

✂ Cut Along the Dotted Line

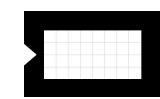
### Block Types



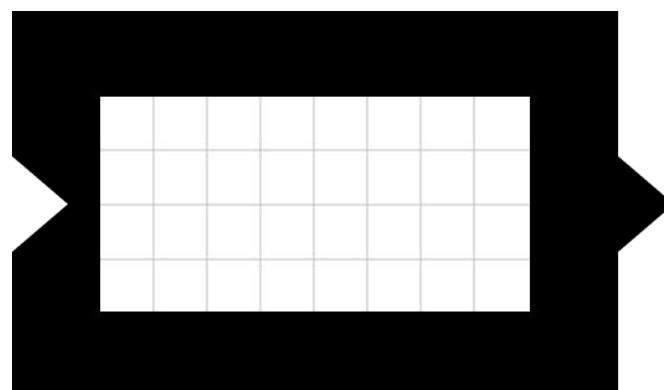
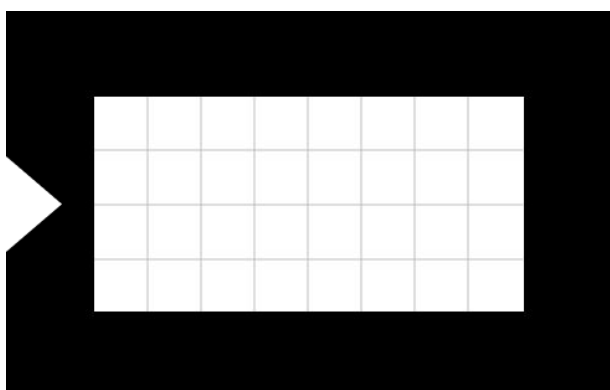
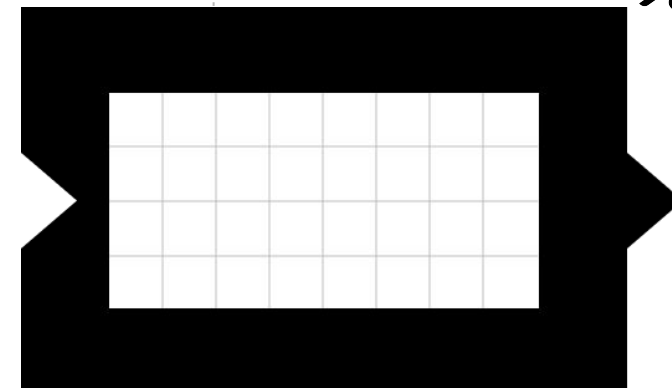
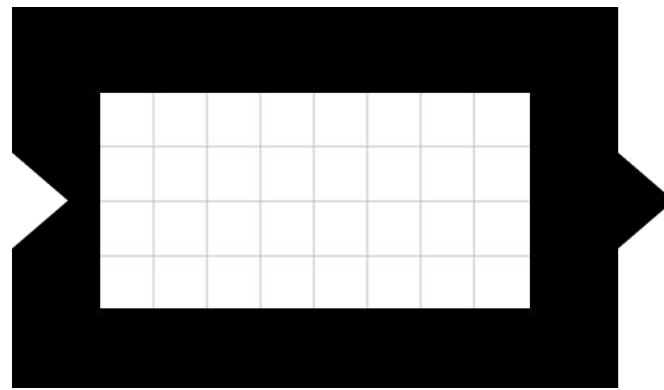
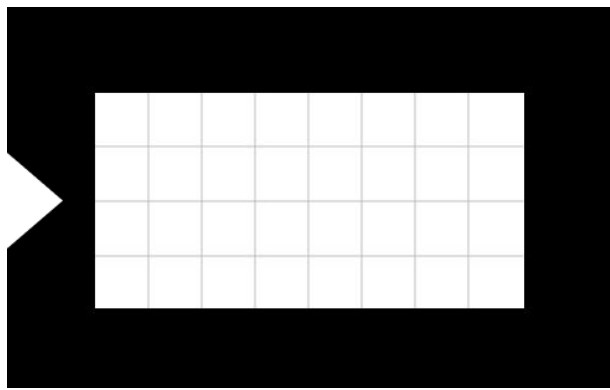
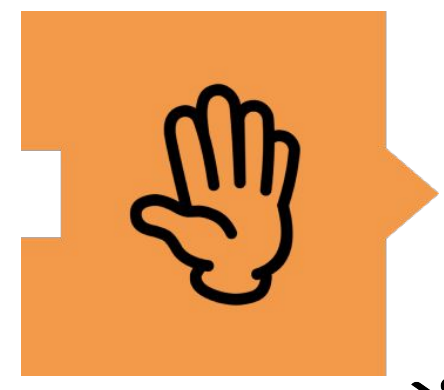
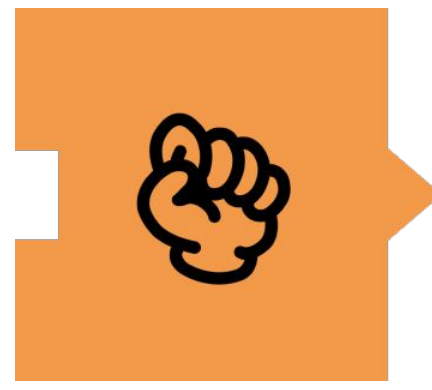
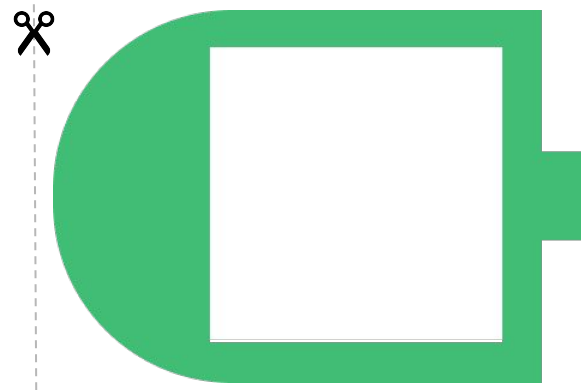
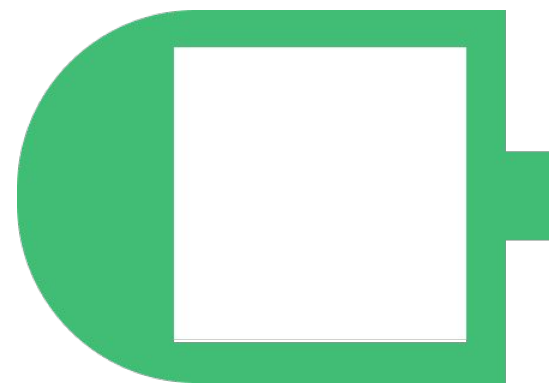
Sprite Block (Green)



Event Block (Orange)



Action Block (Black)



✂ Cut Along the Dotted Line



## Brainstorm & Draw

[For Kids]

1. We're going to make **your drawing** move! What you want to draw? (character/object)

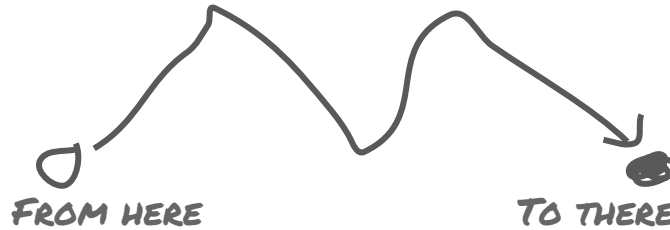
2. Your drawing will appear on the screen. How do you want to make it move? Draw a **path** your drawing will follow. Where are the starting and end points?

3. Think about **background scene** your drawing will be overlaid. You can draw it or use your physical environment.

Example Idea

BROWN  
BUNNY

BUNNY WILL JUMP TWICE  
GOING TO THE RIGHT



PLANTS AT HOME

Your Idea

## Code

Using paper coding blocks, create code to make your drawing animate as you have designed.

## Scan & Play

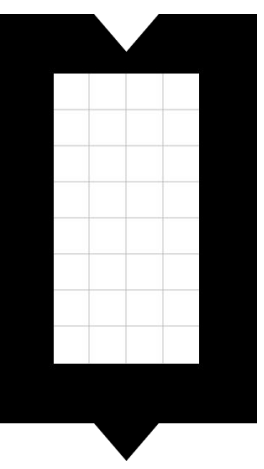
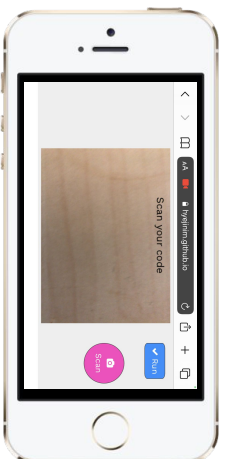
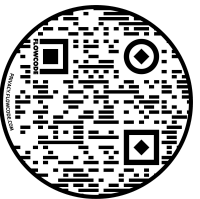
Using a mobile device, scan your code and run the program. Play it over a background scene you choose or draw. Record and share it!

# Cheat Sheet [For Parents]

## Things Needed:

*\*Please make sure that you have all of them listed below before the study session*

- Printed and cut out paper coding blocks
- Blue washable markers (for filling color in grid cell)
- Color pens (for drawing)
- iPhone with a camera
- Download Zoom Cloud Meetings app on iPhone
- Download Zoom on laptop/tablet (<https://zoom.us/download>)
- Open the link below in **Safari** Browser, in **landscape** mode on iPhone  
Link: [hyejinim.github.io/draw2code](https://hyejinim.github.io/draw2code) or use the QR code.



- [ ] Do you have the camera accessed?  
[ ] Fill the grid with blue marker on the Action card and see if there is yellow line of box around the blue square when you scan it with a mobile application
- If everything works properly, you're ready! If not, refresh the page, change the light condition, and try it again. Feel free to reach out to the researcher with any questions.

## Parent/guardian's Role in the Study

- Support and encourage your kid to complete tasks
- Offer guides or teach how to do when your kid is struggling with coding or using a mobile device
- Play with your kid together if they want
- Adjust camera for Zoom recording

## What Your Kids Will Do with the Draw2Code Kit:

Kids are going to learn how to create augmented reality animation using the Draw2Code kit. Kid's drawing will appear and animate on the screen.

1. **Brainstorm** what to create.
2. **Draw** a character or object to animate.
3. **Code** to deciding when, where, and how the drawing will appear on the screen using coding blocks at the tabletop.  
*\*See "About Blocks" section*
4. Once kids are done with coding, **scan** all the coding blocks and **run the program** using a mobile device. Kid's drawing will appear overlaid on the real-time video feed.
5. **Control the virtual sprite** using a gesture seen through a camera.
6. Choose a background scene that goes well with their animation. **Play the animation with a desired background scene.** Kids can switch a camera to show themselves.

## About Blocks:



### Sprite Block:

To create a virtual sprite that will be animated on the screen, draw a character or an object in the empty area on it.

### Event Block:

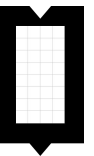


To trigger your sprite to animate, decide what event you will use  
→ Hitting the play button on the screen



→ Showing the hand sign to a camera

### Action Block:



To design each frame of animation, use a **blue marker** to fill in the grid with color. The size and position of blue square will match where the sprite will appear on the screen