# Imagine

Jot down any ideas, resources, links, example projects, etc. that are part of your imagination process.

#### Madlib/Digital Storytelling

#### USE

- 1. Students will have some prior knowledge of makecode basics and personal narrative elements
- 2. Students will get in groups and physically play with the micro:bit to discuss what they notice
- 3. Class will share together what strings they are reading and how the inputs correlate with a generator
  - a. What happens if you press the button A twice? Does it have the same word?
  - b. What do you do if you select a different input? Shake?

#### **MODIFY**

- 1. Students then go into MakeCode to view the teacher example
- 2. In the small groups have students manipulate and delete particular blocks and discuss what they notice and why those blocks are important for the generator to work
  - a. What happens if the "Name" on two blocks equals the same number?
  - b. What if the math range does not match the logic blocks?
  - c. Add another block to see what happens! What if I wanted 4 names? Try to add another input. Explore, delete, and see what happens!

#### **CREATE**

- 1. Students will create on MakeCode a generator for characters and settings. This will be through brief instruction and scaffolding of input, variables, logic, and math blocks
- 2. Students will have the choice of what input they would like to use and the different names for characters and settings
- 3. When they have created and filled out PART 1 of the <u>digital storytelling activity</u> they will then trade their micro:bit with a partner

# Imagine

Jot down any ideas, resources, links, example projects, etc. that are part of your imagination process.

### Madlib/Digital Storytelling CREATE

1. The new micro:bit will tell them what their character is and setting (ex. The instructions they received said shake to generate a random character)

#### Writing Integration:

- 1. Students will take the character and setting they generate to lead them into their narrative story
- 2. They will go into PART 2 of their digital storytelling activity
- 3. Students will use the organizer and generator to create a narrative story incorporating elements that have been previously taught (transition words, problem, solution, lesson/theme)
- 4. Students will then write their entire story as a cohesive narrative piece
- 5. Students will share with their partner and get feedback
- 6. Students will review the editing and revisions checklist to create a final narrative piece

#### Assessment:

- 1. Student checklist on editing and revising narrative story
- 2. CS checklist for creating in MakeCode and micro:bit
- 3. Rubric for overall (writing, CS, and overall)

## **Imagine**

Complete the TPACK graphic organizer (delete text in each circle and replace with your own thoughts) to show the interconnection of technology, pedagogy, and content from one idea from your imagining.

#### **Technology:**

Students will be able to use MakeCode to create a micro:bit generator. Students also will practice how to use code blocks.

#### Pedagogy:

I will be using the use/model/create model as well as the gradual release model.
This will demonstrate a

This will demonstrate a structure where students are starting with inquiry/play and slowly scaffolded in specific content to then be able to spend the majority of time creating independently or in partnerships.

#### **Content:**

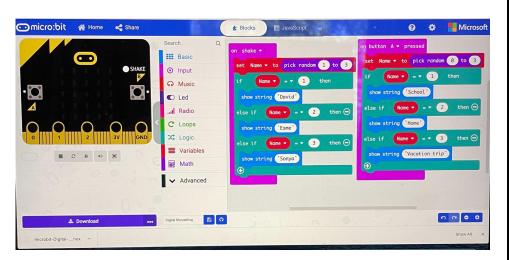
Students will be exploring the elements of narrative writing. They will demonstrate writing a cohesive piece that incorporates narrative elements (character, setting, problem. Solution, lesson/theme.

Context: I would like to continue supporting all students by providing consistent feedback to individuals, as well as peer feedback. I would also like of be prepared with accommodations (medium, mild, spicy) opportunities for students. I would also like to always open resources to students would like to explore the tool and connect to it in different ways. Whether it is engaging in a passion project related to micro:bit or just seeing other coders that look like them utilize the tool.

### Create

Create 1 *additional* example student artifact for the activity/lesson/project extension that you brainstormed in the imagine phase. Share screenshots of your code/project and the link to your creation below.

Digital Storytelling Activity (Study Copy)



Coding for student artifact

Student artifact for micro:bit generator



### Play

Play with the artifact you created. What can you add to it? What can you revise? Where can you go from here? Summarize your play below through text and/or artifacts below.

I liked the idea of exploring more components to add on in MakeCode or navigate the different ways I can have students interact with peers. One idea that I played with was adding more random options and adding different inputs as students get more advanced in the micro:bit. Ex. students could add icons, and their partner would need to interpret the icon in their own way to add to the story.

I also played with the idea of how the story could be further with partnerships. Based on the feedback from week 6, I would love to move into a way that students could create the story WITH a partner. Perhaps the next step could be another switch where students pair up and have to switch off on writing the different parts of the stories (ex. Partner 1 writes the beginning sentence with a transition word and partner 2 writing the beginning sentence that includes the character). Partners then present their co-written narrative that could then spring to the week 6 Scratch narrative project!

Also based on the feedback form week 6, I would also like to prepare a "mild", "medium", and "spicy" alternative or addition to the project. For example the mild could be just putting one character and setting. Spicy could be incorporating another input that includes an icon that relates to a problem or solution.

### Play

Play with the artifact you created. What can you add to it? What can you revise? Where can you go from here? Summarize your play below through text and/or artifacts below.

Also there was an issue as I was playing around with coding. I tried to do the randomized coding based on the picture below. The issue that arose was that when I pressed one of the inputs it would say "undefined" and then when I pressed the input again the correct string would appear. Do you think you could help me troubleshoot what went

wrong? Thank you!

```
Blocks
               JavaScript
                                                                        Micro
on start
 show string "Hello!"
  set settings ▼ to array of "Forest" "Home"
                           get value at pick random 1 to length of array characte
  on button B - pressed
  show string settings ▼ get value at pick random 1 to length of array settings
```