

Makerspace 2018

Northern Elementary School

Why Makerspaces?

- As the makerspace movement “draws upon the innately human desire to make things using our hands and our brains”, school makerspaces can provide this necessary outlet for students, fueling engagement, creativity and curiosity at the same time (Fleming, 2015, p.2)

Artic ICE

- Innovation
- Creation
- Exploration



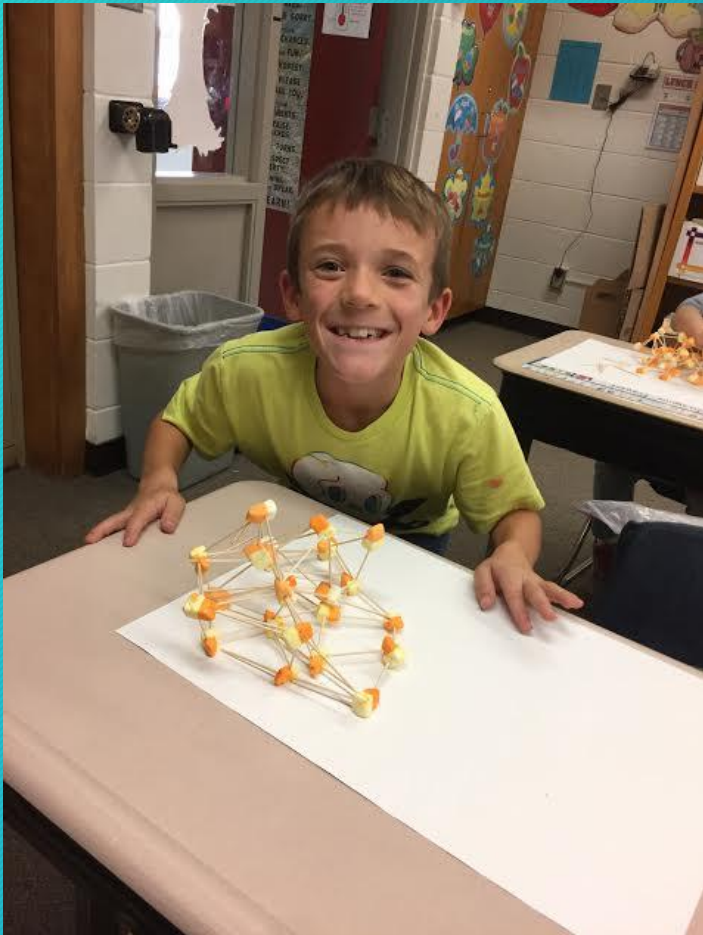
Unique opportunities for a challenge...



Makerspace & STEAM



A place to build...



What can you build with
candy corn marshmallows and
toothpicks?

Why does your structure need
to be solid?

What is the base of a
structure called?

What gives a student pride
and a big smile?

Present use with students ...

- Teacher demonstrations and large projects
- Free choice exploration and building
- Students cross-curriculum stations
 - Johnnie Apple seed activities- measurement, 5 senses, descriptors, etc.
 - Spider webbing activity- yarn and unifix cubes.
 - Bears - build a 3-D cave with magnetic blocks.
 - Story and structure activities- Goldilocks and the three bear-chairs.
 - Fire Safety week- using wall magnets- put out the fire.

A place to innovate and dream...



A time to cooperate...

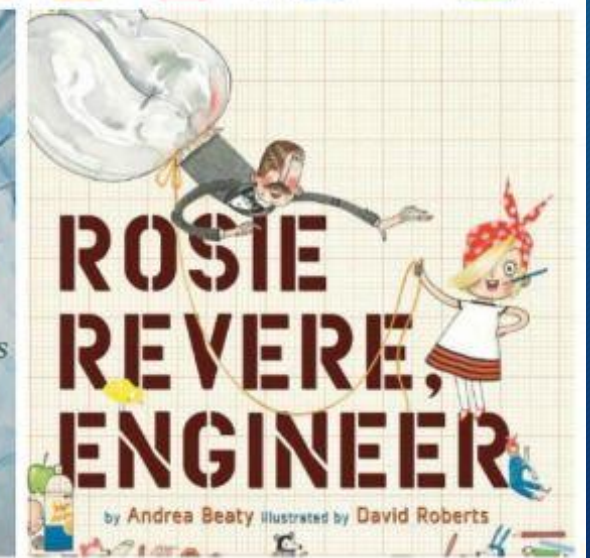
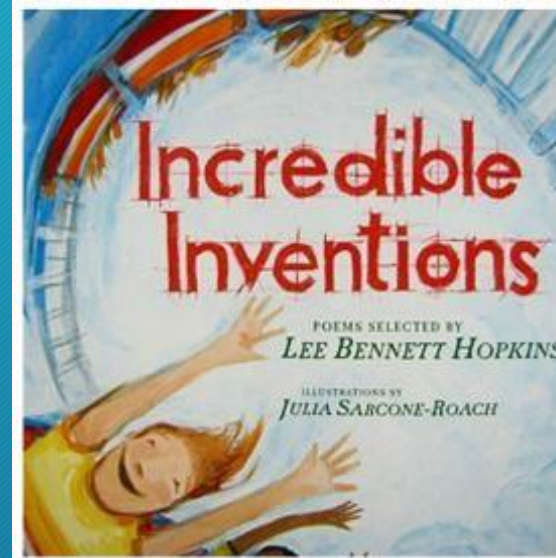
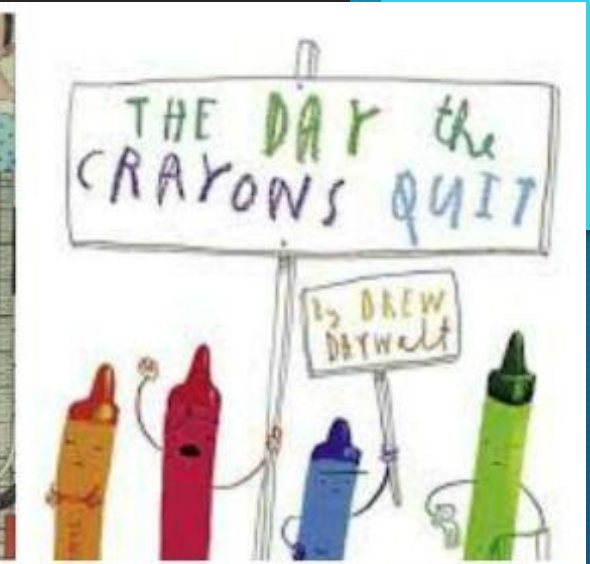
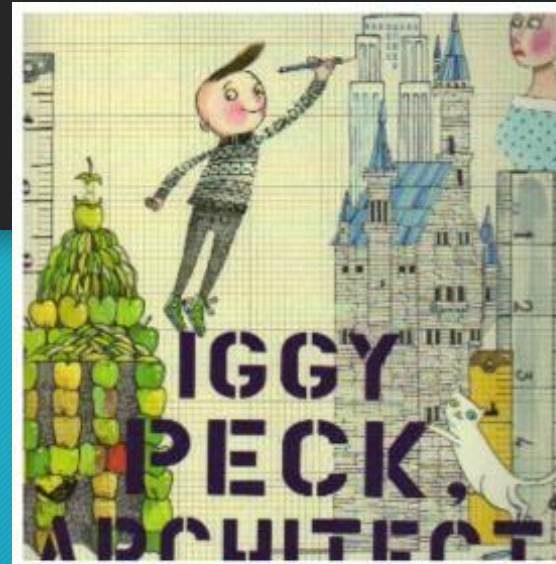


A chance to create...



Engineering literature...

“Some kids sculpt sand castles. Some make mud pies. Some construct great block towers. But none are better at building than Iggy Peck, who once erected a life-size replica of the Great Sphinx on his front lawn!”
From: Iggy Peck, Architect



A moment for “Brainflakes”...



What does Makerspace do for students?

- Maker education fosters curiosity, tinkering, and iterative learning, which in turn leads to better thinking through better questioning. I believe firmly that this learning environment fosters enthusiasm for learning, student confidence, and natural collaboration. Ultimately the outcome of maker education and educational makerspaces leads to determination, independent and creative problem solving, and an authentic preparation for real world by simulating real-world challenges (Laura Fleming (2015, p. 48).

Parts become whole...



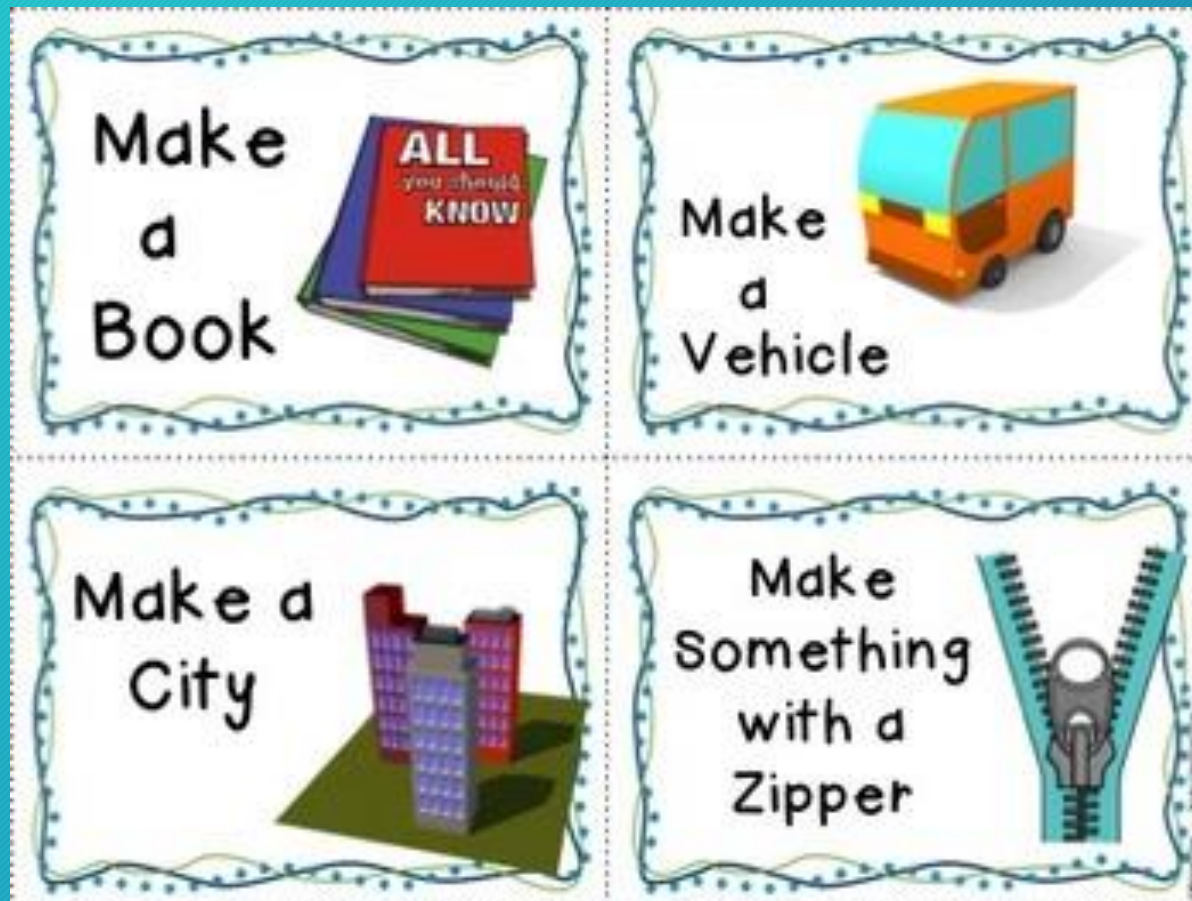
Hovercraft...



A place to inspire teamwork...



A place where your ideas matter...



Catapulting into creativity....



Makerspace and Math

- **Mathematics:** Makerspace can help illustrate many mathematical concepts through the production of physical objects. Equations and their relationships can be physically constructed, altered and computed all within the classroom.



“Make”-ing learning fun!



Final thoughts...

- “Ultimately, the interdisciplinary and empowering natures of these makerspaces can help prepare youth for a future we can’t yet imagine” (Davee, Regalla & Chang, 2015, p. 10).

Final thought.

