ISTE 2023

Early Learning Playground

More Than 'Just' Play! Deep, Playful Learning With Tech & Little Learners

Thank you to the many educators who made the Early Learning Playground possible. Your expertise and enthusiasm for little ones and active learning with technologies is always inspiring.

For more information about the Early Learning Playground or to provide feedback please reach out to:

Gail Lovely
GailLovely@SuddenlyItClicks.com

Support Materials are provided here in alphabetical order by last name of the lead facilitator.
Also available at: https://bit.ly/2023playgroundtote

Collaborative Little Learners- Powerful Learning Experiences Made Easier

Melissa Adkins
Instructional Technologist
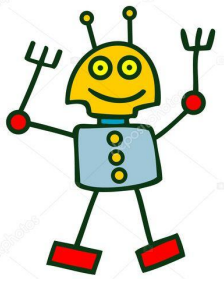Lamar County School District, Mississippi
adkins.melissa@gmail.com
@MelissaCAdkins

Click image below to access presentation.

Read Online
bit.ly/clliste23

Collaborate
app.bookcreator.com
Join Code: **TTBG7Q7**

Collaborative Little Learners
Melissa Adkins

Collaborative Little Learners:
Powerful Learning Experiences Made Easier
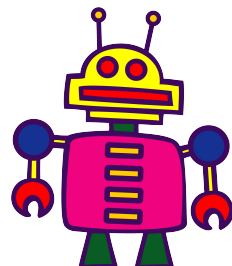
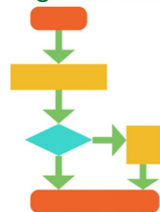# Block-based Coding with Robots!
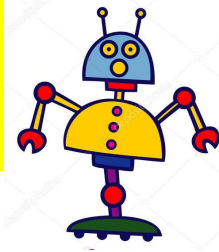
Aaron Brill – abrill@aimpa.org
Director of Innovation Technology
AIM Academy

- Connect tech skills to existing curricula
- Use robots to:
  - Tell a story
  - Showcase understanding
  - Estimate
  - Experience trial and error
  - Solve problems
  - Build strong partnerships
  - Engage student interest
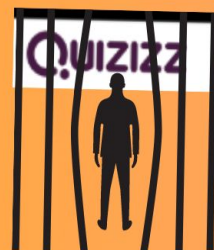
Hunting for Fun and Team Learning!

Focus: Applying CT to Problems that Matter!
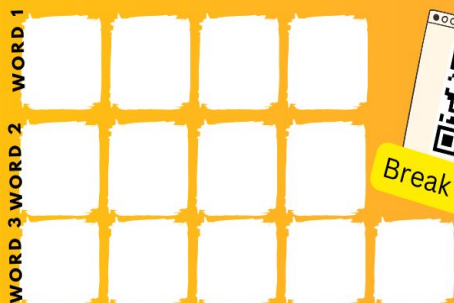
ISTE 23
ESCAPE THE QUIZ
GAME TIME!
LEARNING SHOULD BE FUN!

1. Can you crack the code?
   - Game Elements reward correct Quizziz answers!
     ProTips: -Look at the Memes! Record the Clues **Quickly!**
       -Make sure **Memes** are turned on!
   - Need more Clues.. **PLAY AGAIN!**
     Need Knowledge? **Study Flashcards** Between Games!
   - Enter the Secret Words into this Form to Break Out!

Find Clues Here
JOINMYQUIZ.COM
ENTER GAME CODE:
_ _ _ _ _ _ _

WORD 1
WORD 2
WORD 3

Break Out Here:
!

TICKET 2179264

GET YOUR GAME CARD AT TABLE

- **Bonus: CLICK TO SHARE YOUR SUCCESS!**

YOUR GAME FACILITATORS:
WENDY HEDEEN @WENDYHEDEEN
STORMY DANIELS @MSDANIELSSTORMY

Computational Thinking in the Early Childhood and Elementary Classroom

Morgan Decuir
Kindergarten through 4th Grade STEM Teacher
WBR Parish Schools, Louisiana

morganedecuir@gmail.com

COMPUTATIONAL THINKING
in the
Early Childhood & Elementary
CLASSROOM

Morgan Decuir – Kindergarten through 4th Grade STEM Teacher – West Baton Rouge Parish Schools

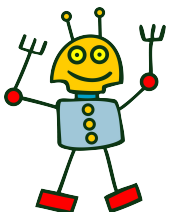## Please click on the image to access the slideshow!

Not Just Playing games, Making them!

Jennifer Garvey - jgarvey@peckschool.org

Technology, Innovation & Design Integrator
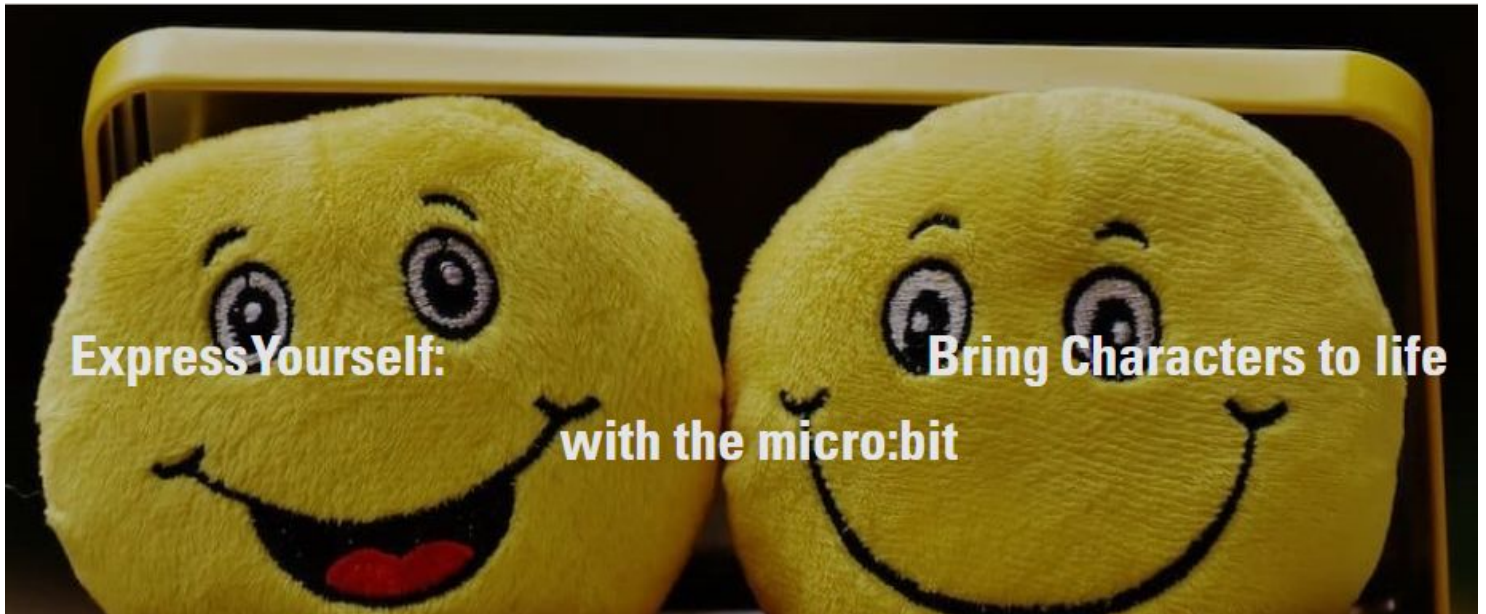The Peck School, Morristown, NJ

Not Just Playing Games

Making Them!

Jennifer Garvey
jgarvey@peckschool.org

GAME OVER

Scan this QR code or click the
image above for my slides.

Little Learners and Animated Paper Characters = Active Learning

Dhouha Jemai
douhajemai3@gmail.com

Express Yourself: Bring Characters to life with the micro:bit

Please click on the image to access the example

Présentation48.pptx the content of the workshop

Data Stories

Use classroom classics like **Ten Black Dots** and **Five Monkeys** for [math storytelling projects](#) that build strong foundations through [data stories](#).

10 black dots can make a dinosaur.

When I was one,
I had so much fun.
When I was two,
I grew and grew.
When I was three,
I fell out of a tree.
When I was four,
I grew some more.
When I was five,
I wanted to drive.
When I was six,
I learned some new tricks.
When I was seven,
My brother was eleven.
But now I'm eight,
And that's just totally great.

Poetry

Eight creatures live in this house.
Four humans, two dogs and two love birds.
Two grown ups, one sister and me.
Four with dark hair, one with blonde hair and two with green and yellow feathers.

10 minutes later at 7:50 a.m. the grouchy butterfly met a bird.
"Want to fight?" asked the grouchy butterfly.
"If you insist," replied the bird.
"Oh you're not big enough," answered the grouchy butterfly and stormed off.
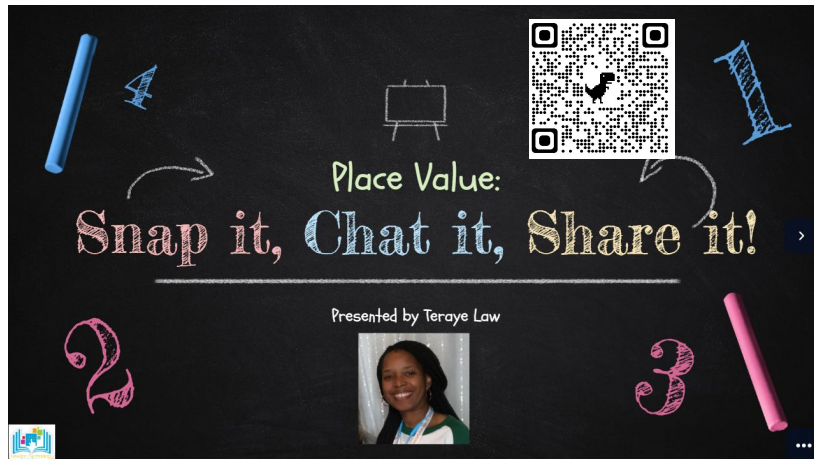
Page 3

Melinda Kolk - @Creative Educator
editor@thecreativeeducator.com

Place Value: Snap It, Chat It, and Share It!

Place Value Book
https://bit.ly/PVbook

Click the photo below or scan the QR Code for more resources.

Place Value:
Snap it, Chat it, Share it!

Presented by Teraye Law

Teraye Law
Digital Learning Coach, Newton Co. Schools
www.twitter.com/terayelaw

Computational Thinking
For Young Learners
(and their adults)
A Simplified Explanation

Gail Lovely
GailLovely@SuddenlyItClicks.com

A Super Quick Overview of Computational Thinking for Young Learners
by Gail Lovely

Defining CT:

There are MANY ways to define Computational Thinking... my own working definition to think with is:

Computational thinking (CT) is a creative way of thinking that encourages young children to be systematic problem-solvers who can identify problems and generate step-by-step solutions that can be communicated and followed by computers or humans.

Components of Focus with Young Learners:

Decomposition:
Breaking a problem into smaller "chunks" (and then using those "chunks" to replicate, solve a problem or understand a process.)
Examples: steps in a process, parts of a story, sounds in a word

Pattern Recognition:
Making connections between similar problems and experience and/or finding patterns and extending and testing them. Requires noticing and describing attributes and characteristics.
Examples: sequences of events (lunch before recess), robots need power to "work", word order

Abstraction:
Filtering out (ignoring) the characteristics we don't need (or focusing on only the characteristics which "matter") AND Identifying important information while ignoring unrelated or irrelevant details.
Example: when sorting something by color, the shape doesn't matter

Algorithms:
Creating and testing step-by-step plans to solve problems or achieve results.
Examples: Solving disputes between friends, building things, stacking blocks

GailLovely@SuddenlyITClicks.com

Link: https://bit.ly/quickCT

More Info at SuddenlyitClicks.com
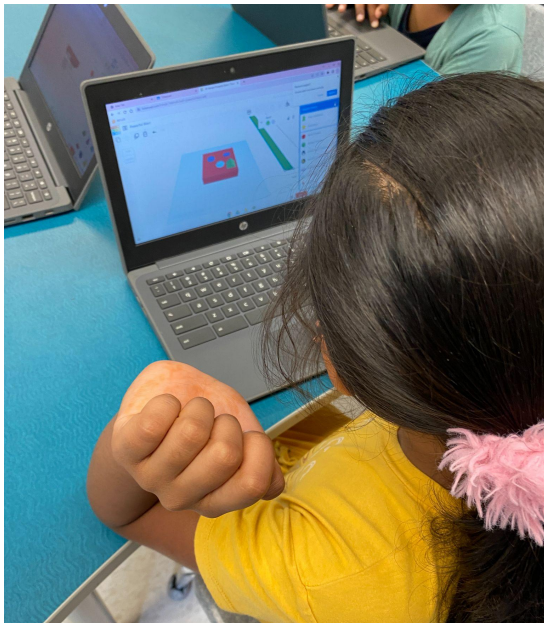
Look at This!
From Digital to Physical Windows using Tech and lots of Great Thinking

Heidi MacGregor
Littleton Public Schools, Massachusetts

Heidi's contact Info:

Click here for the project plan.

Engineering with Paper: Amazing Projects with Simple Supplies

Develop spatial reasoning & computational thinking skills by designing with paper shapes

Godwyn Morris

Contact me at info@dazzlingdiscoveries

[Free downloads](https://www.dazzlingdiscoveries.com/free-downloads) (https://www.dazzlingdiscoveries.com/free-downloads)
Projects you can make with just paper, tape & scissors. Make 3 dimensional shapes with paper, then build with them. These two projects use just two shapes, tracks and cylinders.

Roller coaster

Catapult and target

Engineering with PAPER ®
Created by
Dazzling Discoveries STEM Education Center
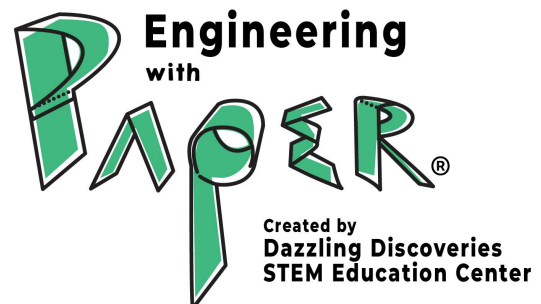
Click the logo to go to the website

Kinders becoming Movie Stars:

Transforming a Project into a Production

Juli Robb and Jenn Ladner

Eastford Road Elementary School in Southbridge, MA

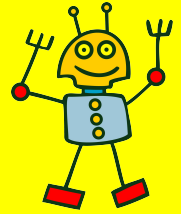jrobb@southbridgepublic.org   jladner@southbridgepublic.org
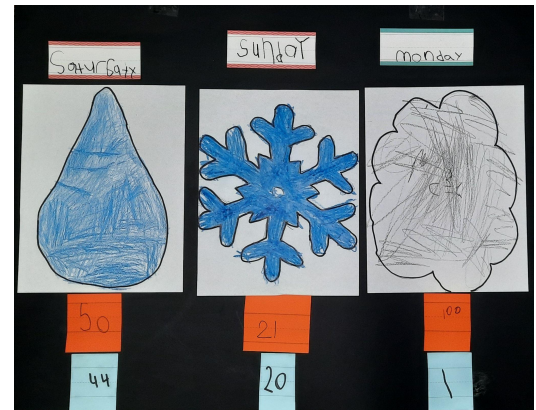
Tips for selecting technology for production and post-production:
- Choose technology that you are comfortable using when recording with students the 1st time. Add a new tech tool each time to learn new tools with the students along the way.
- You do not need to buy expensive equipment or editing software for this project. For a low tech option, record each segment on your phone and download a video editor app.. If you use a camcorder, you can edit with iMovie on a Apple product or Windows Movie Maker on a PC.
- The more pre-production that you do, the less post-production time you will need. Plan the schedule and prepare materials in advance to save time.

Links to Helpful Resources
- Weather Report Project slides to pre-teach students about the project
- Copy of Weather Script

Oh the Thinks
They Can Think!
Screen-free Coding and Little Learners

Nina Pratowski
npratowski@colonialsd.org

Link:
https://drive.google.com/file/d/1-WoOonww1FYe466TqaJgUPTRPiCh
CV8d/view?usp=sharing

Leverage Technology for Playful Learning

Silvia Scurrachio

Links:

- [Bing Create video](#)
- [Metadadolab video](#)
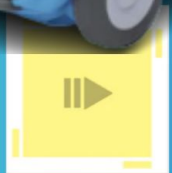- [Storytelling video](#)
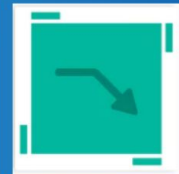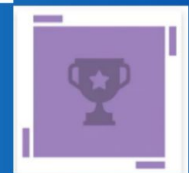- [Tutorials presentation](#)

Dr. Charisse Snell - csnell@atim.us
ATiM Specialist, Troy University

Angela Clark - aclark@atim.us
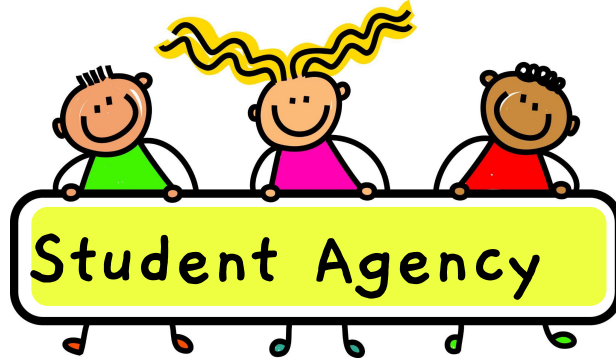ATiM Specialist, University of Montevallo

Click the image above to access the presentation or use the bit.ly.

https://bit.ly/3Nl7XNN

Debbie Tannenbaum
Tech Coach at Saratoga ES in Fairfax County, VA
@TannenbaumTech
debbie@tannenbaumtech.com

Click the image above or use https://bit.ly/iste23littlescan to access the slides.

Computational Tinkering

Heidi Williams - Computer Science Curriculum Specialist

Nofearcoding.org

Marquette University

# of sides

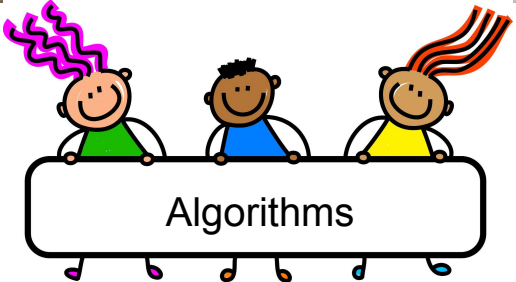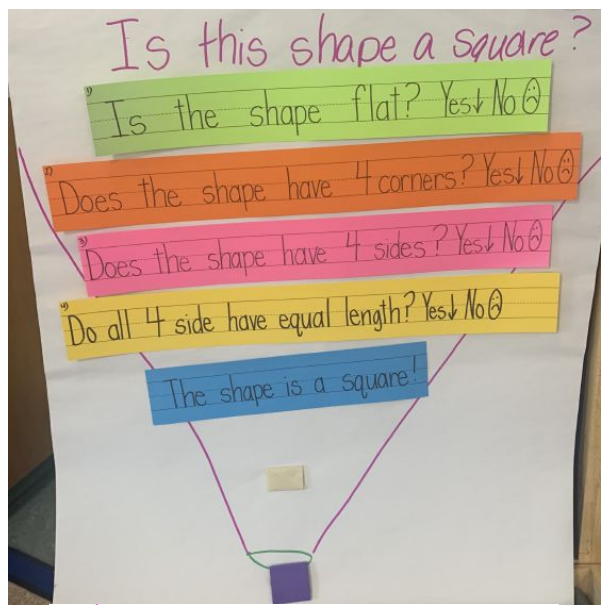# of corners

dimension

Decomposing the Problem
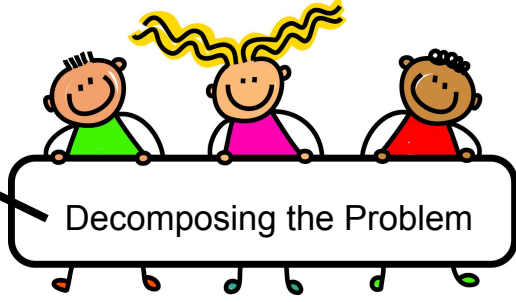
WHERE IS THE SQUARE?

Essential Question (Computational Thinking Problem):

How do we figure out if a shape is a square?

Standards: **Math:**

Identify and describe 2 and 3 dimensional shapes.

Analyze, compare, create, and compose 2 and 3 dimensional shapes.

ISTE Computational Thinker:

1.5.c: Students break problems into component parts, extract key information, and develop descriptive models to understand complex systems or facilitate problem-solving.

1.5.b: Students collect data or identify relevant data sets, use digital tools to analyze them, and represent data in various ways to facilitate problem-solving and decision-making.

1.5.d: Students understand how automation works and use algorithmic thinking to develop a sequence of steps to create and test automated solutions.

Is this shape a square?

Is the shape flat? Yes↓ No⊘

Does the shape have 4 corners? Yes↓ No⊘

Does the shape have 4 sides? Yes↓ No⊘

Do all 4 side have equal length? Yes↓ No⊘

The shape is a square!

Algorithms

Check out my book for more insights and resources!

Available for purchase at the ISTE Central bookstore.

NO FEAR CODING

Computational Thinking Across the K-5 Curriculum

SECOND EDITION

HEIDI WILLIAMS