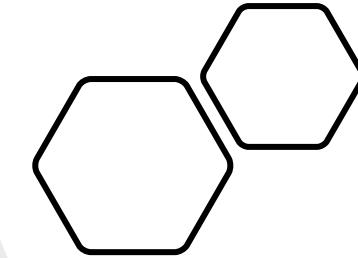


Knitting
encoding

Future
STEAM
project



Knitting encoding examples



Source:

Roberts, Siobhan. *'Knitting Is Coding' and Yarn Is Programmable in This Physics Lab.* New York Times, May 17, 2019.

<https://www.nytimes.com/2019/05/17/science/math-physics-knitting-matsumoto.html>

Ms. Roberts states that knitters feel that “knitting is coding” and that yarn is a programmable material. The potential dividends of this research range from wearable electronics to tissue scaffolding.

Morse Code Knitting

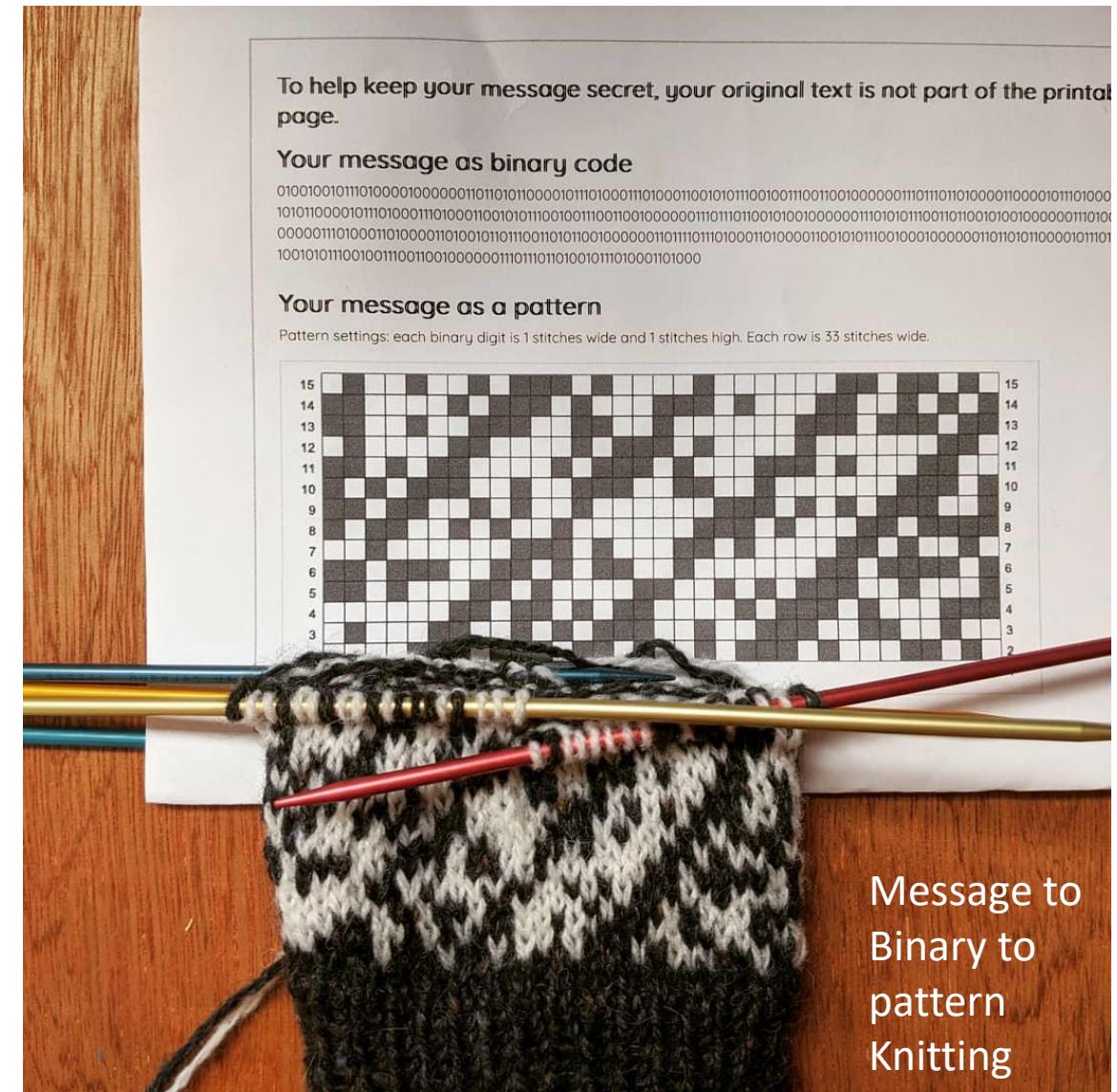


Binary Knitting



FLICKR: JACQUELINE-W

Other project examples:



Message to
Binary to
pattern
Knitting

Our four units in STEAM were: (1) Social Media, (2) Photography, (3) Star Wars and (4) Canoe Tripping.

My new project “**knitting encoding**” is for the Star Wars unit. A big part of the Star Wars series was the encryption of secret messages. Both the rebels and the empire had to keep messages secure.

Knitting Encoding brings the different subjects in STEAM together:

- Networking involves physics and science.
- Security and encryption are related to technology.
- Knots are a hot new topic in pure math research.
- Knitting is an art form and is beautiful.
- Spies and spy-craft are an aspect of national and international law.
- Historical examples of knitting and codes during war time could be part of English.
- Knitting can be used to aid mindfulness.