
Literacy through Making: Language & Learning in the MakerSpace



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Welcome to ILA Conference 2017



Hello
你好
Bonjour
Hallo
Ciao
こんにちは
Hola

What is Making?

An iterative process of thinking, tinkering, and creating that begins with a question or a problem and ends with something new emerging from the child's imagination.

Making makes learning visible.

When students are engaged in making activities, their problem solving processes and thinking are apparent.



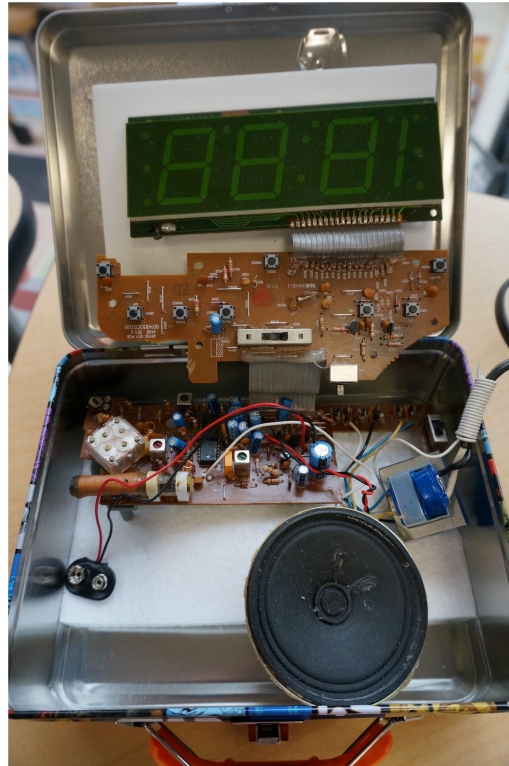
Making is social!

*Through play,
tinkering, creating,
debugging, and
remixing, we build
community.*



Making is social - *and socially active.*

Making creates opportunities for students to **ENGAGE** with “powerful ideas” (Papert, 1980)!!



ARE YOU A TINKERER TOO?
STAND WITH AHMED
AND BUILD YOUR OWN CLOCK!

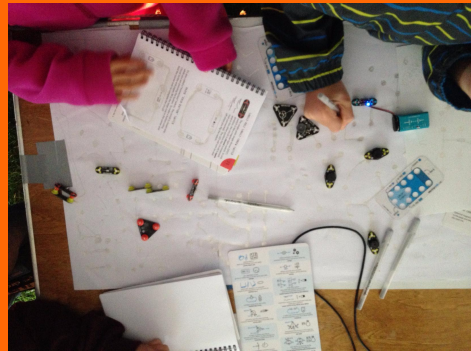
SATURDAY, OCTOBER 24
AT 1 & 3 • MAIN LIBRARY
CURIOUS GEORGE ROOM
..... for ages 10–18

Learn what's inside a clock, build a clock circuit, and engineer a housing!
Registration opens October 5.
To sign up, contact 857-235-9853
or lkirkland@cambridgema.gov.

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The role of the teacher is to create the conditions for invention rather than provide ready-made knowledge.

Seymour Papert (1991)

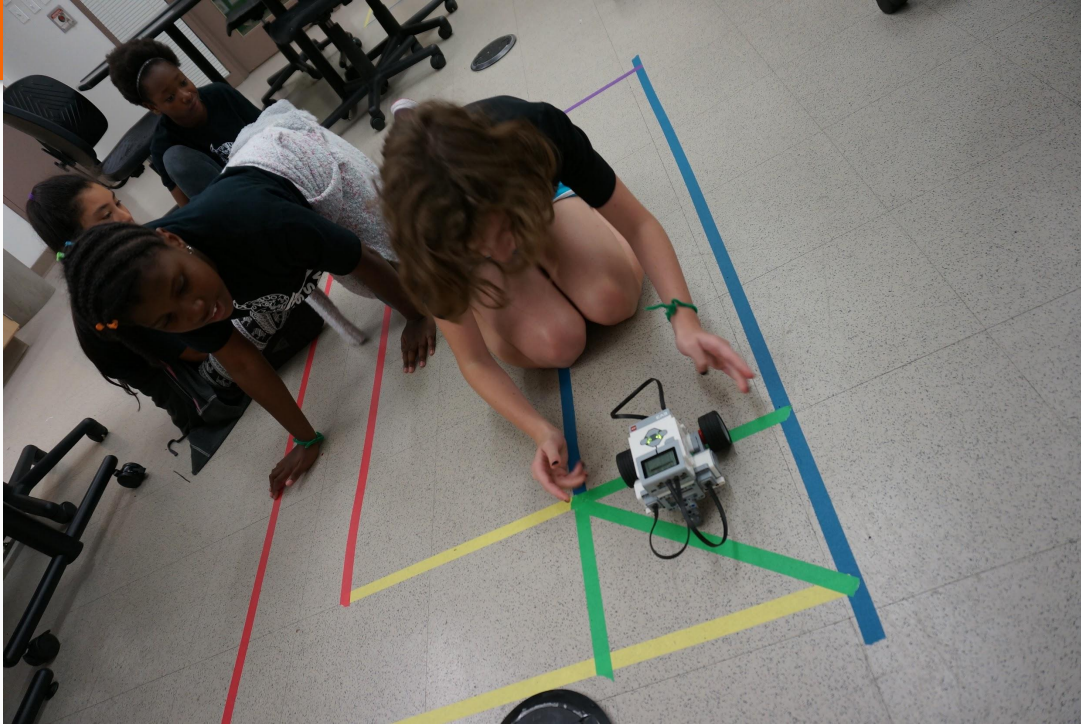


Every time we teach a child something, we keep them from inventing it themselves. On the other hand, that which we allow them to discover for themselves will remain with them visible for the rest of their lives.

Piaget (1955)

“Education is not an affair of telling and being told, but an active and constructive process.”

Dewey (1916)



Making provides fertile ground for literacy!

“The languages needed to make
meaning are radically
changing...”

New London Group, 1996



Meaning-making through problem-solving



**Making sense of
stories: *The Three
Little Pigs***

“Making” the literacy connection!



“At the heart of constructivism is a concern for lived experience, or the world as it is felt and understood by social actors.”

Au (1998)

Literacy IS problem solving!!

“Although the acquisition of literacy skills is viewed as an important task....the salient feature is how people construct meaning through problem-solving processes.”

Freire (2005)

Your challenges.....

- BristleBots
- Rube Goldberg Challenge
- Paper Circuits with Concrete Poetry
- Green Screen Adventure

BristleBots

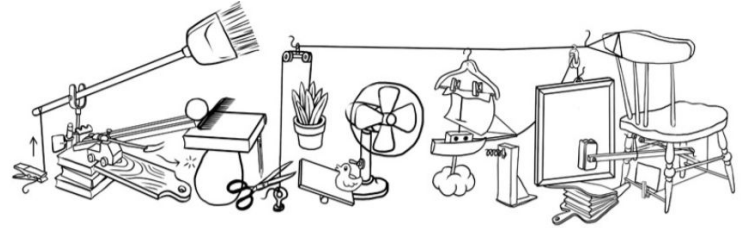
WHAT: Bristlebots are made of a vibration motor, battery, toothbrush, and foam tape. The robot is brought to life by completing a simple circuit between the battery and motor.

YOUR CHALLENGE:

Use the materials provided to design your own bristlebot.



Rube Goldberg Challenge



https://rubegoldbergphilly.files.wordpress.com/2014/09/cropped-sized_banner6-3.jpg

WHAT: Born in 1883, Reuben Lucius “Rube” Goldberg was an engineer that liked to create complex machines to accomplish simple tasks. His work started in the form of cartoon and eventually manifested in the real world.

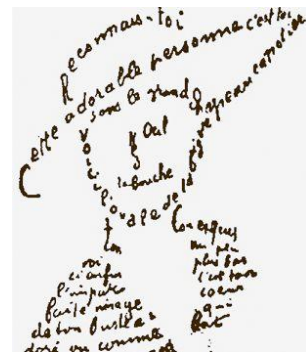
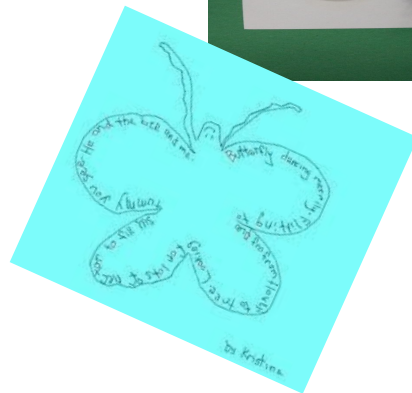
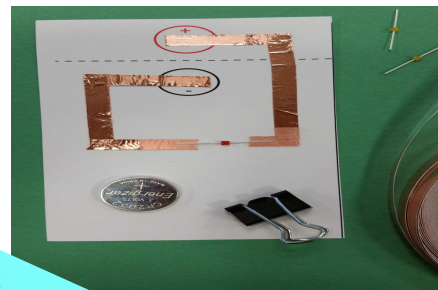
YOUR CHALLENGE:

Create a machine that can perform a simple task through the use of complex chain reactions. Make sure to document your design and collaboration process.

Concrete Poems & Paper Circuits

WHAT: Concrete Poems are written to take the shape of poem's topic. And paper circuits are self-designed simple or complex circuits made of cardstock, copper tape, a 3V battery, and LEDs.

YOUR CHALLENGE: Create a simple circuit to enhance a concrete poem.



Green Screen

(Self-Directed Activity)



Using the Green Screen app DoInk, transport yourself anywhere you want to be!



So let's
PLAY!