The background is a solid light purple color. It is decorated with various geometric shapes and patterns. On the left, there is a pink circle with diagonal stripes, a yellow zigzag line, and a light blue circle with a dot pattern. In the center, there is a large dark blue circle containing the title text. To its left is a dark grey square and a small pink circle. Below the square is a yellow triangle. To the right of the central circle is a large dark grey circle, a yellow triangle with vertical stripes, and a pink pentagon. On the far right, there is a blue circle with diagonal stripes and a yellow circle. Dashed lines in blue and pink form circles and triangles around the central elements.

# Technology in the Primary Grades Part 2 - STEM Apps



# Hello!

We are so glad you are here.

Link to our  
Presentation...

[bit.ly/stem2cmsd12](https://bit.ly/stem2cmsd12)



Courtney Parker & Caroline Wyman  
We are from Cheyenne Mountain D12  
Colorado Springs, Colorado



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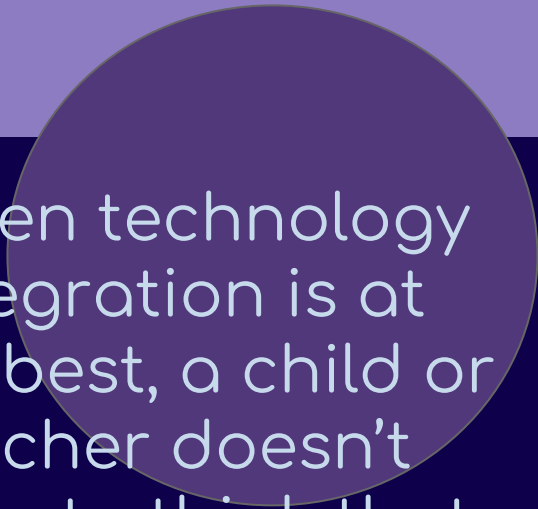
Tech gives the  
quietest student a  
voice.

Jerry  
Blumengarten



“

When technology  
integration is at  
it's best, a child or  
teacher doesn't  
stop to think that  
he or she is using  
a tech tool---it's  
second nature.


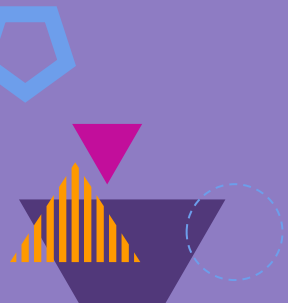
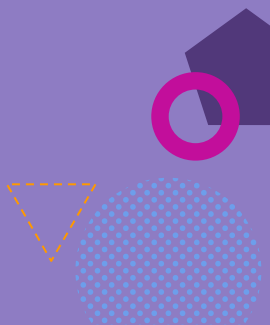


# Objectives for this Session

- Integrate more technology into your curriculum
- Help you feel less overwhelmed
- Share how to manage iPads in the classroom
- Share how to incorporate coding/STEM activities in the primary grades
- Give you time to explore apps that you can use immediately

# Outline for Session



- 
- Question Forum
  - Introductions/Skill Levels
  - Management of iPads
  - Explanation of Apps/Robots
  - Time to explore/create
- 
- 



# 1



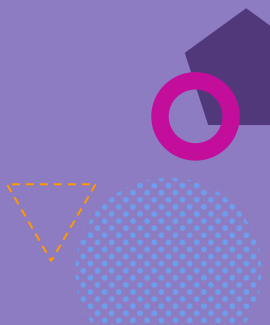

Questions during  
Presentation





# Ask a question at

Navigate to this page...This is a way to ask questions during our presentation.





2



Skill Levels





# Skill Levels in this room

## iPad Skill Level

### Novice:

iPad has gathered dust on your shelf..

### Intermediate:

Some knowledge of apps - not consistently using the iPad, don't know the next steps to take

### Advanced:

Use the iPad daily, hoping for some new apps today.

# Skill Levels in this room

Management Comfort Level

Novice:  
HELP!!!

Intermediate:  
I have some  
ideas, but  
would like  
more.

Advanced:  
I got this, may  
have some  
strategies to  
share with  
you!




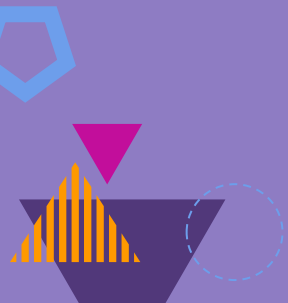
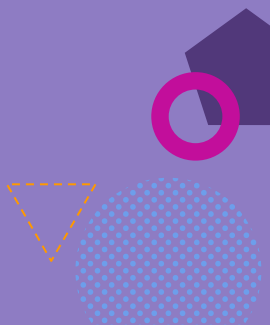
3



iPad Management

# Management



- 
1. Getting started
    - a. iPad/Laptop rules
    - b. Rotation schedule
  2. Tracking student work
  3. Plan where to store files
  4. Plan for syncing apps/files
  5. Know district policies for sharing files with parents
- 
- 



4



iPad Apps

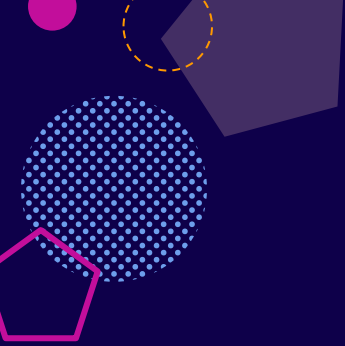


# Goals for iPad Use Across Curricular Areas

- Differentiate instruction
- Increase student independence
- Raise the level of higher order thinking skills
- Motivate students
- Accelerate basic learning skills

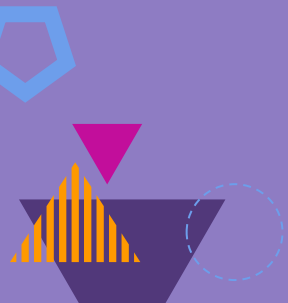
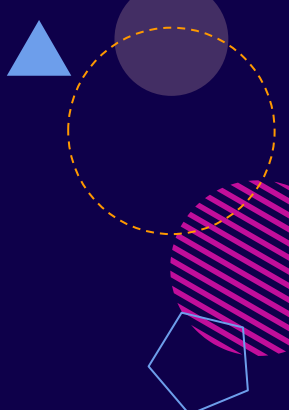
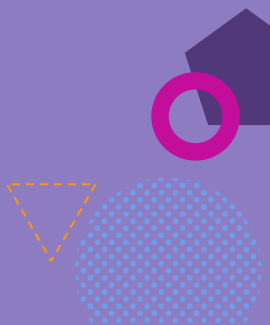
# Goals for iPad Use with STEM APPS

- Differentiate instruction
- Increase student independence
- Raise the level of higher order thinking skills
- Motivate students
- Accelerate basic learning skills
- Increase problem solving skills
- Build Grit
- Utilize logical thinking skills

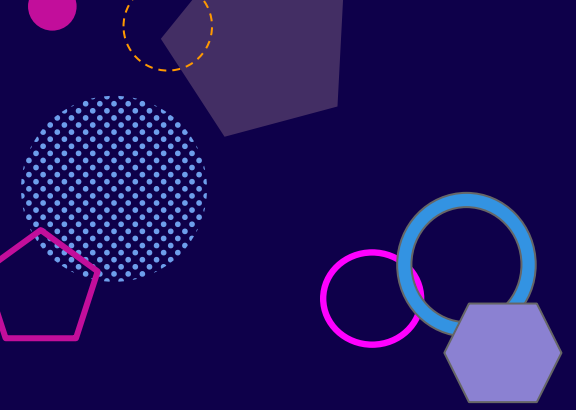


# STEM APPS


## Coding & Creating

1. Lightbot Hour
  2. Kodable
  3. Scratch Jr.
  4. Simple Machines (Tiny bop)
  5. Robot Factory (Tiny bop)
  6. Everything Machine (Tiny bop)
  7. Skyscrapers (Tiny bop)
- 
- 
- 





# STEM APPs that require other materials



## Coding Robots

1. Blockly
2. Osmo

- 
1. Bee Bots/ Code & Go Robot Mouse
  2. Ozobots
- 

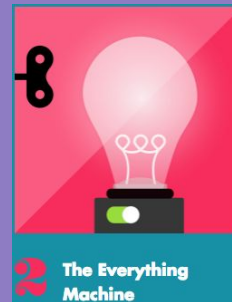
# Where do I begin STEM

Unplugged  
Activities:  
Begin with  
paper/pencil  
activities.



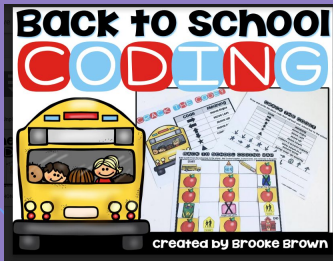
Introduce  
activities and  
apps slowly.

Move to iPad:  
The apps we  
are sharing  
are easy to  
use and build  
on.



# Where do I begin Coding?

Unplugged Activities:  
Begin with paper/pencil activities.



Definitions:  
Kodable is a great resource.



Move to iPad:  
The apps we are sharing are easy to use and build on.



# Lightbot Hour

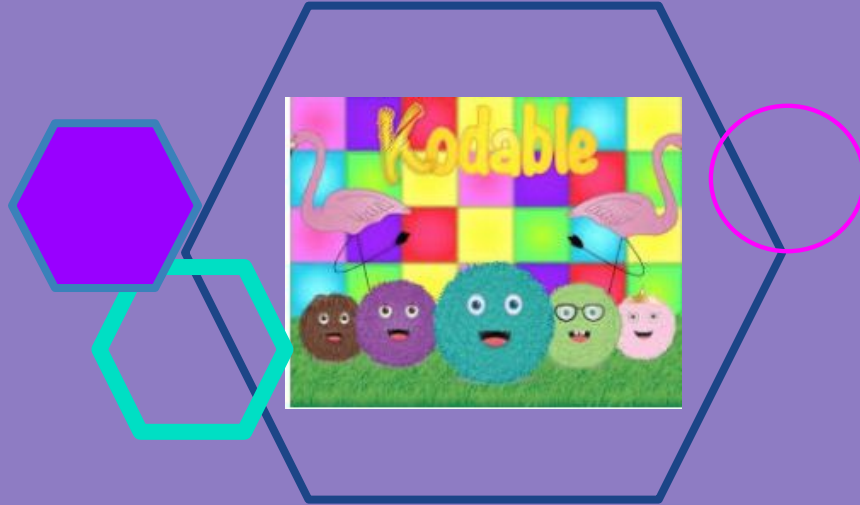


Beginning Coding: builds on skills; independent levels; can have more than one player; saves data.

# Lightbot Hour Screenshot



# Kodable



Beginning Coding: builds on skills;  
independent levels; can have more than  
one player; saves data, can play on  
computer too!

# Kodable Screenshot



# Scratch Jr.



Beginning Coding: creating characters,  
different scenes- almost story telling



# Scratch Jr. Screenshot



# Tiny bop Apps

## Pros:

- ◇ Endless creativity
- ◇ Unplugged activities to go along with many of the apps.
- ◇ Open ended
- ◇ Sharing possibilities

## Cons:

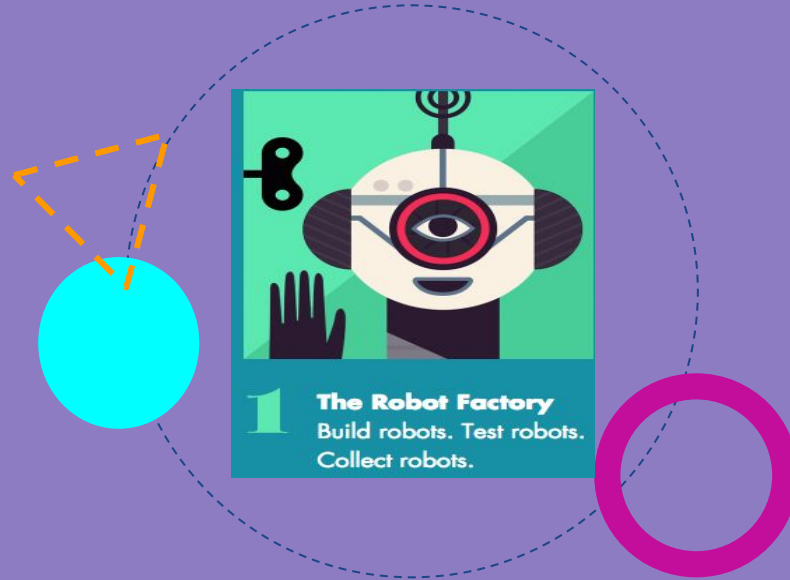
- ◇ Cost
- ◇ Sometimes hard to figure out.

# Simple Machines



Exploring force, pushing, pulling, input forces & output forces of the six simple machines. Also has extensions in the handbook for unplugged activities.

# Robot Factory



Build a robot, trial and error, unlimited creativity.

# SkyScrapers



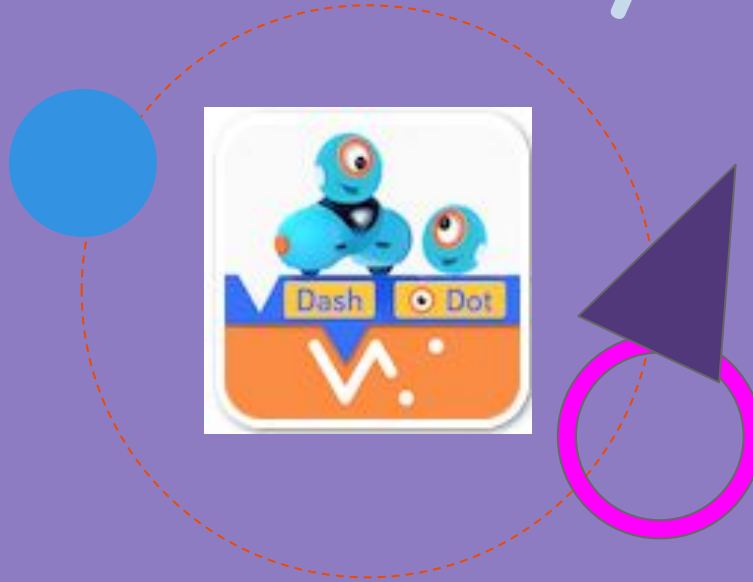
Exploring the innerworkings of buildings,  
building skyscrapers.

# Everything Machine



Figuring out how machines work, with power sources, audio, picture, connecting with other devices....

# Blockly



Works with the app to code the robot.

# Ozobots



Coding with colors.

Can also use with website to code.

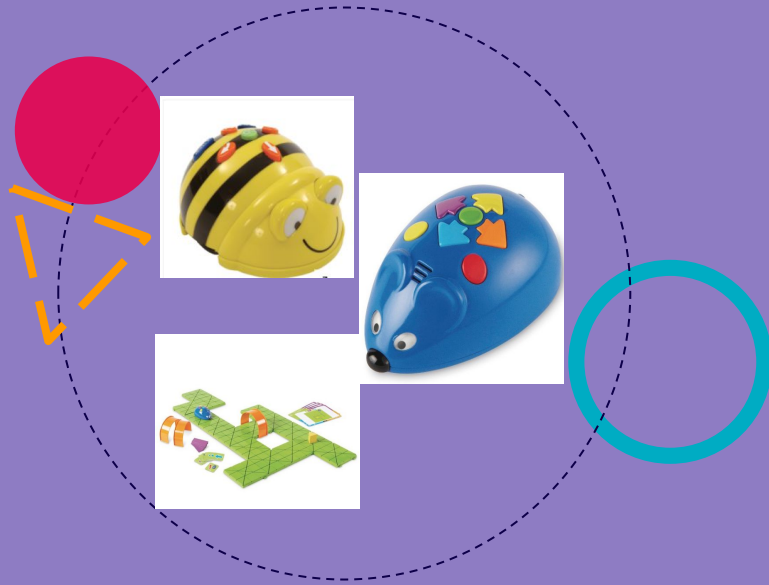


# Osmo



Beginning Coding: needs the additional device to work. Continually adding programs to work with the device.

# Bee bots/Code & Go Robot Mouse



Easily coded robots. Great for  
beginners. Can increase difficulty.



# 5



Time to Explore/Create





Time to Download and Practice  
Choose your favorite one and let's try it out...

# Thanks!



## Any questions?

Courtney and Caroline

[c2cedtech.wixsite.com/home](https://c2cedtech.wixsite.com/home)