

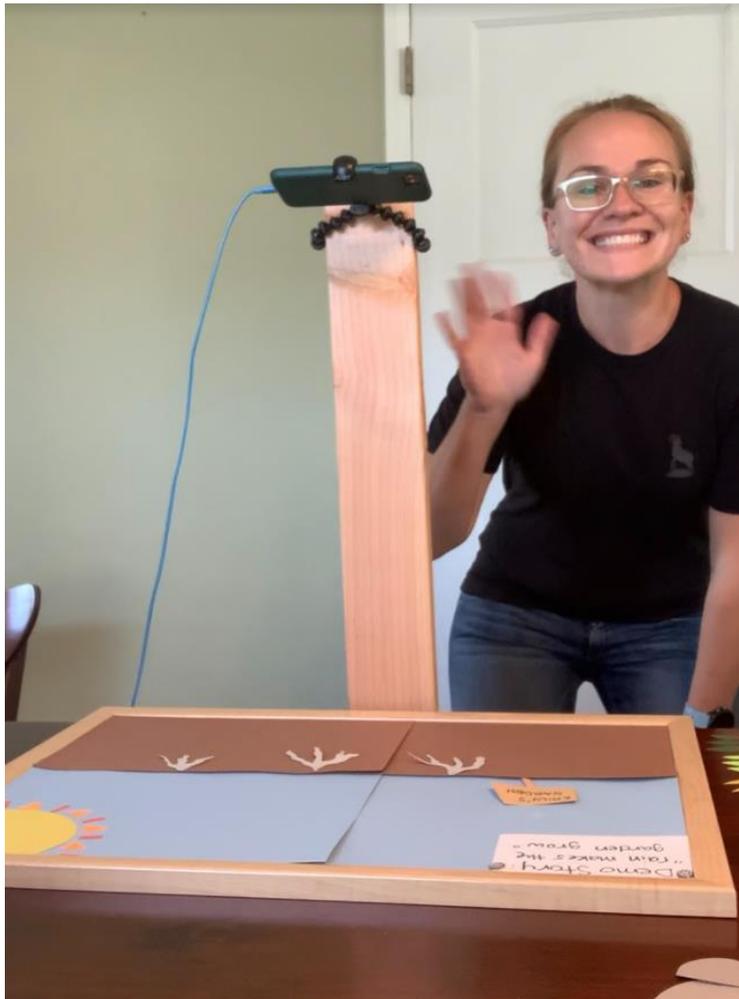
Step-by-Step Instructor Guide for a Stop-Motion Animation Workshop

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Goal

To create a short (<1 minute) stop-motion animation of a story. Workshop is designed to be completed in two days or two sessions. Each portion is about 1.5 – 2 hours long. You may want to leave time between sessions for people to make their pieces. Depending on how intricate their story is, they may need more time for cutting out shapes, making “characters,” etc.

Note: you can watch the 27 min it took to **film** the demo animation described in this workshop guide [here \(sped up a lot so this video is only 1.5 minutes\)](#). Note that the video does not include time spent coming up with the story, sketching, or making my pieces.



Hi! I am Dr. Fairfax, and I will be teaching you how to make a stop-motion animation of a water story today!



Day 1: Storytelling and Crafting

Before You Start - Brief Code of Conduct Discussion (10 min)

- Discuss rules of engagement
 - Respecting peers with different perspectives and cultures
 - What helpful, meaningful, and thoughtful critique means
 - How to ask questions (raise hand feature or type in chat if virtual, raise hand if in person)
 - Use of video (if virtual, video on when working with instructors in breakout rooms but otherwise optional. Does not apply if in person)

Step 1: Think of a Story (15-20 min)

- Each person thinks of a story they could tell a friend or a family member about water.
- It can be anything at all related to water!
- Good stories usually have some sort of take home message or point to them.
- Examples:
 - Do you have a story about an activity you like to do in the water - fishing, swimming, boating, etc.? What do you see or feel when you do that activity?
 - Have you experienced a time when there was too much or too little water around you? A drought? A flood? A fire?
 - Do you have a garden, a potted plant, or a pet? Does it need water? What happens if it gets too much or too little water?

Step 2: Narrow Down to One Sentence (5-10 min)

- Some stories are long and complicated, and that is fine! But for animating stories, we want them to be as short and sweet as possible.
- Every person needs to get their story down to **one sentence** that captures the key message or main point of your story.
- Try to make sure that water is somewhere in that one sentence main point.
- Example:
 - **Full story:** when it was sunny and dry last summer, all the plants in my garden started to wilt. But then it rained on them and they started to grow again. At the end of the summer those plants had tomatoes! We ate them in salsa. The plants wouldn't have grown if they didn't get watered by the rain.
 - **One Sentence Story:** rain makes the garden grow.



Step 3: Sketch It Out (15-20 min)

- The stop-motion animations we are going to make don't have any spoken words, and usually no written words or just a few written words in the animation itself.
- Try to think about how you could tell your one sentence story in a game of charades or pictionary, using only visuals and no speaking.
- Now, sketch out 3-5 pictures like a comic strip that tells your story using the **provided handout** or on a sheet of paper.
- If you can't tell the story in 3-5 pictures, the story is too long and/or complex for this!

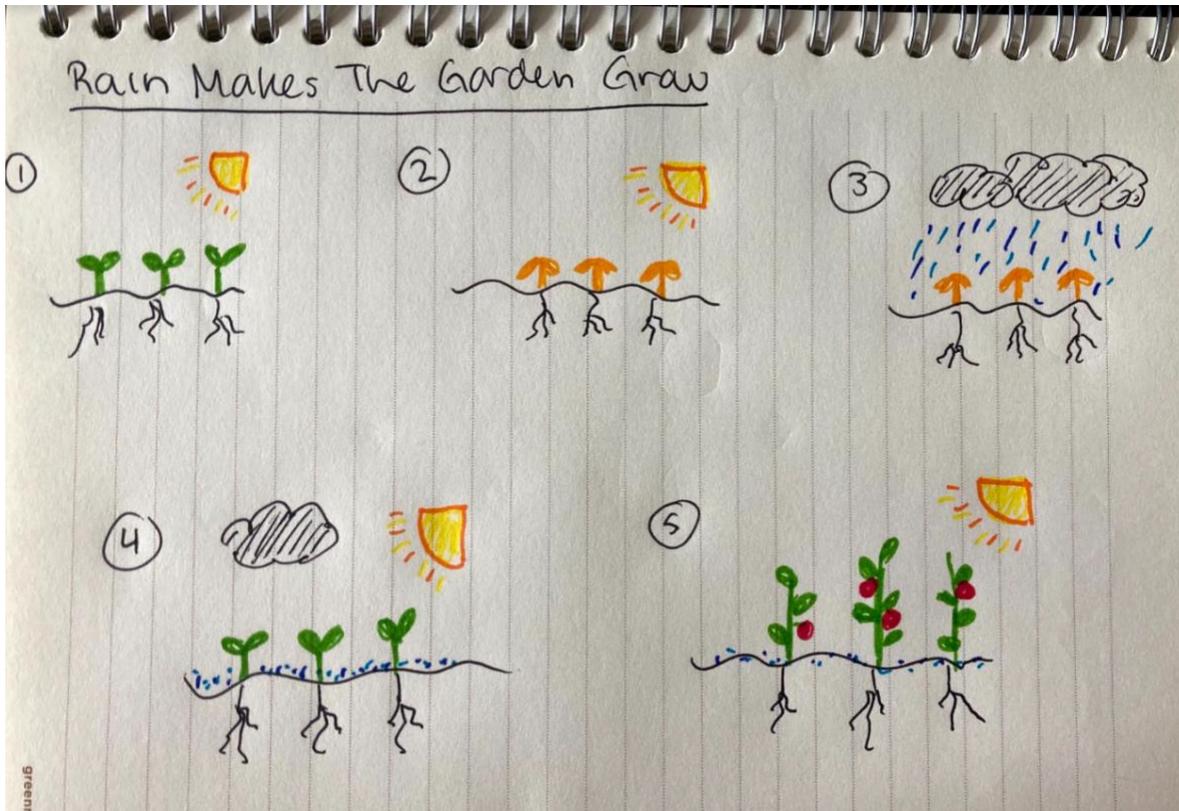


Figure 1: Example of a 5-panel sketch of the story “Rain makes the garden grow.”

Step 4: Identify Key Elements (15 min)

- Look at your sketched story and identify the key elements and “characters” in the story.
- What objects and/or people are doing something?
- What is the background scenery?
- Does anything change part way through the story?
- Example: in the “rain makes the garden grow” story, the background scenery is dirt with plant roots in it and the sky. The sun is doing something - it is shining on the plants. The clouds are doing something - they are raining on the plants. And the plants are doing something and changing - they start green, then wilt without water, then get green again and grow when it rains.



Step 5: Let's Get Crafting! (rest of time allotted plus any additional time between days/sessions)

- Set up your filming space so you know how big to make all the pieces for your stop motion. This could be on a corkboard, or some other flat surface. I recommend taping off or marking a boundary for your filming space so you have a defined area to work in.
- Use construction paper, felt, markers, and other crafting supplies to create all the pieces for your story. Whatever random craft supplies you have are perfect for this!
- Remember, if something is changing (a facial expression, the color of something, the size of something, etc) then you need to make a separate piece for before and after the change.
- Example: for the "rain makes the garden grow" story, the pieces that I needed are as follows:
 - **Background scenery:** dirt base; plant roots; blue sky; a little sign saying "Emily's Garden"
 - **Moving pieces:** plant stems and leaves when: green and small (healthy sprouts), greenish-yellow and small (wilting sprouts), yellow and small (wilted sprouts), green and large (healthy tomato plant); tomatoes; rain clouds, rain drops; sun (round part); sun rays; block letters saying "Let's eat!"



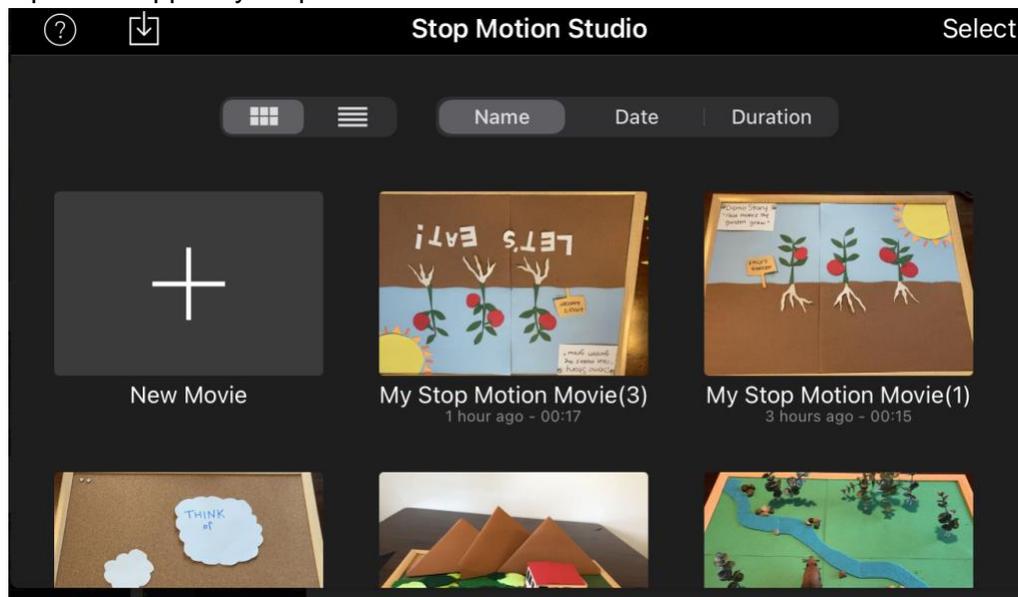
Figure 2: all pieces for my story laid out. All were cut from construction paper for this example.



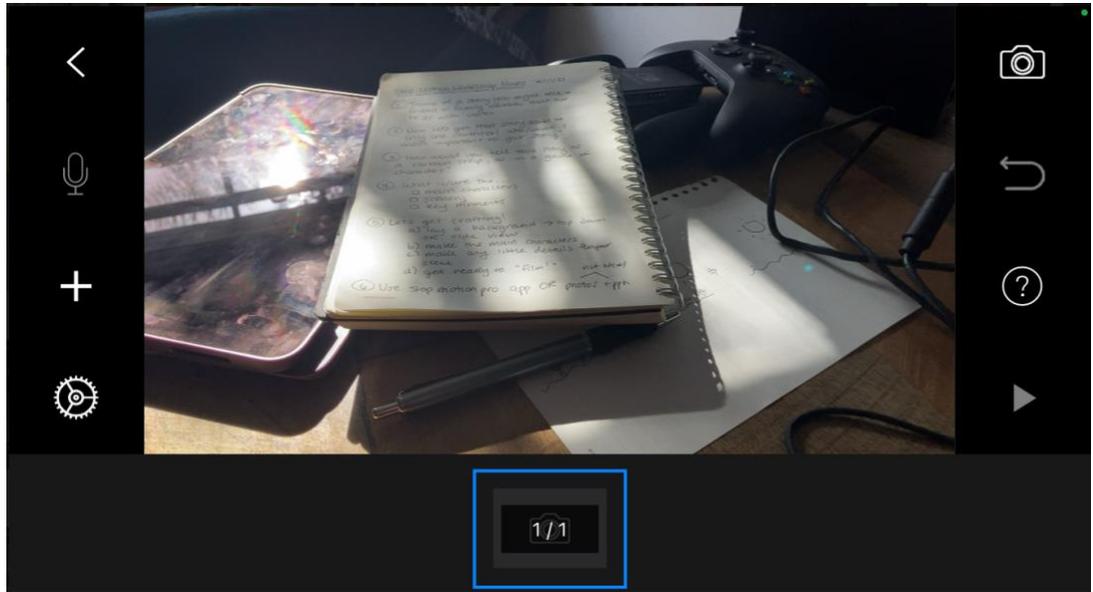
Day 2: Filming Your Stop-Motion

Step 6: Lights, Camera, Action! (20 min set up together, 30-45 min filming)

- You will want to have your camera held very still during filming. You can use a tripod, wedge it between books, or any other DIY you can come up with to keep it from moving around. See the **Materials List** for some examples.
- Follow this general sequence for filming:
 - Take a picture in the Stop Motion Pro app
 - Move pieces <1 cm each. Smaller motions = smoother animations.
 - Take another picture in the Stop Motion Pro app
- 10 seconds of stop motion is usually about 40-50 photos, and takes about 15 minutes to film.
- You're trying to tell your story in <1 minute - **so plan on moving the pieces 50-300 times!**
- **Using the Stop Motion (Pro) App**
 - Open the app on your phone or tablet



- Select “New Movie”



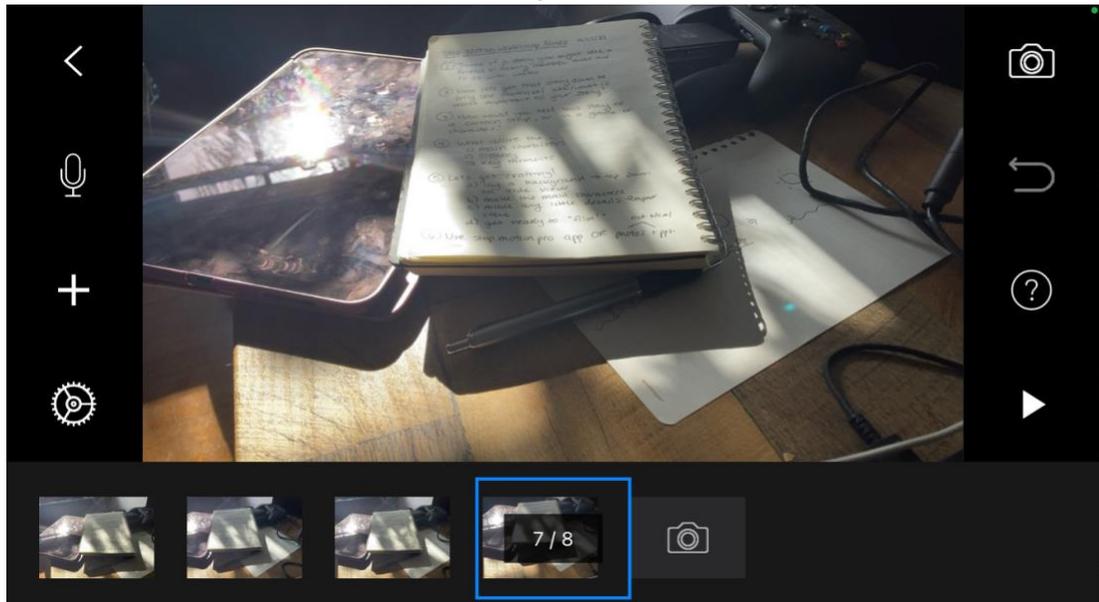
- The button shaped like a camera in the top right take you to the picture-taking mode



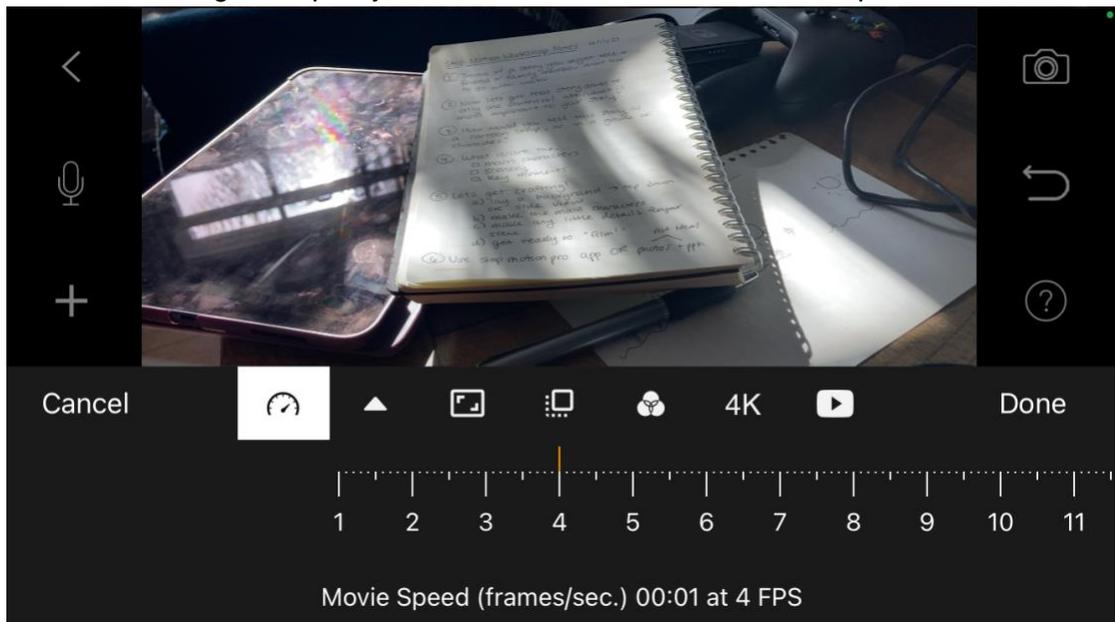
- The slider on the left toggles if you can see your previous photo transparently overlaid on the camera mode. If you don't want to see that, slide it all the way up. If you do want to see it, slide it down.
- There is a timer mode on the right panel, on the top. You can use this to time photos. I don't usually use this feature.
- The big red button takes a picture. Note: every time you go out of this screen then come back in, the first time you push the button to take a picture it takes an all white picture to scale the color in the app. Press it again to take a photo.
- The play button beneath it shows you the stop-motion you've created
- The sliders on the bottom right let you adjust some camera settings within the app (exposure, focus, etc.). I usually leave these on defaults,



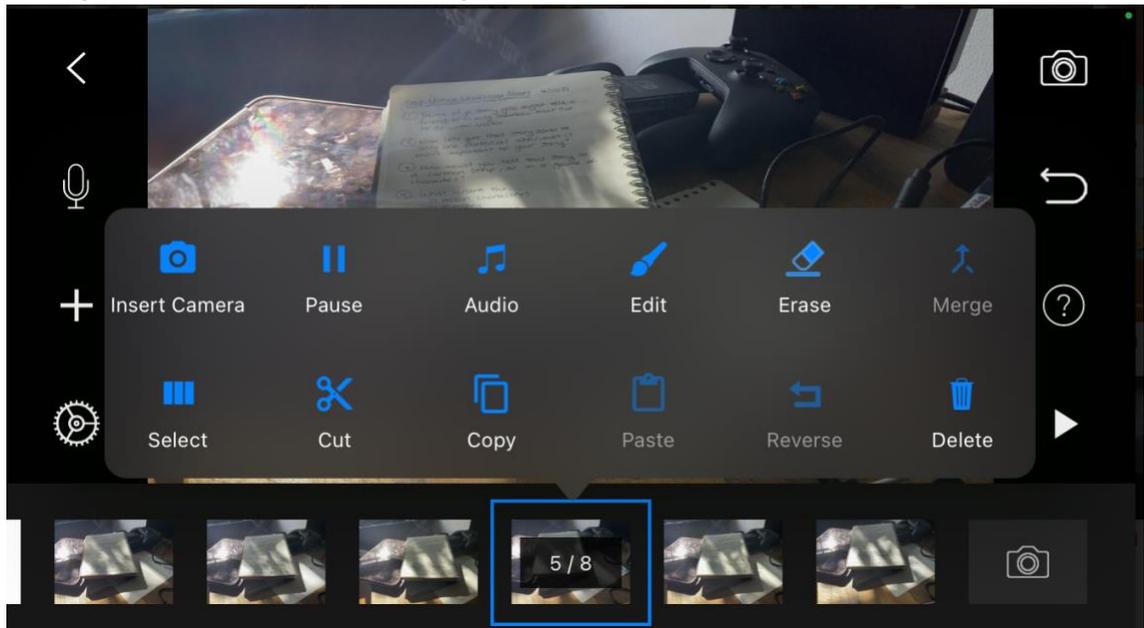
- Once you have taken some photos, you can hit the back arrow on the top right to view your whole photo sequence in a bar along the bottom



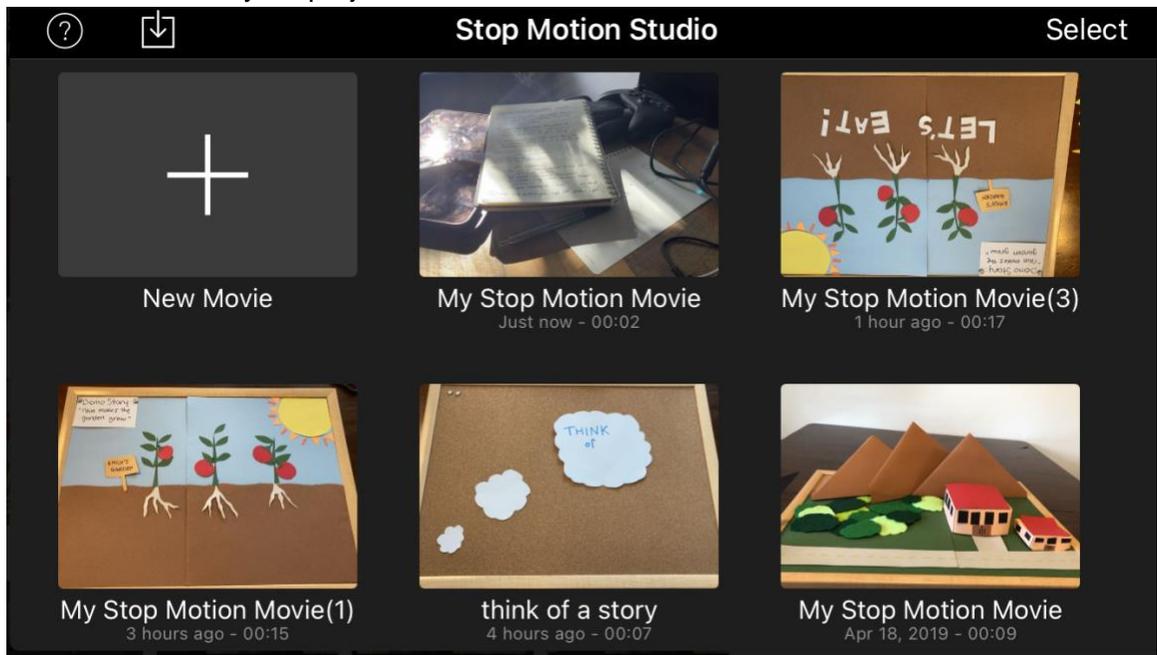
- The gear icon on the bottom left lets you adjust the frames per second rate of the whole animation, change the quality of the animation, add filters, and crop it.



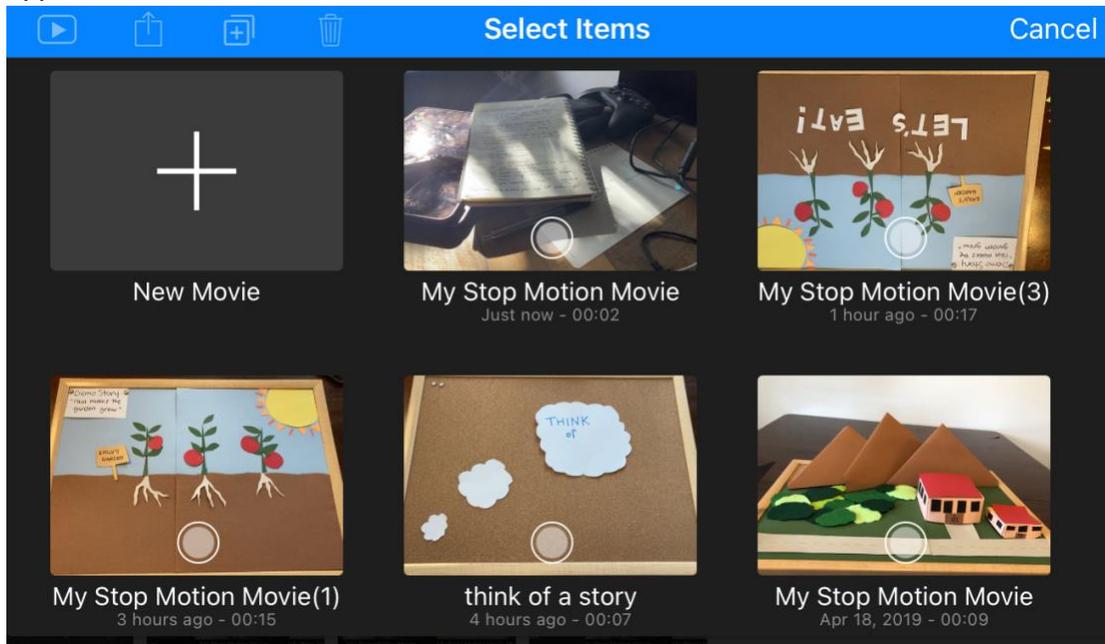
- Once outside of the gear screen (back to the view with the whole photo sequence in a bar along the bottom), tapping on an individual image in the bottom panel brings up the editing panel for that individual image.



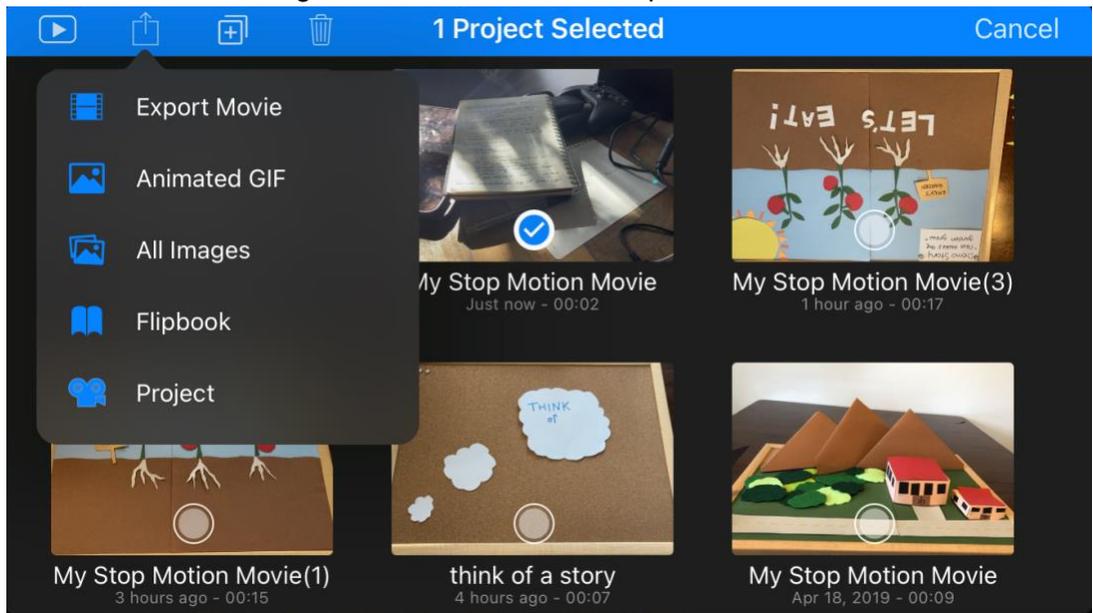
- You can add more photos, add a pause on this frame (hold it for a bit longer in the animation), add audio, edit it, copy it, delete it, etc.
- When you are all done with taking the photos and making adjustments, go back to the home screen with your projects on it.



- Hit “Select” in the top right corner, and select the animation you want to export from the app.



- Once selected, choose the second button (the upload button) in the upper left and export as either a movie or a gif file. Choose where to export.



- You can view my example animation here: [rain makes the garden grow](#)



Step 7: Guess the Story (10 min)

- Show a classmate, peer, or friend your stop-motion story, but don't tell them what you were trying to show!
- Ask them to guess what your one story was. Did they guess correctly? Were they close? Were they totally off?
- After they try to guess, tell them the one sentence story you were trying to tell if they did not guess correctly.
- Talk with them about what parts of your animation worked well, and what parts were more confusing or could be made more engaging.
- Take notes on what they say! The whole point of these is to tell a story without saying any words. It's very important the audience can understand your story, and if they can't yet, then listen to what they suggest to make it clearer!
- Watch someone else's animation and try to guess their story.
- Provide the other person with feedback - what can they improve? What was done really well? Do you have any ideas to make their story cooler or more exciting? Share them.
- **Note:** feedback should be served as a sandwich. Say one thing you like, give one point of constructive criticism or point out something they should change, then end with saying another thing you like. You want to sandwich your suggestions with compliments! We all worked hard!

Step 8: Reflect (and Revise) (10 min)

- Think about the feedback you got on your animation, and also what you liked and didn't like about some of the animations your peers made.
- Go back to your sketch from step 3 - is there anything you would change about the story arc to improve your animation?
- Then, go to step 4 - did you show all the key elements clearly? Were some things left out?
- Then, go to step 5 - do you need to make any new pieces to improve your animation? Are there any details you want to add?

Step 9: Film It Again! (optional)

- Go ahead and try filming it again! I find that the second filming is MUCH easier than the first.
- Make any changes you planned from step 8 (if applicable).
- Export your final animation and share it with your friends, family, and community!

Step 10: (optional) Adding Sound and Special Effects

- You can take your exported movie file and add sound effects or video effects in video editing softwares on the computer like [iMovie](#), [Adobe Premiere](#), [Blender](#) (free), [Shotcut](#) (free), [etc.](#)
- There are many video tutorials for these softwares on Youtube if you are new to them
- You can view the example animation with simple sound effects added here: [rain makes the garden grow \(with sound\)](#)
- I get sound effects from [freesound.org](#) where there are many sound effect files with Creative Commons licensing (free to use with attribution)



Appendix A: Example One Sentence Stories About Water

Stuck on coming up with a story but still want to practice animation? Here are some example one sentence water stories you can choose from and animate! It's okay to tell the same story as someone else - we all have our own unique styles for storytelling so the end results will still be different!

1. Fish love swimming in rivers.
2. You can fish for your dinner in a river (if you're good enough to catch something!).
3. Frogs need lakes/ponds to live in.
4. Thunderstorms aren't a bad thing, they bring water to the land.
5. Rain makes wildflowers bloom.
6. Floods can wash away everything in their path.
7. People enjoy lakes lots of ways - boating, sunbathing, fishing, picnicking, swimming, and more.
8. Droughts make plants wilt and wither.
9. No rain makes wildfires happen.
10. Swimming in lakes makes me happy.
11. Lots of animals come to the river/lake/pond to drink.
12. Ducks love swimming around in water.
13. Watering my plants makes them grow.
14. We need to drink a lot of water on a hot day.
15. Birds come to the birdbath when it's dry outside.
16. Rain makes my family happy.
17. Snow melting makes the rivers flow stronger.
18. Snow can be melted into water to drink.
19. Rain and snow and fog are all ways water gets to the ground.
20. We use wells to take water from the ground.
21. Splashing in puddles is fun.

