

2.3 Project: “Journey of a Waterdrop”

Duration: 50–55 minutes

Students will be able to:

1. Use CreatiCode AI tools to generate a story character sprite and multiple scene backdrops.
2. Build a sequential animation using the switch backdrop block and the enhanced say block.
3. Explain a simple waterdrop journey through Ocean → Cloud → Rain → River using dialogue.
4. Apply the same techniques to an original story and evaluate the project with the submission checklist.

Learning Activity Summary

- Warm-up and introduce the project goal, waterdrop story arc, and success criteria (5 minutes)
- Guided walkthrough: key blocks, project setup, AI sprite generation, backdrop generation, and Ocean/Cloud coding (25 minutes)
- Hands-on practice: students generate Rain/River backdrops and complete the full code sequence (10–15 minutes)
- Creative adaptation: pairs plan or begin a new project using the same scene-switching/storytelling technique (5–10 minutes)
- Submission checklist, wrap-up discussion, and Q&A (5 minutes)

Student Materials

- Computer with Internet access
- CreatiCode account
- Lesson 2.3 slide deck
- Optional workbook or project planning sheet

Teacher Preparation

- [Lesson 2.3 slide](#) projected and [CreatiCode](#) Playground open
- Student accounts/logins ready before class
- AI image generator tested; backup assets ready in case generation is slow
- Prompt examples ready: waterdrop sprite, ocean, clouds, rain, river
- Submission checklist/rubric visible for the final self-check
- Access to the Journey of a Waterdrop and [AI image editing tutorials](#)

Teacher Notes / Differentiation

Support: Give students prompt frames, keep the required sequence to four scenes, and allow them to copy the model code before changing the words or images. Pair students who are new to block-based coding with a confident partner.

Extension: Ask advanced students to add movement, sound, extra costumes, additional scenes, or a more original theme that still uses at least four AI-generated backdrops and one sprite.

Pacing: Model the Ocean and Cloud scenes together, then release students to build Rain and River independently. The creative adaptation may be started in pairs and finished as homework if needed.

AI Use / Safety: Remind students not to enter private information into prompts, to keep images school-appropriate, and to revise prompts when results do not match the story.

Key for this guide

 = explicitly explain

+ = student action

! = teacher tip

WARM-UP / PROJECT LAUNCH (5 MINUTES)

Slide 1

Project: “Journey of a Waterdrop”



Project Introduction

Welcome students and introduce the Part 2 project: an animated story called “Journey of a Waterdrop.”

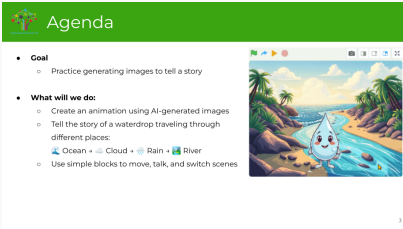
Slide shows: Title slide with the project name and Lesson 2.3.

 Today students will use AI-generated images and simple code to tell a visual story instead of building a project completely from scratch.

+ Students open CreatiCode and get ready to create a new project.

Slide 2

Goal: Tell the Journey



Agenda

- **Goal**
 - Practice generating images to tell a story
- **What will we do:**
 - Create an animation using AI-generated images
 - Tell the story of a waterdrop traveling through different places:
 - 🌊 Ocean → ☁️ Cloud → 🌧️ Rain → 🏞️ River
 - Use simple blocks to move, talk, and switch scenes

Goal and Story Arc

Slide shows: Goal: practice generating images to tell a story; sequence: Ocean → Cloud → Rain → River.

📌 The project is a short presentation/animation. Each backdrop is one scene in the waterdrop's journey, and the sprite's dialogue explains what is happening.

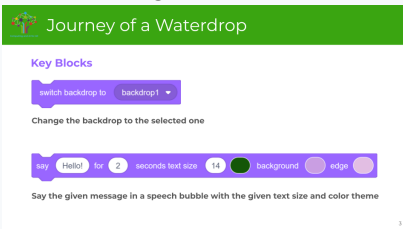
+ Quick turn-and-talk: "What should the waterdrop say in each scene?" Invite one or two responses before moving on.

! Connect the story to the water cycle: ocean water warms, rises into clouds, falls as rain, and flows through rivers back to the ocean.

GUIDED WALKTHROUGH (25 MINUTES)

Slide 3

Key Blocks



Journey of a Waterdrop

Key Blocks

switch backdrop to backdrop1

Change the backdrop to the selected one

say Hello! for 2 seconds text size 14 background edge

Say the given message in a speech bubble with the given text size and color theme

Key Blocks

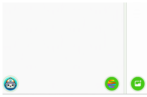
Slide shows: The purple switch backdrop block and the new say block with message, time, text size, and color options.

📌 **switch backdrop to [backdrop]** changes the scene the audience sees.

📌 **say [message] for [seconds] text size [number]** shows a speech bubble so the character can narrate the story.

+ Students locate these blocks in the editor and notice how the dropdowns and color options work.

! Keep dialogue short so each speech bubble is readable during the 3-second display time.

Slide 4 Create Your Project Create Your Project Step 1: • Go to the CreatiCode playground • Create a new project • Name it "Journey of a waterdrop" • Remove the existing sprites 	Step 1 - Create Your Project (4 minutes) Slide shows: Project setup instructions. • Go to the CreatiCode playground. • Create a new project. • Name it "Journey of a waterdrop." • Remove the existing/default sprites. + Students create the project and confirm the project name is visible. ! If students are behind, let them keep the default sprite until they successfully generate the waterdrop sprite.
Slides 5-6 Add / Edit Sprite Create Your Project Step 2 - Add the main character sprite • Generate a waterdrop or some other sprite character you like ↳ Prompt Example: a waterdrop character facing the viewer, cartoon style  	Step 2 - Add the Main Character Sprite (6 minutes) Slide shows: Generate a waterdrop or another character sprite; then clean up the costume if needed. ✓ Students can use the example prompt or create a character of their own as long as it fits the story. Prompt example: a waterdrop character facing the viewer, cartoon style + Students generate the sprite, add it to the project, and rename it clearly (for example, Waterdrop). ! If the AI image includes unwanted shadows, background fragments, or extra marks, model erases them in the costume editor before coding.

Slides 7-9 Ocean Backdrop + Dialogue Create Your Project Step 3 - Generate an ocean backdrop - Generate an ocean backdrop or of your own idea Prompt Example: surface of a large ocean, cartoon style - Name it meaningfully, like "Ocean" 	Steps 3-5 - Build the Ocean Scene (7 minutes) Slide shows: Generate an Ocean backdrop, switch to it when the green flag is clicked, and add the first speech bubble. Backdrop prompt: surface of a large ocean, cartoon style + Students generate the backdrop and name it Ocean. 📌 Switch to the waterdrop sprite before adding code so the code belongs to the narrator. Model code: when green flag clicked → switch backdrop to Ocean → say "I'm a waterdrop in a big ocean" for 3 seconds. ! Have students test after this first scene. A successful test should show the Ocean backdrop and a readable speech bubble.
Slides 10-11 Cloud Backdrop + Code Create Your Project Step 6 - Add a cloud backdrop - Generate a cloud backdrop or based on your own idea Prompt Example: a few clouds in the sky, cartoon style - Name it "Cloud" (or your own name) 	Steps 6-7 - Add the Cloud Scene (6 minutes) Slide shows: Generate a Cloud backdrop and extend the code sequence so the waterdrop rises into the clouds. Backdrop prompt: a few clouds in the sky, cartoon style + Students generate the backdrop and name it Cloud (or another meaningful name). Model code to add: switch backdrop to Cloud → say "When it is warm, I rise into the clouds" for 3 seconds. 📌 Explain that the code runs in order from top to bottom, so every new scene needs both a backdrop switch and a sentence. ! If the project skips too quickly, check that each say block has a time value such as 3 seconds.

HANDS-ON PRACTICE / CREATIVE ADAPTATION (15-20 MINUTES)

Slides 12-13 Rain + River Practice



Create Your Project

Step 8 - Add "Rain" and "River" backdrops

- **For Practice:** generate 2 more backdrops:
 - some light rain over a lake, cartoon style
 - a river flows into the ocean, cartoon style
- Name these backdrops as "Rain" and "River"

12 W

Steps 8-9 - Add Rain and River Scenes (10-12 minutes)

Slide shows: Practice task: generate two more backdrops and add code to explain each scene.

Rain prompt: some light rain over a lake, cartoon style

River prompt: a river flows into the ocean, cartoon style

+ Students name the backdrops Rain and River, then add them to the code sequence after Cloud.

Suggested code to add: switch backdrop to Rain → say "Then when it turns cold, I fall into the lakes as rain" for 3 seconds → switch backdrop to River → say "Finally, the rivers will carry me back to the ocean" for 3 seconds.

! Circulate and check that every project has at least four backdrops, one sprite, and a logical order.

Slide 14 Creative Adaptation



Creative Adaptation

Work in pairs to build a new project using similar techniques

- Example ideas for new projects:
 - **Story of a tree:** show a tree over backdrops of a sunny day, a cloudy day, a rainy day and a snowy day, explain how the weather affects the tree.
 - **Tour of the Solar System:** show a spaceship over a few backdrops of planets, such as Earth, Mars, Saturn, etc. Explain what's unique about each planet.
 - **Voyage of Magellan:** show a ship sprite over a few backdrops of key locations that Magellan visited, such as a port in Spain, then a tropical island in Guam, and the Philippine shoreline.
 - **(Advanced) A Person's Lifetime:** show a person progressing through key stages of life, such as childhood, youth, adulthood, and old age. As the backdrops change, update the person's sprite to reflect physical growth and aging.

14 W

Creative Adaptation (5-8 minutes)

Slide shows: Pairs build a new project using similar techniques.

👤 The waterdrop is the model. For the final challenge, pairs can apply the same technique to an original theme with one character and a sequence of backdrops.

Example themes: Story of a tree through weather changes; Tour of the Solar System; Voyage of Magellan; advanced: a person's lifetime.

+ Pairs choose a theme, list four scenes, write one short sentence for each scene, and begin generating images.

! Point out that the rubric includes "Original Theme," so students should not submit an unchanged copy of the waterdrop example unless you want the model project only.

SUBMISSION & WRAP-UP (5-10 MINUTES)

Slide 15

Submission Checklist



Submission Checklist

Check your project against this rubric yourself before submitting it

Category	Criteria	Max	Score
AI Application	Use AI tools to search/generate at least 4 backdrops and 1 sprite that clearly connect to the waterdrop's journey.	2	—
Project Functionality	The project correctly switches backdrops and uses dialogue (e.g., "say" blocks) to explain each scene.	1	—
Story Sequence	Scenes are ordered logically to tell a complete story or presentation.	1	—
Original Theme	The project uses a theme or story different from the waterdrop example while applying the same techniques.	1	—
Total:		5	—

Submission Checklist / Rubric

Slide shows: A 5-point self-check rubric students complete before submitting.

Review each criterion and show students how to score their own project honestly before submitting.

- AI Application (2 pts): at least 4 backdrops and 1 sprite generated/searched with AI and connected to the journey.

- Project Functionality (1 pt): project switches backdrops and uses dialogue/say blocks to explain scenes.

- Story Sequence (1 pt): scenes are ordered logically to tell a complete story or presentation.

- Original Theme (1 pt): final project uses a theme or story different from the waterdrop example while using the same techniques.

+ Students test the full project from the green flag, self-score the rubric, then submit or share according to class procedures.

Slide 16

Wrap-Up / Discussion



Wrap up/Discussion

What challenges did you face when searching or generating backdrops or sprites?



How AI image generator tools can help you create new projects?

© 2020

Wrap-Up / Discussion

Slide shows: Two discussion questions about AI image generation and project challenges.

+ Students respond: “How can AI image generator tools help you create new projects?” and “What challenges did you face when searching or generating backdrops or sprites?”

👤 Reinforce that AI is a creative helper: students still make choices about prompts, scene order, dialogue, code, and revision.

! If time allows, invite two students or pairs to show one scene and explain how they improved their prompt or code.

Exit check: Students can identify the two key blocks and explain why their scenes are in a logical order.