About Galileo Learning

Galileo Learning (Galileo) creates and operates Innovation Camps for kids. Their mission is “to develop innovators who envision and create a better world” and this mission comes to life each summer at nearly 60 imagination-sparking locations (40 in the Bay Area, 15 in SoCal locations and 4 in Chicagoland.) They also train and employ more than 2100 educators and aspiring educators as summer staff. Galileo’s programs serve campers from pre-K through 8th grade.

In all of Galileo’s programs, the curricula focuses on helping campers (and staff) develop 21st Century skills and mindsets through understanding and applying the Galileo Innovation Approach (GIA). The GIA is inspired by the Stanford d.school’s design thinking process and mindsets and fine tuned for 5-14 year old campers who are especially open to absorbing new ways to think, explore and create. Click here for more information about Galileo Learning.
The Galileo Innovation Approach

The Galileo Innovation Approach (GIA) is our unique approach to teach and learning. It is designed to develop Galileo Innovators – campers and staff who imagine and create a better world. Galileo Innovators approach their work with an Innovator’s Mindset, do their work with an Innovator’s Process, and seek/leverage Innovator’s Knowledge.

Galileo Innovator’s Mindset
Galileo Innovators have dispositions that support breakthrough thinking and creative work. The Galileo Innovator’s Mindset has five elements:

BE VISIONARY
- I envision a better world.
- I imagine things that don’t yet exist.
- I believe that it is my place to turn ideas into reality.

BE COURAGEOUS
- I freely share my creative thoughts.
- I stretch myself to try new things.
- I embrace challenges.

BE COLLABORATIVE
- I value the unique perspectives of others.
- I build on the ideas of others.
- I use my strengths to support the work of others.

BE DETERMINED
- I persevere until I achieve my goal.
- I recognize setbacks as opportunities to learn.
- I know that innovation and mastery require effort.

BE REFLECTIVE
- I take time to think about what is and isn’t working in my design.
- I think about how my work impacts other people and the world.
- I seek feedback to improve myself and my work.

Galileo Innovator’s Process
Galileo Innovators learn and practice an iterative process to bring the best ideas to fruition. The diagram below shows the Galileo Innovator’s Process:

Galileo Innovator’s Knowledge
Galileo Innovators require subject-specific knowledge to creatively solve problems and make their visions a reality. Galileo Innovator’s Knowledge lies in the following four categories:

CONCEPTS AND FACTS
Galileo Innovators understand the big ideas, principles, and facts relevant to their work.
Examples: Adding more tension to a rubber band creates a higher pitch when it’s plucked

HISTORICAL CONTEXT
Galileo Innovators understand the contributions, objectives, and processes of relevant movements, artists, scientists, designers, and other experts who came before them.
Examples: Kandinsky uses a variety of brushstrokes and line types to represent music visually

SKILLS AND TECHNIQUES
Galileo Innovators understand how to use relevant materials, tools, and technology so they can effectively build, test, and share their ideas.
Examples: Manipulating cardboard by cutting, curling, bending, folding, scoring, tabbing, and fastening; taping techniques; watercolor resist

AUDIENCE AND ENVIRONMENT
Galileo Innovators understand the needs, beliefs, and circumstances of their users and the physical context in which their work will be received.
Examples: Engineers need to design buildings in a specific way when constructing in an earthquake prone area
Galileo Innovation Approach and the Curriculum

Our curriculum is designed to support you in teaching the Galileo Innovation Approach and nurturing Galileo Innovators. Below are some ways in which the curriculum fosters your development as an Innovation Educator.

First, you’ll find that the components of the GIA literally leap off the page.
- The GIA terms are emphasized throughout the curriculum in ALL CAPS to help you easily identify opportunities to integrate the GIA.
- An overview of the key Innovator’s Knowledge, Process, and Mindset for each lesson appears in the Instructional Priorities & Supporting Innovation section. Think of these as the blueprint of a successful lesson. Starrred sections in the curriculum are connected to these priorities and should not be skipped.

Second, the curriculum includes a daily Innovator’s Mindset Challenge. The Mindset Challenge helps campers focus on developing a different part of the Innovator’s Mindset each day and shows how practicing this element can help them develop as innovators. The challenge is introduced near the beginning of the lesson, supported with details in the facilitation notes and debriefed as part of the lesson wrap up.

Third, each day concludes with a Lesson Wrap Up that provides a forum for you to go deep on innovation themes with campers. Prompts are provided to support project sharing, reviewing key Innovator’s Knowledge and debriefing the day’s Mindset Challenge. Use this time to help campers solidify what they learned, notice how practicing the mindset helped them with their project and recognize the innovator in themselves and in others. Familiarize yourself with the discussion questions before each lesson so you can best guide campers to develop as innovators throughout the rotation.

Additionally, these general practices can help you to bring the GIA to life:
- Think about what it means to you to be an Innovation Educator and find ways to realize that vision.
- Pace your class to allow time for campers to engage with each project, giving ample time for the TEST, EVALUATE and REDESIGN phase so that campers can thoughtfully evaluate how they can improve their designs, and then implement the modifications.

- Model the Mindset in your teaching. When you make a mistake, celebrate it! Tell the campers that your teaching or the project didn’t go as planned, and that you’ll learn from that and try it a different way in the next rotation.
- Help campers understand what it means to be a Galileo Innovator and strive to shape their self-images as such.
- Recognize campers as they exhibit the Innovator’s Mindset as relevant throughout the day—in addition to this focus during the Wrap Up. (E.g., I see that you’re BEING REFLECTIVE, thinking about what is and isn’t working with prosthetic hand design. That’s a great way to start developing an innovative solution!)
- Refer to the steps of the Innovator’s Process (and your Galileo Innovator’s Process Poster) as you describe the day’s activities and as campers work.

Finally, the curriculum supports your own innovations for how to integrate the GIA in your classroom. Please apply the Innovator’s Mindset and Process to this end and SHARE your learning with your colleagues!
Galileo Makers – Nebula (Pre-K – Kindergarten)

DIY Art

**Project Overviews**

**Galileo Makers Day 1 – Suminagashi Paper Marbling**

**Project Description**
There are many ways to create your own patterns and designs on fabric and paper. Suminagashi marbling is a traditional technique using ink and water that creates unique and beautiful organic designs. Today campers create suminagashi prints on paper and pillowcases.

**Instructional Priorities and Supporting Innovation**

*Demonstrate the TECHNIQUE of dropping ink in the water with a partner.*
*Demonstrate the TECHNIQUE for making a print on paper with a partner.*
*Model how to EVALUATE your technique as you drop ink and how to decide when it’s time to start over.*

**Throughout the Lesson**

*Support the Innovator’s Mindset Challenge: BE REFLECTIVE – Campers pay attention to how they’re working and notice what happens when they work this way.*

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Galileo Makers Day 2 – Personalized Door Hanging

Project Description
Today campers incorporate the paper suminagashi prints from yesterday into personalized door hangings for their bedrooms.

Instructional Priorities and Supporting Innovation
Do-With-Me: Preparing Paper and Cardboard
★ Lead campers through the TECHNIQUE for arranging the construction paper and suminagashi print on the cardboard.

Demo & Discussion: Activity Stations Overview
★ Demo the SKILLS AND TECHNIQUES needed at each station. Be sure campers are clear what the goal of each station is.

Throughout the Lesson
★ Support the Innovator’s Mindset Challenge: BE DETERMINED – Campers stay focused at each activity station to accomplish all the different steps necessary to create their door hangings.

Galileo Makers Day 3 – Nighttime T-Shirt, Part 1 of 2

Project Description
Today campers experiment with alternative ways to dye clothes using everyday materials. They use cool colored tissue paper and water to create a tie-dyed effect on a white cotton shirt.

Instructional Priorities and Supporting Innovation
Demo & Discussion: Tissue Paper Tie-Dye Overview
★ Demonstrate all the TECHNIQUES needed for preparing the t-shirt and tissue paper, placing the tissue paper on the t-shirt, and peeling it off.
★ Model EVALUATING to make sure the shirt is wet enough, the paper is lying flat, and the shirt is completely covered.

Throughout the Lesson
★ Support the Innovator’s Mindset Challenge: BE REFLECTIVE – Campers pay attention to how they’re working and notice what happens when they work this way.
Galileo Makers Day 4 – *Nighttime T-Shirt, Part 2 of 2*

**Project Description**
Camper will create three new blue paint colors by mixing various amounts of blue, turquoise, violet, green, white, and black paint, and then arrange stencils on their tie-dyed t-shirts and fill them in using their unique shades of blue.

**Instructional Priorities and Supporting Innovation**
*Demo & Discussion: Mixing Blue Colors Overview*
★ Demo and discuss the TECHNIQUES for creating different kinds of blue using the paint colors available.

*Demo & Discussion: Stenciling Overview*
★ Demo and discuss the TECHNIQUES for successful stenciling.

**Throughout the Lesson**
★ Support the Innovator’s Mindset Challenge: BE VISIONARY – Campers imagine the blues they want to mix and envision how they want to add designs to their shirts.

Galileo Makers Day 5 – *Bedtime Buddies*

**Project Description**
Today campers create a set of soft characters, inspired by the traditional craft of Guatemalan Worry Dolls, to join them at bedtime. They also stencil a pouch to put them in.

**Instructional Priorities and Supporting Innovation**
*Demo & Discussion: Securing and Wrapping*
★ Demo all the TECHNIQUES needed to successfully assemble, wrap and embellish the dolls, including using glue dots.

**Throughout the Lesson**
★ Support the Innovator’s Mindset Challenge: BE DETERMINED – Campers stay focused to make sure their materials are attached well and wrapped tightly.
**This Week’s Story**

Each week at camp a story will unfold through a series of skits done at opening and closing ceremonies. The story provided to your Camp Director for this theme has been included here so that you can incorporate the story into your classroom this week. We’ve provided some suggestions in the curriculum for how to tie activities into the storyline, and we also encourage you to bring the story to life in your own way!

**Galileo Makers Story Overview**

**Website Teaser**
*Galileo Makers: DIY Art and Real-World Inventions*

Flex your maker muscle and put a creative spin on everyday objects. Design a personalized stool, clock or pillowcase for your room. Build useful inventions to take home like a vacuum or a secret lock box with an alarm that really works. Harness your innovative energy and join the marvelous maker movement as you transform intriguing ideas into functional, faire-ready reality.

**Characters**

- **Storyteller**
  *Our narrator, who reads Monday's story and parts of Wednesday's and Friday's—this role can be played by anyone who is a clear-spoken, engaging reader of stories*

- **Lucy**, a girl who lives in Land Land
  *A curious, potentially creative human stuck in a world of dull sameness—a situation that has resulted in a state of constant restlessness, as she never quite knows what to do with herself*

- **Finn**, a boy who lives on Cardboard Island
  *A super-enthusiastic kid who's always up for a challenge and has ideas to spare—an I-have-an-awesome-idea-so-what-are-we-waiting-for kind of guy*

- **Lucy's parents**
  *Formerly creative folks who have lived in Land Land so long they don’t remember what it’s like to make things themselves*

- **The makers of Cardboard Island**
  *Assorted creative folks—including our Camp G campers—who live and make on Cardboard Island*

**Setting**

- **Land Land and Cardboard Island**
  - **Land Land**: A place where everyone is the same—everyone dresses the same (in dull colors), decorates the same (minimally, also in dull colors), has the same haircut and says all the same things (e.g.: Person 1: "Welcome to Land Land"; Person 2: "Welcome to Land Land")
  - **Cardboard Island**: An alternate world that's covered in cardboard as far as the eye can see—its inhabitants spend their days transforming its vast cardboard reserves into awesome hand-made gizmos, gadgets and pieces of furniture, all wildly colored and wonderfully personalized

**Plot**

Restless in her Land Land existence (and dreading an upcoming move to a new house that's just like her current house), Lucy draws a doorknob on the back wall of her closet, which opens a portal to Cardboard Island, a land covered in cardboard and inhabited entirely by marvelously creative makers. There she meets Finn, who introduces her to the fabulous, fearless creativity of the Cardboard Islanders. They offer to help her make items to personalize her new room. When Lucy gets stuck back in Land Land, she and the Cardboard Islanders work together to reopen the portal and stage a mini-Maker Faire featuring items for Lucy's new room.

**Conflict**

Lucy's dad paints over the "doorknob" in Lucy's closet, sealing the portal and locking her in Land Land before she can realize her vision for her new room. She and the Cardboard Islanders need to reopen the portal and stage their Faire before Friday's move and without upsetting Lucy's parents, who might not approve of such un-Land Land-like creations.

**Resolution**

Lucy and the Cardboard Islanders reopen the portal between the lands and put on an awesome Maker Faire on the island. Lucy's parents follow her through the portal to the Faire, but instead of being upset, as Lucy feared, they're impressed and inspired by her VISION.

**What We Want Campers to Learn**

- The Maker Movement is all about making things and getting people together to learn and create.
• Maker Faire is an all-ages gathering of makers who come together to collaborate, get inspired and share what they've made and learned.
• As long as you have an imagination (and a little cardboard) you never have to be bored.
• Innovators are VISIONARY and COLLABORATIVE.

Galileo Makers: Monday

The storyteller reads:
Once upon a time, so long ago that nobody but the storytellers remember, there lived a girl named Lucy. Lucy lived in a place called Land Land where everything was the same. In Land Land, everyone wore the same clothes, ate the same food, drove the same cars and lived in rows of identical houses. And this is how it had been in Land Land for generations. Year after year, it was the same, and that sameness had been the same for Lucy’s parents, her grandparents and her great-great-grandparents, all the way back as long as anyone could remember.

It wasn’t such a bad place to live, but Lucy couldn’t help but feel a little tired of all the sameness. Sure, it made it easy to pick out her clothes in the morning and decide what to eat for lunch, but she couldn’t help but feel like there was something... missing.

On the day our story begins, Lucy was sitting in her room doodling, thinking about her family’s big move to a new house later that week. She wanted to be excited about moving, but she just couldn’t muster up any enthusiasm, because in Land Land, new houses were pretty much just the same as old houses. Which meant that her new room would look pretty much the same as her old room, which, in turn, looked exactly the same as her brother’s room... and her best friend’s room... and her best friend’s brother’s room...

"UGH!" Lucy exclaimed, rising to her feet. She was suddenly so fed up with the dreary, tedious BORINGNESS of it all. "Why does EVERYTHING I own have to look exactly the same as everything everyone else owns?" she wondered out loud, waving her pencil around for emphasis. Throwing open her closet door, she scanned racks and shelves stuffed with identical shirts, shoes, toys, books and sports equipment, all in drab, sensible colors. Pushing them aside, she stood considering the back wall of her closet. "Well," she said, looking at the pencil in her hand, "maybe I there's SOMETHING I can make look a little different."

And with that, she drew a big, round, ornate-looking doorknob on the wall in front of her, right where a doorknob would go if the back of her closet were a door instead of a wall. When she was done, she stood back, pleased with her handiwork. In fact, her doorknob looked so real, she almost felt like she could reach out and grab hold of it... so she did. And to her surprise, the knob turned in her hand and her closet wall swung open in front of her like a big door. Speechless and more than a little curious, she took a deep breath and stepped through it.

Lucy blinked in the bright sunlight. As her eyes started to adjust, she noticed three things about her surroundings:

Number one: She wasn’t inside her closet anymore. The warm, dazzling sun and fresh, salty-smelling air made that part pretty obvious.

Number two: She was surrounded by cardboard as far as the eye could see. But not just cardboard boxes and tubes and scraps—cardboard EVERYTHING. There were cardboard trees and flowers, cardboard benches and streetlights, cardboard houses and bicycles... and they were all so DIFFERENT. Every last flower petal and bicycle spoke was different from the one next to it—brightly painted, adorned with trims and tassels, some even wired with lights and switches. She’d never seen anything so intriguing or beautiful in her whole life... certainly not in Land Land.

And the third thing she noticed was the people—because there were plenty of people in this strange new place, and they had started to notice this new, drably dressed visitor. The people here were a little like the place itself: decked out in a variety of colors and cool embellishments, every one totally, marvelously different from the last. There was even a whole batch of kids about her age, sitting right in front of her, who seemed to be campers of some kind...

One of these utterly unique individuals—a boy about her age, wearing a wildly cool, totally wacky cardboard hat and a backpack covered in buttons and lanyards—walked right up to her and stuck out his hand. "Finn’s the name," he announced cheerfully, "it’s awesome to meet you!" Lucy took his
hand tentatively. "Hello, hello. I'm Lucy," she said, nodding her head twice, as was traditional in Land Land. And then, before she could stop herself, she blurted out, "Um... I'm sorry, but I... I'm just a little confused. Where am I?" Finn laughed. "Oh, how silly of me," he said, "where are my manners? Lucy, welcome to Cardboard Island!"

**Galileo Makers: Wednesday**

1. **Lucy and Finn learn about each other's homes**
   **The storyteller reads:** "Now, where did we leave off? Ah yes! There Lucy was, on the other side of a mysterious door in the back of her closet, surrounded by bright people and their bright creations, talking to a boy named Finn..."
   - Finn tells Lucy about Cardboard Island, a place covered in cardboard and inhabited by makers, including this group (i.e., the campers), who only just arrived Monday.
   - Lucy explains how different this place is from her home and tells Finn what led her here: She's tired of everything being so same-y in Land Land, especially the idea of her not-so-new "new" room in the house she's moving to.

2. **Finn and his Cardboard Island friends offer to help**
   - Excitedly, Finn says that he and his friends are experts at personalizing special spaces—they can help her make stuff for her room!
   - Lucy gets excited too, confessing that she sometimes sketches ideas for inventions.
   - The pair makes a plan: On Friday, Lucy, Finn and the Cardboard Islanders (including the campers) will put on a Maker Faire (an event Finn has to explain to Lucy) on the island, full of creations she can use in her new room.
   - Lucy is thrilled, but she muses that she probably shouldn't tell her parents yet, since she's not sure how they'll feel about all these unique creations in their Land Land home.

3. **Lucy gets stuck back in Land Land**
   **The storyteller reads:** "A few days passed, with Lucy traveling back and forth between Land Land and Cardboard Island, sharing her sketches and starting to learn how to bring them to life. But one day, when she came rushing home from school, excited to head to the island with a new batch of ideas, she got an awful shock..."

   - Lucy finds her dad in her closet, just having painted over her doorknob (an innocent mistake—he saw something out of order and thought he'd fix it).
   - Once her dad leaves, Lucy confirms that the door is, in fact, gone.
   - She tries redrawing the doorknob but it's no use—she bangs on the door helplessly.

4. **The Cardboard Island folks reopen communication**
   - Just then, a note arrives through the closet wall (the Cardboard Island gang heard her banging and fashioned a quick mail slot), which Lucy reads aloud: "Pretty cool mail slot, huh? We think we can figure out a new door, too. We just need a little time..."

5. **The Cardboard Island folks convince Lucy to stay the course**
   - Lucy is skeptical, but then she hears Finn calling faintly through her wall: He tells her that nothing is impossible if they COLLABORATE—they'll keep planning and making for the Friday Faire (sending plans through the mail slot), plus work on ideas to help them reopen the portal between the two lands.

**Galileo Makers: Friday**

1. **Lucy wraps up the finishing touches on her Maker Faire project**
   **The storyteller reads:** "It had been a busy few days since the door in Lucy's closet—the one between her home in Land Land and Finn's home on Cardboard Island—had been accidentally sealed shut. Lucy had been spending that time hard at work, communicating with her friends on Cardboard Island, sending plans back and forth as they generated ideas and creating her own project for Friday's Maker Faire..."
   - Lucy finishes her project and holds it up to inspect it, looking proud, then sighs, wondering aloud if she'll ever be able to go to Cardboard Island again—was this all a big waste of time?

2. **Lucy reopens the door to Cardboard Island**
   - Just then, she hears something coming from her closet and walks over to check it out.
   - "Is that you, Finn?" she asks.
   - "Yup," he responds, and then: "Draw a new doorknob!"
• She doesn’t hear him clearly at first, and once she does, she has to remind him that she already tried redrawing the doorknob with no luck.
• Finn explains that they figured out the secret to unlocking the portal: She can’t just draw the same doorknob again: “We’re makers—it has to be a totally reimagined thing... something the world has never seen before!”

3. Lucy attends her first Maker Faire

The storyteller reads: "Lucy picked up her pencil and studied the wall for a moment, then began to draw a completely new kind of doorknob, this one square and modern-looking with broad stripes running across it. When she was done, she picked up her project, took a few steadying breaths and reached out to turn her new doorknob. And once again, there she was, standing in the dazzling sun of Cardboard Island. But before she could celebrate her successful arrival, she was stopped in her tracks by what she saw: Everywhere she looked, there was a different maker with a different incredible thing—chairs and beds and beanbags; nightlights and desk lamps and fairy lights; clocks and door hangings and murals. It was all so overwhelmingly, astonishingly amazing that she almost couldn’t take it all in... but she wanted to try..."

• Lucy runs around the Faire delightedly, meeting makers, hearing about their projects and sharing her own.

4. Some unexpected visitors show up

• As Lucy begins to run to another booth, she runs smack into her mom and dad.
• Lucy is at a loss for words, but begins to stammer an excuse for what she’s doing and why she’s there, trying to hide her project behind her back.
• Her parents (a little speechless themselves) slowly explain that they’re not mad... they’re impressed—in fact, they remember a time, long ago, when they used to make things, too...
• They ask to see Lucy’s project and marvel at it—they’re inspired by her VISION.
• Overjoyed, Lucy says that she couldn’t have done any of it without the COLLABORATIVE efforts of Finn and her other Cardboard Island friends—the community of makers that welcomed her.

5. The storyteller wraps things up

The storyteller reads: "Lucy, her parents, Finn and the rest of the Cardboard Island makers spent hours together at the Faire that day, showing each other what they made and sharing what they learned making it. The Land Landers started to truly understand the power of creating things the world has never seen before and of working together with interesting, innovative people. And they learned a lesson that Cardboard Islanders, Galileo campers and makers all over the world have known for many years: As long as you have an imagination—and maybe a little cardboard—your life will never be boring.

By the end of the day, Lucy and her parents were so utterly inspired and full of ideas for what else they could make—objects to decorate their new house, to solve everyday problems, to give as gifts—that they couldn’t wait to show everyone back home in Land Land. And that’s exactly what they did. And from that day forward, to their delight, Land Land was never the same again.”

Notes and Additional Ideas

• Your other actors can act out the read-out-loud scenes as the storyteller reads them.
• As inhabitants of Cardboard Island, campers can submit their own ideas/plans for a new door between their land and Land Land.
• Lucy and Finn not being able to hear each other through the wall can be played for comedy: They can stand directly next to each other (with either a cardboard or an imaginary wall between them), shouting as loud as they can, but barely able to make each other out.
• Lucy's project for the Faire can be anything—a camper project or something entirely different.
• On Wednesday or Friday, Lucy can meet real makers (played by staffers) that campers have been learning about, who can share their projects with her.
• On Friday, campers can stage the Maker Faire that Lucy discovers on the other side of her door.
• Feel free to turn Friday's Faire into a deeper exploration of campers' work throughout the week—look at each project and call out (or have campers identify) the Mindset elements and Process steps they used in making it.
**Preparation for the Week**

This section contains preparation of materials such as cutting paper and cardboard. Give this list to Summer Interns (SIs) who have some time to help Lead Instructors (LIs) or to Team Leaders (TLs) who help LIs do prep work after camp. It also helps you get a sense of the prep needed for the week. It does not include tasks such as setting out materials or preparing a place to store projects. Those suggestions are in the prep section of each lesson.

**Day 1 – Suminagashi Paper Marbling**

*Days earlier*

- Cut white cardstock in half to make 5.5" x 8.5" sheets for marbling (6 per camper).
- Create a few examples of marbled paper yourself to understand the process and to use as a sample.
- Use a paper cutter to cut the Care Instructions copies in half (1 half per camper).

**Day 2 – Personalized Door Hanging**

*Days earlier*

- Place small circles of blue tape on the backs of all the letter stencils to help keep them in place when campers are using them. Place some on the top, and depending on the letter shape, you may also want to place some on the bottom or on a side.
- Create a Glue Dot Garden. (This allows you to pre-rip glue dots without having to worry about them getting stuck to the table before campers are ready to use them.)
  - Ask your OC to save the sticker backing paper from camper name tags.
  - Rip individual glue dots and place them face down on the sticker paper.
  - Place the prepared glue dots at the Border Station (10 per camper).
- Cut the Twisteez wire in half for beading (15" per camper).
- Create a finished sample for demoing and so that campers have an idea of the end goal.

**Day 3 – Nighttime T-Shirt, Part 1 of 2**

*Days earlier*

- Create a sample of your own so campers understand the end result and so you are aware of the process and any complications that might come up.
- Cut tissue paper into roughly 2" x 3" or 3" x 4" pieces. This is easy to do with adult scissors or a paper cutter.

**Day 4 – Nighttime T-Shirt, Part 2 of 2**

*Days earlier*

- Cut stencils into individual or pairs of shapes. Try to leave as much space as possible around the stencil shapes so it’s easier for campers to hold on to them. Some of the smaller stars can stay together in clusters. If there are some stencils that don’t have enough space around them to hold them, put a roll of blue tape on the back.

**Day 5 – Bedtime Buddies**

*Days earlier*

- Insert the 5.5" x 3.5" cardboard sheets into the 5" x 7" pouches. This will prevent the bingo daubers from bleeding through the muslin and will allow campers to stencil on both sides. Be sure to save these if you’re teaching this theme again.
- Cut pipe cleaners (metallic and regular) in half to make 6" pieces (3 of each per camper).
- Cut yarn into 8-10 ft. lengths (3 per camper).
- Prepare Glue Dot Gardens with individual strips (6 glue dots per camper).
- Create a sample bedtime buddy for the Introduction.
Extension Activities for the Week

This is a list of theme-specific, low-impact activities campers can do throughout the week if they finish early.

Materials

- bead, pony, asst. colors (1 bag per classroom)
- block, wood, asst. shape and size, 150 pack (1 pack per classroom)
- book, perfect square (1 per classroom)
- book, What Do You Do With An Idea? (1 per classroom)
- books, asst., box (1 per classroom)
- chalk, sidewalk, set of 30 (1 per classroom)
- glue stick, washable (5 per classroom)
- marker, washable, asst. color, set of 8 (4 per classroom)
- paper, butcher, white, 36" x 250 ft. (1 per classroom)
- paper, construction, asst. colors, 9" x 12" (1 pack per classroom)
- paper, newsprint, 9" x 12" (1 pack per classroom)
- pipe cleaner, asst. colors, 12" (1 box per classroom)
- puppet, animal, hand (1 set per classroom)
- puzzle, floor, underwater (1 per classroom)
- soap, dish, liquid, 20-25 oz., for bubbles (1 per classroom)
- Tinker Toys, set of 200 (1 set per classroom)
- wand, bubble, set (1 set per classroom)
- yarn, knitting, brown (1 skein per classroom)
- marker, Sharpie, magnum, black, for LI use only (2 per classroom)
- marker, Sharpie, king size, black, for LI use only (2 per classroom)

Maker Theme Books

If a majority of the class finishes early, you or your TL can read the books to the group. Alternatively, individual campers can look through the books themselves.

Keep Making

- Campers can turn their extra suminagashi paper prints into cards, stationery, bookmarks, crowns, etc.
- Campers can use the Nighttime stamps to create a scene in the night sky on butcher paper, or they can print on their suminagashi pillowcases.

- If you’ve got lots of extra tissue paper from Tissue Paper Tie Dye, campers can dye construction paper just like they did their shirts.
Day 1

**Suminagashi Paper Marbling**

There are many ways to create your own patterns and designs on fabric and paper. Suminagashi marbling is a traditional technique using ink and water that creates unique and beautiful organic designs. Today campers create suminagashi prints on paper and pillowcases.

![Print on paper](image)

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### The Big Picture

#### Lesson Breakdown

<table>
<thead>
<tr>
<th>Activity</th>
<th>Duration</th>
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</thead>
<tbody>
<tr>
<td>Welcome to Art</td>
<td>10 min</td>
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<tr>
<td>Introduction</td>
<td>5 min</td>
</tr>
<tr>
<td>Demo &amp; Discussion: Working With Suminagashi Inks</td>
<td>10 min</td>
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<tr>
<td>Camper Work Time: Creating Suminagashi Prints</td>
<td>30 min</td>
</tr>
<tr>
<td>Clean Up</td>
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<tr>
<td>Wrap Up</td>
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</tr>
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<td>Transition</td>
<td>5 min</td>
</tr>
</tbody>
</table>

#### GIA Focus

*Innovator’s Knowledge Focus: SKILLS AND TECHNIQUES

Innovator’s Mindset Focus: BE REFLECTIVE – I take time to think about what is and isn’t working in my design.

**What’s Next:** Tomorrow (Day 2) campers will create personalized door hangings using their favorite suminagashi prints.
How to Create Today’s Project

Step-by-Step Pictorial

This is intended to help you understand how to create today’s project. It doesn’t describe how you’ll facilitate this lesson for campers. You’ll need to read the “Play-by-Play” section for this information.

Paper Printing

Fig. 1
Drop the ink over the float paper. Wear gloves.

Fig. 2
Drop 8-10 drops total (campers will take turns with a partner dropping 4-5 drops each).

Fig. 3
With the help of a partner, lay the paper on the surface of the water. Create as few waves as possible.

Fig. 4
Count to five.
Hold the paper on one edge and lift it up, making as few waves in the water as possible.

Clean the water after three or four prints by placing newsprint to soak up the excess ink.

- Use the same technique described previously to print on the pillowcase.
- Drop 16-20 drops in the larger bin instead of 8-10.
- Place the pillowcase in the bin and count to five.
- Lift the pillowcase up in the same way as the paper.
- Hang the pillowcase to dry.
Get Ready!

Lesson Materials
* (starred) items are choice materials; un-starred items are required for each camper

Intro Materials
☐ samples of suminagashi prints, for demoing (a few per LI)

Demo & Discussion: Working With Suminagashi Inks
☐ all materials from Camper Work Time, for demoing (1 set per LI)

Camper Work Time: Creating Suminagashi Prints

printing on paper
☐ marbling kit, suminagashi, set of 6 inks (1/2 set per 2 campers)
☐ container, plastic, deli, 16 oz., for holding dye bottles (1 per 2 campers)
☐ paper, cardstock, white, 8.5" x 11", for marbling (3 per camper)
☐ bin, plastic, 6 qt., 12.5" x 7.5" x 4.5" (1 per 2 campers)
☐ paper, newsprint, 9" x 12", for "cleaning" the water (10 sheets per 2 campers)
☐ gloves, latex free, sm. (1 pair per camper)
☐ towel, paper, roll, sheet (5 per 2 campers)
☐ bucket, 5 gal., screw top, for hand washing, refilling water, and dumping dirty water (3 per classroom)
☐ pitcher, clear, 1 gal., for filling water bins (2 per classroom)
☐ towel, shop rag, for keeping the floor dry at hand washing station (5 per classroom)

printing on pillowcases
☐ marbling kit, suminagashi, set of 6 inks (1 per pillowcase station)
☐ container, plastic, deli, 16 oz., for holding dye bottles (1 per pillowcase station)
☐ pillowcase, standard, white, 20" x 30" (1 per camper)
☐ bin, plastic, 28 qt., 23" x 16.25" x 6", for marbling pillowcases (2 per classroom)
☐ paper, newsprint, 12" x 18", for "cleaning" the water (6 per 2 campers)
☐ towel, paper, roll, sheet (5 per 2 campers)
☐ copy, black and white, Care Instructions (1 per 2 campers)

post-printing
☐ cardboard, corrugated, 16" x 20", to lay wet paper prints on (1 per 4 campers)
☐ sponge, cellulose, 3.5" x 6" x 1.5", for wiping down tables (5 per classroom)
☐ string, cotton, for hanging wet paper and pillowcases (1 ball per classroom)
☐ tape, blue, 1", for hanging string (8" per classroom)
☐ clothespin, wood, for hanging wet pillowcases (2 per camper)
☐ cardboard, corrugated, 12" x 48", for placing underneath hanging pillowcases (5 per classroom)

Preparation

Days earlier

 centroids Cut white cardstock in half to make 5.5" x 8.5" sheets for marbling (6 per camper).
 centroids Create a few examples of marbled paper yourself to understand the process and to use as a sample.
 centroids Use a paper cutter to cut the Care Instructions copies in half (1 half per camper).

Day before

 centroids Set up your classroom for campers working in pairs with bins of water. You will need:
  • 6 qt., 12.5" x 7.5" x 4.5" bin, filled with water (1 per 2 campers)
  • 5.5" x 8.5" cardstock (6 per camper)
  • 16 oz. plastic deli container holding 3 ink colors (1 per 2 campers)
  • 9" x 12" newsprint for cleaning the water (about 10 per 2 campers)
  • paper towels (5 per 2 campers)
  • rubber gloves (1-2 pairs per camper)
 centroids Set up the 5-gallon buckets in an appropriate location near the bins, but out of the way. You can fill them in the morning.
 centroids Set up string for hanging pillowcases with clothespins. Place the 12" x 48" cardboard underneath to catch any dripping water or dye. You can set up the string outside as well.

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Set up the pillowcase marbling station:
- 1 full suminagashi ink set, with caps removed, in a deli container
- pillowcases (1 per camper)
- large bin with water

Morning of:
Fill the bins and buckets with water.
- Fill one bucket with clean water so it is easier for you to refill the bins, and leave the other one empty for dumping dirty water.
- If you are using a bucket for the hand washing station, fill that as well.
- Use the pitchers to fill the bins with water. The large bin in particular is easier to fill this way.
- Place the shop rags on the floor under and around the buckets to prevent the floor from getting wet and slippery.

Suggested Materials Management
- Be thoughtful about how you set up the classroom so campers can share easily.
- Be thoughtful about using the string and clothespins.
- Be sure to wring out the pillowcases a little bit right after campers print on them. They will be very wet and will drip a lot once they are hanging.
- If you are hanging the pillowcases outside, still be sure that they are dripping onto the cardboard so the dye doesn’t stain cement or other flooring materials.
- If it’s difficult for campers to drip exactly onto the float paper that comes in the kit, simply make a slightly bigger one of your own with cardstock.

Suggestions for Large Classes
None

Notes
Make sure to send the pillowcases home with the Care Instructions copies. These copies also include instructions for washing the shirts campers will create later in the week.

Check In With Your TL
Make sure your TLs are clear about their role in helping today’s lesson run smoothly. Specific ways TLs can help today are listed in the dotted overview boxes throughout the lesson.

On the Board
Guiding Questions
EVALUATE and BE REFLECTIVE
- What’s the best way to drop the ink?
- What’s the best way to place the paper on the water?
- What do you notice about your print?
- Should you keep working this way or should you stop and make a change?

Vocabulary
suminagashi – means “floating ink” in Japanese; a marbling technique used in Japan for hundreds of years
marbling – the act of creating designs on water with ink and then printing the designs on paper
Teaching the Lesson: Overview

Instructional Priorities & Supporting Innovation

These are the key lesson elements you’re expected to communicate/support today. Think of this as the blueprint of a successful lesson. When applicable we’ve included details about why an element is important for innovation.

Demo & Discussion: Working With Suminagashi Inks
★ Demonstrate the TECHNIQUE of dropping ink in the water with a partner.
★ Model how to EVALUATE your technique as you drop ink and how to decide when it’s time to start over.

Throughout the Lesson
★ Support the Innovator’s Mindset Challenge: BE REFLECTIVE – Campers pay attention to how they’re working and notice what happens when they work this way.
Why – Nebulas can often get caught up in the moment without noticing the effects their actions are having. Encouraging campers to think about this helps them recognize that taking time to think about their actions will help them achieve their desired outcomes.

Teaching the Lesson: Play-by-Play

Welcome to Art (10 min)

It’s important to set clear expectations for the whole week. Go over daily procedures you’ll want campers to be familiar with (what they do when they first come in, what materials they can and can’t touch, where they put projects, etc.). Have campers come up with agreements about how they can respect you, one another, and the space and materials.

Introduce the idea of being an innovator. Say: We’ll be learning about art all week, but we’ll also be practicing being Galileo innovators. Being an innovator is a really important job. Innovators think of really great ideas and can turn them into something real!

Point out your Innovator’s Process poster. Say: These are the steps that good innovators follow to help them make amazing creations. They come up with a lot of ideas, test them out, and redesign to make them better.

Point out your Innovator’s Mindset poster. Say: This is how good innovators think and act. They try new ideas, they work together, and they don’t give up!

Say: Are you ready to innovate?! Let’s get started!

Introduction (5 min)

Welcome campers and make a quick story connection
Did you all hear a story about Lucy this morning? How’s she feeling? (She’s frustrated that her room looks exactly the same as everyone else’s in Land Land.) Well, maybe we can cheer her up by creating some totally original designs to make her bedroom – and yours – stand out.

Introduce the week’s theme
★ Explain that the week’s theme is all about making, which means creating things oneself.
  ▪ This includes tools, things for games and play, and totally new inventions.
  ▪ This week, campers are making things that are useful for their rooms and during bedtime!

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• Explain that people who make things are called makers. The maker community is a space where makers can come together to share ideas.
• Tell campers they'll be learning about some current-day makers who are creating things similar to the things they'll be making at camp.
• If this is your second or third rotation you can ask campers to tell you what they know about making and makers since they will have gotten this introduction in science.

Build excitement for today’s project
• Show campers your paper samples and have them guess how you made these amazing designs.
• Let them know that they are going to make their own amazing designed marbled paper, using a super special marbling technique called suminagashi that uses ink, water and a special floating paper!
• Tell them you are excited to show them this technique so they can make their own marbled paper, and also something very special for their own rooms – marbled pillowcases!

Introduce the Innovator’s Mindset: BE REFLECTIVE ★
• Point to this on your Innovator’s Mindset poster.
• Define the Mindset element in the context of today’s lesson. Say: As we work today we’re going to practice being reflective, which means thinking about our projects as we work and noticing what’s happening. Today we’ll especially notice what techniques work well for creating designs with ink and printing them.

Demo & Discussion: Working With Suminagashi Inks (10 min)

What You’ll Need to Cover: Overview
• Observe and discuss suminagashi marbling using a sample.
• Demonstrate working with a partner to drop ink in the water. ★
• Demonstrate working with a partner to make a print with paper. ★
• Demonstrate how to continue working, including getting the water "cleaned.”
• Discuss printing on a pillowcase.

What You’ll Need to Cover: Details
Observe and discuss suminagashi marbling using a sample
• Show a sample of the printed suminagashi paper.
• Ask: What do you notice about it? (It is colorful, with lots of designs.)
• Introduce the word “suminagashi” and tell campers that this is a special technique used for creating this kind of design on paper or fabric.
• Explain and mime each basic step for creating a print.
  ▪ Drop special ink onto the surface of the water.
  ▪ Designs will form on the water.
  ▪ Then, lay a piece of paper on the surface of the water where it will pick up the ink.

Demonstrate working with a partner to drop ink in the water ★
• Have campers gather around a bin set up on the table to demonstrate.
• The key to creating designs on the surface of the water is to drop the ink on the special floating paper. The paper makes the ink spread out and stay on the surface.
• If you miss the floating paper, the ink will sink to the bottom.
• Campers will work with a partner and take turns dropping the ink onto the floating paper, one drop at a time.
• For some people it’s easier to hold the dropper close to the water, and for others it’s easier to hold it further away.
• Tell campers they should each do four or five drops.
• Review the Mindset Challenge ★ – Remind campers that they’ll need to practice being reflective as they work, too, to figure out the best way to get the drops on the paper and to make sure they’re adding the right number of drops.
• Demo dropping with the TL and taking turns.
• Emphasize always putting dyes back in the deli container so they don’t spill!
• Support BEING REFLECTIVE ★
  ▪ Share what you’re observing out loud as you demo.
  ▪ Share what ways are easiest to drop the ink on the water.
  ▪ Keep track of how many drops you’ve done.
Demonstrate working with a partner to make a print with paper ★
• After they do eight to 10 drops (four to five each), they are ready to make a print!
• They just need to lay the paper on the surface of the water, with each partner holding one end. Work with your TL to demonstrate this.
• Let go of the paper completely and let it float on the surface. Count to five while the ink gets absorbed by the paper.
• Warn campers that it’s important to be very careful so that they don’t make too many waves in the water. Otherwise the design gets harder to see. They don’t need to put their fingers in the water, just the paper.
• Demonstrate pulling the paper out of the water by lifting it from one end. Turn it over and lay it on the cardboard to dry right away.
• Do another print to show that you can make several.

Demonstrate how to continue working, including getting the water “cleaned”
• Review the Mindset Challenge ★ – Let campers know they’ll also need to be reflective by noticing when their prints are getting too light. When they see this it’s time to start over!
• Instruct campers to raise their hands and ask an adult to come and “clean” the water when their prints are getting too light.
• Explain that this technique is awesome because they don’t need to change the water; they just need to soak the ink off the top with newsprint.
• The water may start to look dark, but that is from the ink that has sunk to the bottom.
• Once an adult has cleaned the water, campers can do another round of four to five drops each.
• Campers can reprint on paper they already did for a layered effect, especially on ones that printed really lightly.

Discuss printing on a pillowcase
• Tell campers that while printing is happening, you will call them up in pairs to each print on a pillowcase!
• Since the pillowcase is much bigger, they will print in a much bigger bin of water, but the process is exactly the same.
• An adult will help them lay the pillowcase down and pull it up again.
• The second partner will want to add more ink to the water before doing a print to make sure the color is bright.
• Show an example of how the printed pillowcases look.

Camper Work Time: Creating Suminagashi Prints (30 min)

During Work Time Campers Will...

**DESIGN**
1. With a partner, take turns dropping the ink on the floating paper to make designs.
2. Squeeze eight to 10 drops of different colors (four or five turns dropping per person).

**CREATE**
3. With a partner, gently and carefully lay a piece of cardstock on the surface of the water and count to five.
4. Carefully pull the paper off the water and set it on a piece of cardboard.
5. Repeat the printing process with the other partner’s piece of cardstock.
6. Continue printing until the design is showing up very lightly on the paper.
7. Ask an adult to “clean” the water.
8. Do another round of dropping ink and printing paper with the partner.
9. When called to the pillowcase printing station, work with the same partner and an adult to create a print on a pillowcase.

How Your TL Can Help
• Facilitate as campers print on paper while you help campers print on pillowcases.
• Help campers hang pillowcases to dry.

Facilitate the Project Steps

**DESIGN (Steps 1-2)**
• Help campers who are having a hard time getting the ink to drop on the paper. Give them a slightly bigger piece of floating paper, or show them a different technique for dropping.
• Remind campers to count their drops as this will also help them stay focused and pay attention to what’s happening.

**CREATE (Steps 3-9)**
• Remind campers to work together to place the cardstock in the water.
• Help redirect campers who are being too fast or rough when making prints.
• Remind campers to notice when their prints are getting too light.
• Write names on the pillowcases with Sharpie before campers print.
• At the pillowcase printing station, help campers move along quickly so that you have enough time for everyone.
• Be sure to have the second partner add a few more drops before printing his or her pillowcase.

Support BEING REFLECTIVE ★
Suggest strategies that help and encourage campers to be reflective
Some specific strategies for today:
• Talking about what they see with their partners
• Asking themselves, “What happens when I...”
• Really noticing what happens when their partners are working/paying close attention when their partners are working as well

Recognize reflective campers
This encourages the camper and helps others see how they can be reflective as well. Recognition can be just verbal or include some kind of physical award. Be sure to be specific about how you see campers being reflective.
Some ways you might see reflection today:
• Using any of the strategies mentioned above
• Changing their techniques to get a different effect
• Stating when they like or dislike something
• Trying to recreate something they liked

Ask the Guiding Questions that support being reflective

Clean Up (5 min)
• You’ll probably have to dump and refill the water in between rotations.
• It’s not essential that you keep track of who made what paper prints, but do try to write names on pillowcases.

Lesson Wrap Up (10 min)

Review (SKILLS AND TECHNIQUES and BE REFLECTIVE)
Give campers a chance to review what skills and techniques they learned and used to make their awesome creations today.

Suggested review activity
• Have campers high-five their partners if they:
  ▪ Made several different and awesome marbled papers today!
  ▪ Helped each other drop the ink on the floating paper
  ▪ Shared their observations with their partners
  ▪ Helped each other place the paper on top of the water
Day 2

**Personalized Door Hanging**

Today campers incorporate the paper suminagashi prints from yesterday into personalized door hangings for their bedrooms.

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**The Big Picture**

### Lesson Breakdown

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<th>Activity</th>
<th>Time</th>
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<tbody>
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<td>Introduction</td>
<td>5 min</td>
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<tr>
<td><strong>Do-With-Me: Preparing Paper and Cardboard</strong></td>
<td>10 min</td>
</tr>
<tr>
<td>Glue construction paper onto 9” x 12” cardboard, and glue a suminagashi print in the center of the construction paper.</td>
<td></td>
</tr>
<tr>
<td><strong>Demo &amp; Discussion: Activity Stations Overview</strong></td>
<td>10 min</td>
</tr>
<tr>
<td><strong>Camper Work Time: Stencil, Border and Beading Stations</strong></td>
<td>25 min – 8 min per station</td>
</tr>
<tr>
<td>Visit activity stations to print the first letters of their names with paint on the suminagashi paper. Add a decorative border using metallic markers, pom-poms and mosaic squares, and then practice beading to create the hanging wire.</td>
<td></td>
</tr>
<tr>
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**GIA Focus**

Innovator’s Knowledge Focus: SKILLS AND TECHNIQUES

Innovator’s Mindset Focus: BE DETERMINED – I persevere until I achieve my goal.
How to Create Today’s Project

Step-by-Step Pictorial

This is intended to help you understand how to create today’s project. It doesn’t describe how you’ll facilitate this lesson for campers. You’ll need to read the “Play-by-Play” section for this information.

Preparing the Background

Fig. 1
Rub a glue stick all over the 9” x 12” cardboard, making sure to get all the edges.

Fig. 2
Carefully line up a piece of construction paper over the cardboard and smooth it on.

Fig. 3
Choose a favorite suminagashi print, and cover the entire back side with glue using a glue stick.
Fig. 4
Carefully center the Suminagashi print and smooth it on over the construction paper.

Fig. 5
If needed, peel back the edges and apply more glue until all the edges lie flat.

Stencil Station

Fig. 6
Find the appropriate letter stencil for the camper’s first name. Each stencil should have small pieces of blue tape on the back.
Line up the stencil over the suminagashi print so it fits within the paper.

Carefully peel away the stencil to reveal the painted letter. If any blue tape stuck to the paper, put it back on the stencil.

Begin filling in the stencil using an up and down motion with the paintbrush. Make sure to fill in the entire letter space.
Border Station

Fig. 11
Use metallic markers to create a simple border pattern that goes around the suminagashi print.

Fig. 12 – Creating a second pattern

Fig. 13 – A finished border pattern
Turn the paper so it's easier to create the pattern. All four sides can be the same or different, but fill the entire border.
Beading Station

Fig. 16
Attach one end of the wire to the back of the door hanging so the beads don’t slip off. (You or the TL will do this for campers.)

Fig. 17
Begin stringing beads onto the wire. Choose colors that match the suminagashi print. String up to 11 beads on the wire.

Fig. 14 – Adding pom-poms

Fig. 15 – Adding mosaic squares

When the drawn pattern is finished, add embellishments with pom-poms and mosaic squares.
Get Ready!

Lesson Materials
* (starred) items are choice materials; un-starred items are required for each camper

Intro Materials
☐ finished sample of door hanging (1 per LI)

Do-With-Me: Preparing Paper and Cardboard
☐ 5.5” x 8.5” suminagashi print (1 per camper; from yesterday)
☐ paper, construction, 9” x 12”, asst. colors (1 per camper)
☐ cardboard, corrugated, 9” x 12” (1 per camper)
☐ glue stick, washable (1 per camper)
☐ all the materials above, for LI demo (1 set per rotation)

Demo & Discussion: Activity Stations Overview
☐ all materials from Camper Work Time, for demoing (1 set per LI)

Camper Work Time: Stencil, Border and Beading Stations

stencil station
☐ stencils, letters & numbers, 6” (2 sets per theme)
☐ tape, blue, 1”, for placing on the back of the stencils (2” per letter)
☐ paint, tempera, turquoise, Sargent (1 tsp. per camper)
☐ container, plastic, deli, 16 oz., for holding paint (4 per station)
☐ paintbrush, ¾”, flat (1 per 2 campers)
☐ towel, paper, roll, sheet (1 per camper)

border station
☐ marker, washable, metallic, asst. colors, set of 6 (2 sets per theme)
☐ paper, mosaic square, asst. colors, 3/8” (15 per camper)
☐ pom-pom, asst. sizes and colors (8 per camper)
☐ glue stick, washable (6 per station)
☐ glue dots, 1/2”, for pom-poms (10 per camper)

beading station
☐ bead, pony, asst. colors (11 per camper)
☐ wire, Twisteez (15” per camper)
☐ tape, masking, 1”, for adhering wire to the cardboard (5” per camper)
Preparation

Days earlier
- Place small circles of blue tape on the backs of all the letter stencils to help keep them in place when campers are using them. Place some on the top, and depending on the letter shape, you may also want to place some on the bottom or on a side.
- Create a Glue Dot Garden. (This allows you to pre-rip glue dots without having to worry about them getting stuck to the table before campers are ready to use them.)
  - Ask your OC to save the sticker backing paper from camper name tags.
  - Rip individual glue dots and place them face down on the sticker paper.
  - Place the prepared glue dots at the Border Station (10 per camper).
- Cut the Twisteez wire in half for beading (15" per camper).
- Create a finished sample for demoing and so that campers have an idea of the end goal.

Day before
- Set aside the materials for the Do-With-Me:
  - 9" x 12" cardboard (1 per camper)
  - 9" x 12" construction paper (1 per camper)
  - campers’ suminagashi prints (at least 1 per camper, up to 3 per camper)
  - glue stick (1 per camper)
- Set up the activity stations:
  **Stencil Station**
  - letter stencils with blue tape on the backs
  - 16 oz. deli containers to hold the turquoise paint (1 tsp. per camper, 4 deli containers per station) (to be filled Morning Of)
  - ½” paintbrushes (1 per 2 campers)
  - paper towels (1 per camper)
  **Border Station**
  - metallic markers (2 sets per station)
  - mosaic squares (15 per camper)

- pom-poms (8 per camper)
- glue sticks (6 per station)
- Glue Dot Garden (10 glue dots per camper)

Beading Station
- 15” Twisteez wire (1 per camper)
- pony beads (11 per camper)
- masking tape, for attaching wire to the cardboard (4” per camper) (You can tear the masking tape as needed.)

Morning of
- Fill the deli containers at the Stencil Station with paint.

Suggested Materials Management
- Have the TL manage the paint station. S/he should assist campers in using the stencils and paint appropriately, wiping down extra messy stencils, and wiping down extra messy brushes.
- You are supplied with two sets of stencils per theme, but only put out the second set if the first letters are getting really wet and gloppy with paint. Even then, be selective about which letters get replaced. You don’t need two full stencil sets at the station.
- You should manage the beading station and the overall flow of station rotation.
- Be sure to keep an eye on the number of materials campers are using, since it will be more free flow, and supplies need to last.

Suggestions for Large Classes
If possible, you can have two of each station and fewer campers at each.

Check In With Your TL
Make sure your Tls are clear about their role in helping today’s lesson run smoothly. Specific ways Tls can help today are listed in the dotted overview boxes throughout the lesson.
On the Board
Guiding Questions
BE DETERMINED
• What do you need to do at this station?
• How can a teammate help you reach your goal?
• What do you still need to do to finish your door hanging?

Vocabulary
border – the outside edge of a space
stencil – thin material with letters or designs cut from it that is used to recreate something over and over
beading – the art of attaching beads to one another by stringing them with a string or wire

Teaching the Lesson: Overview

Instructional Priorities & Supporting Innovation
These are the key lesson elements you’re expected to communicate/support today. Think of this as the blueprint of a successful lesson. When applicable we’ve included details about why an element is important for innovation.

Do-With-Me: Preparing Paper and Cardboard
★ Lead campers through the TECHNIQUE for arranging the construction paper and suminagashi print on the cardboard.

Demo & Discussion: Activity Stations Overview
★ Demo the SKILLS AND TECHNIQUES needed at each station. Be sure campers are clear what the goal of each station is.

Throughout the Lesson
★ Support the Innovator’s Mindset Challenge: BE DETERMINED — Campers stay focused at each activity station to accomplish all the different steps necessary to create their door hangings.

Why – Supporting campers to complete all the different steps and do a good job on each helps them recognize that impressive creations are the result of putting time and effort into all parts of a project.
Teaching the Lesson: Play-by-Play

Introduction (5 min)

Build excitement for today’s project
• Announce that campers will use the amazing suminagashi prints they made yesterday to create special door hangings for their rooms!
• Show campers your sample for context.
• Explain working at three different stations to break up the work that they have to do. At each station, they will add something different to the door hanging.

Introduce the Innovator’s Mindset: BE DETERMINED ★
• Point to this on your Innovator’s Mindset poster.
• Define the Mindset element in the context of today’s lesson. Say: There are a lot of different steps today and we’re going to practice being determined as we work. This means we’ll need to stay focused and do our best on each step until our door hangings are complete. Each step is important for helping our projects look awesome!

Do-With-Me: Preparing Paper and Cardboard (10 min)

What You’ll Need to Cover: Overview
• Give an overview of the activity.
• Lead campers through gluing the 9” x 12” construction paper on the 9” x 12” cardboard. ★
• Lead campers through gluing the suminagashi print on the construction paper. ★

How Your TL Can Help
Help with passing out supplies and maintaining pace. TLs can also begin to write names on projects as campers are working if there’s time.

Guiding Campers
Give an overview of the activity
• Let campers know they will all do the first steps together as a group before they move on to the stations.

• They first need to glue construction paper to the cardboard base, and then they will glue a suminagashi print on top of that.

Lead campers through gluing the 9” x 12” construction paper on the 9” x 12” cardboard ★
• Pass out the cardboard and construction paper.
• Show campers how to carefully rub the glue stick all around the edges of the 9” x 12” cardboard. It’s easier to put the glue on the cardboard, because they won’t have to touch it.
• Demo how to hold the construction paper with both hands and carefully hold it above the cardboard to line it up.
• Slowly and carefully place the construction paper over the cardboard.
• Demonstrate how to do this with a partner in case campers have a hard time lining it up by themselves.
• Pass out the glue sticks and have campers glue paper onto their cardboard.
• Campers should check that the paper is nice and flat and is not hanging over the edges. The cardboard should be completely covered.
• Support campers who need a little extra help with getting all the edges lined up.

Lead campers through gluing the suminagashi print on the construction paper ★
• Show campers how the suminagashi print will get glued right in the center of the construction paper, leaving an area around it that is open. Tell campers they will decorate this area at one of the stations.
• Demo how to rub the glue stick all around the edge of the print, just like they did with the cardboard.
• Again, hold the print with both hands and place it carefully on the construction paper.
• Try to get it centered, but most importantly, make sure it is glued down well.
• Pass out the suminagashi prints and have campers each pick a favorite print. If this takes too long, simply hand out one print from his/her collection to each camper.
Demo & Discussion: Activity Stations Overview (10 min)

What You’ll Need to Cover: Overview

- Prepare campers for the activity stations demo.
- As a class, move to the stencil station and demonstrate how to use the stencils.
- As a class, move to the border station and demonstrate how to create a border with markers and embellishments.
- As a class, move to the beading station and demonstrate how to string the beads on the Twisteaz wire.
- Review each station and explain the flow for the rest of the rotation.

How Your TL Can Help
Support keeping campers focused and engaged, and moving as a group from station to station. Your TL can support demoing and checking for understanding as well.

What You’ll Need to Cover: Details

Prepare campers for the activity stations demo

- Explain that next, they will move as a class to all the stations so that you can show them what to do at each one.
- Let campers know that it’s important that they stick together and keep their listening ears on so they can visit the stations quickly and start working!
- At each station, they can gather around the table, but they should keep their hands to themselves at their sides, and hold on to their 9” x 12” cardboard.

As a class, move to the stencil station and demonstrate how to use the stencils

- Ask campers how many of them have used stencils before. Ask an experienced stencil-user to explain how they work.
- Explain that campers are going to stencil the first letter of their first names right into their suminagashi prints with turquoise paint.
- Show campers how there is just a little bit of blue tape on the backs of the stencils so it’s easier for the stencils to stay in place.

- When stenciling with paint, it’s important not to use too much paint. This will make it gloppy, and the paint will start to seep underneath the stencil and ruin the edges. It will also make the stencil really messy for the next person who uses it.
- Show campers how to arrange the stencil over the suminagashi, dip your brush in the turquoise paint, and dab it all around the empty space in the stencil.
- It is important to make sure the paint goes all the way up to the edge, so getting a little bit of paint on the stencil will be necessary.
- Be sure to tell campers that if they come to the stencil station first, their project will be wet at the other stations, so they will need to be careful!
- The TL will be monitoring this station as campers work.

As a class, move to the border station and demonstrate how to create a border with markers and embellishments

- Show campers the empty border on your sample and have everyone notice the borders on their own projects.
- Let campers know that at this station, they will create a decorative border with metallic markers by repeating a pattern or design.
- Use a scrap piece of paper to demonstrate some examples of border ideas, like repeating zigzags, wavy lines, stripes, circles, etc.
- Have campers offer suggestions and draw a few of those.
- Choose a design and draw it all the way around with the metallic markers.
- Show campers how they can add other embellishments afterwards with pom-poms and mosaic squares.
- Campers should use the glue dots for the pom-poms and a glue stick for the squares. Review how to use glue dots or have a volunteer demonstrate for the class.
- Have campers give you some ideas about how and where they could use the pom-poms and squares on their decorative borders.
- Remind campers that if the stencil is wet, they will want to be careful when working around the border.

As a class, move to the beading station and demonstrate how to string the beads on the Twisteaz wire

- Tell campers that the beading station will help them to hang their projects in a fun way.
• Beading means to string beads onto a string, wire or other material. Many people make necklaces and bracelets this way.
• Show campers how one end of the wire will be taped onto the cardboard so that the beads don’t slip off.
• Demonstrate how to start stringing the plastic pony beads. Encourage campers to pick bead colors that match their suminagashi prints.
• This will help campers stay focused and also make their choices based on something tangible. Have campers select a few colors for you based on your sample print.
• Tell campers that it’s also important that they count how many beads they are stringing. Eleven beads is the most that can fit comfortably on the wire.
• If campers finish early, they can string more beads for decoration or as tassels along the sides or the bottom of the door hanging. An adult will help them with this if they get to it.

Review each station and explain the flow for the rest of the rotation ★
• Have campers repeat back to you the main goal for each station and the main things to remember there.
• Remind campers that you will split the class up, and it doesn’t matter which station campers start with because everyone will get a chance to visit all of them.
• Let campers know that in general, you will call it out when it’s time to switch, but if campers finish early and want to move on ahead of time they just need to check with an adult.
• The most important station to finish and really be focused at is the stencil station, so it’s possible that campers might get sent there even if they haven’t finished all the stations.
• Remind campers that if they are finished early, there are lots of things to do and they just need to ask an adult for some ideas.
• Review the Mindset Challenge ★ – Remind campers to be determined to work hard at each station to complete each step as well as they can and make the most awesome door hanging possible.

Camper Work Time: Stencil, Border and Beading Stations (25 min – 8 min per station)

During Work Time Campers Will...
1. Begin working at one of the three stations according to LI placement.
   Stencil Station
2. Find the first letter of their first names and place it over the suminagashi print.
3. Fill in the stencil with the turquoise paint, using the brush in a dabbing motion.
4. Fill in the entire stencil, and then carefully remove the stencil from the paper.
   Border Station
5. Create a repeating design with the metallic markers that goes all the way around the border of the suminagashi print.
6. Add to the border with pom-poms and mosaic squares.
   Beading Station
7. String up to 11 pony beads through the Twisteex wire to create the hanging part of the project.
8. Choose colors that match the colors in the suminagashi print.
9. Have an adult attach the strung beads to the back of the cardboard when beading is complete.

Extension
• Campers can string more beads on shorter pieces of Twisteex and make tassels.
• Campers can also use their extra suminagashi prints to make cards or more letter stencils for their friends, parents, siblings, etc.

How Your TL Can Help
As mentioned before, it is a good idea to have your TL monitor the painting/stencil station, but s/he should also help you keep an eye on the general flow and timing, and stay on the lookout for any campers who are having a hard time at their stations.
Facilitate the Project Steps

Stencil Station (Steps 2-4)
- Assist campers with lining up their stencils and filling in the entire negative space with paint.
- Keep an eye on stencils, paintbrushes, and surfaces that get too messy.
- Make sure campers continue to use the correct side of the stencil, and aren’t placing the painted side on their prints by accident.

Border Station (Steps 5-6)
- Remind campers to create a design that goes all the way around the edge.
- Show campers how to rotate the piece around when drawing and decorating so they don’t have to reach over the center. This is especially helpful if the hanging already has wet paint on it.
- Help campers who are having a hard time coming up with a pattern or design and remind them about the examples you showed them earlier.
- Encourage campers to add embellishments with the pom-poms and squares.
- If campers have already painted the letter stencil, they might want to add embellishments to the stenciled area as well, as long as they are careful not to spread the paint around too much.

Beadng Station (Steps 7-9)
- Tape one end of the Twisteez wire to the back of the cardboard before campers start.
- Campers can begin selecting beads if they are waiting for their wires to get attached.
- Make sure campers leave enough room on the wire for the other end to get taped up as well. Leaving the cardboard on the table as they bead will help reduce the chance of all the beads slipping off before the other end gets taped on.

Extension
- Campers who finish with extra time can bead more wire – just cut it to hang down the sides or from the bottom.
- Campers who feel finished with the stations can use their extra suminagashi prints to make cards or other decorative papers.

Support BEING DETERMINED ★

Suggest strategies that help and encourage campers to be determined

Some specific strategies for today:
- Tracking their progress so they can see how much they’ve done and how much more they still need to do. You can support this by having pictures of all the stations on the board. Alternatively, you could track the progress of the class as a whole on the board.
- Actively reminding themselves to focus (refocus).
- Getting a buddy to help if they need some support finishing.
- Remembering the goal for each station. You can support this by having campers share what happens at each station every time they switch, or until you think everyone is super clear.

Recognize determined campers

This encourages the camper and helps others see how they can be determined as well. Recognition can be just verbal or include some kind of physical award. Be sure to be specific about how you see campers being determined. Some ways you might see determination today:
- Using any of the strategies mentioned above
- Asking if there’s anything else they can do at their current station before moving on
- Working the full time at each station and not rushing ahead

Ask the Guiding Questions that support being determined

Clean Up (5 min)

- Make sure all camper projects have names on them.
- Make sure all markers and glue sticks have caps, and the paint station is wiped down if necessary.
Lesson Wrap Up (10 min)

**Review & Recognition and Reflection (BE DETERMINED)**
Give campers a chance to review what techniques they learned and how they embraced the Innovator’s Mindset.

**Suggested review/recognition and reflection activity**
- Visit all the stations again as a class. At each station, have a few campers share how they worked hard and took their time to complete the goal of that station. Some ideas:
  - Did they take time to pick just the right colors of beads?
  - Did they make decorations all the way around the letter?
  - Did they paint carefully and make sure not to use too much paint?
- Campers can give a thumbs-up if they were determined in this way as well.
- Look at one or two campers’ projects as examples of how their determination at that station added to the project as a whole.
- Once you finish revisiting all the stations, have campers give you a high five if they practiced being determined by completing each station!
Day 3
Nighttime T-Shirt, Part 1 of 2
Tissue Paper Tie-Dye
Today campers experiment with alternative ways to dye clothes using everyday materials. They use cool colored tissue paper and water to create a tie-dyed effect on a white cotton shirt.

The Big Picture
Lesson Breakdown

<table>
<thead>
<tr>
<th>Activity</th>
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<tbody>
<tr>
<td>Introduction</td>
<td>5 min</td>
</tr>
<tr>
<td>Demo &amp; Discussion: Tissue Paper Tie-Dye Overview</td>
<td>15 min</td>
</tr>
<tr>
<td>Camper Work Time: Tissue Paper Tie-Dye</td>
<td>30 min</td>
</tr>
<tr>
<td>Lay tissue paper on the t-shirt and wet it with a spray bottle. Peel off the tissue paper and the color remains!</td>
<td></td>
</tr>
<tr>
<td>Clean Up</td>
<td>5 min</td>
</tr>
<tr>
<td>Wrap Up</td>
<td>10 min</td>
</tr>
<tr>
<td>Transition</td>
<td>5 min</td>
</tr>
</tbody>
</table>

GIA Focus
Innovator’s Process Focus: EVALUATE
Innovator’s Knowledge Focus: SKILLS AND TECHNIQUES
Innovator’s Mindset Focus: BE REFLECTIVE – I take time to think about what is and isn’t working in my design.

What’s Next: Tomorrow (Day 4) campers will add nighttime-themed stencils to the dried tie-dye shirt to create a bedtime shirt.
How to Create Today’s Project

Step-by-Step Pictorial

This is intended to help you understand how to create today’s project. It doesn’t describe how you’ll facilitate this lesson for campers. You’ll need to read the “Play-by-Play” section for this information.

Tissue Paper Tie-Dye

Fig. 1
Dunk the t-shirt in water to wet it completely.

Fig. 2
Squeeze it out just a little bit over the water bin so it’s not dripping wet.

Fig. 3
Lay the shirt flat on the cardboard.
Start laying the tissue paper pieces on the wet fabric, pressing them down each time to make sure they are nice and flat.

Wet the fabric and the tissue paper again with a spray bottle as you go. It’s very important that the fabric stays wet so the color soaks into the shirt.

Continue to overlap and layer the tissue paper until the entire shirt is covered.

When everything is covered, give the shirt one final spray and pat down.
Fig. 8
Begin peeling the tissue paper off the t-shirt. Be sure to get all the pieces.

Fig. 9 – Example of a finished shirt

Get Ready!

Lesson Materials
* (starred) items are choice materials; un-starred items are required for each camper

Intro Materials
☐ sample of dyed t-shirt, for demoing (1 per LI)
☐ copy, color, Jesse’s Lumi Prints (1 per 4 campers)

Demo & Discussion: Tissue Paper Tie-Dye Overview
☐ all materials from Camper Work Time, for demo (1 set per LI)

Camper Work Time: Tissue Paper Tie-Dye
☐ *shirt, Fruit of the Loom, white, youth, XS (2 per 5 campers)
☐ *shirt, Fruit of the Loom, white, youth, S (3 per 5 campers)
☐ bin, plastic, for holding water (1 per 4 campers; reuse from Day 1)
☐ gloves, latex-free, small (1 pair per camper)
☐ cardboard, corrugated, 16” x 20”, for laying t-shirts on (1 per camper)
☐ paper, tissue, cool assortment, 20” x 30” (6 packs per theme)
☐ tray, lunch, for tissue paper pieces (1 per 4 campers)
☐ bottle, plastic, spray, 16 oz., for rewetting tissue paper pieces on shirts (1 per 4 campers)
☐ smocks, old camp t-shirts, asst. (1 per camper)
☐ bucket, 5 gallon, screw top, for washing hands (2 per classroom)
**Preparation**

**Days earlier**
- Create a sample of your own so campers understand the end result and so you are aware of the process and any complications that might come up.
- Cut tissue paper into roughly 2” x 3” or 3” x 4” pieces. This is easy to do with adult scissors or a paper cutter.

**Day before**
- Set up tables for groups of four campers with:
  - smocks (1 per camper)
  - plastic gloves (1 set per camper)
  - cotton shirts on cardboard (1 per camper)
  - half a pack of cool colored tissue paper cut into 2” x 3” pieces, on lunch trays
  - spray bottles with water (1 per 4 campers)
- Set up a place where shirts can lay flat once campers are finished. This can be outside the classroom also.
- Set up a station where campers will wet their shirts. Ideally, each table group would have access to one water bin, but make sure the bin is not in any danger of getting tripped on or spilled.

**Morning of**
- Fill the buckets with water for hand washing.
- Fill the bins with water if they were not filled yesterday.
- Make sure you have enough space to do a demo for campers while they are still in the circle.

**Suggested Materials Management**
- Take the bins of water away once campers start using the tissue paper.
- Adjust the size of the tissue paper if you notice campers are not tearing enough/tearing too much. Adjust your demo as well depending on what patterns you notice with your campers.

**Suggestions for Large Classes**
None

**Check In With Your TL**

Make sure your TLs are clear about their role in helping today’s lesson run smoothly. Specific ways TLs can help today are listed in the dotted overview boxes throughout the lesson.

**On the Board**

**Guiding Questions**

**EVALUATE and BE REFLECTIVE**
- Is your t-shirt wet enough?
- Are your tissue paper strips lying flat? How can you make sure they are?
- Where can you add more layers of tissue paper?
- What new colors are you creating?

**Vocabulary**

**tie-dye** – a kind of fabric-dyeing technique that results in lots of colorful designs

**fabric** – cloth, like clothing, pillowcases or blankets
Teaching the Lesson: Overview

Instructional Priorities & Supporting Innovation

These are the key lesson elements you’re expected to communicate/support today. Think of this as the blueprint of a successful lesson. When applicable we’ve included details about why an element is important for innovation.

Demo & Discussion: Tissue Paper Tie-Dye Overview
★ Demonstrate all the TECHNIQUES needed for preparing the t-shirt and tissue paper, placing the tissue paper on the t-shirt, and peeling it off.
★ Model EVALUATING to make sure the shirt is wet enough, the paper is lying flat, and the shirt is completely covered.

Throughout the Lesson
★ Support the Innovator’s Mindset Challenge: BE REFLECTIVE – Campers pay attention to how they’re working and notice what happens when they work this way.
Why – Encouraging campers to be mindful as they work will help campers discover the most successful techniques and result in better final products.

Teaching the Lesson: Play-by-Play

Introduction (5 min)

Welcome campers and make a quick story connection
How’s Lucy doing? (She’s stuck back in Land Land.) Well, remember that nothing is impossible with a little VISION and COLLABORATION. Let’s keep working on those designs to personalize your rooms so we can show them off to Lucy at Friday’s Faire.

Build excitement for today’s project
• Say: Part of getting ready for bed is changing into the clothes we’re going to wear to bed! Today we’re going to start making a nighttime t-shirt that you can wear for sleeping.
• Point out that makers find all kinds of ways to do things themselves, including dyeing (changing the color of) their clothes.
• One innovative maker, named Jessi, found a way to use sunlight to dye fabric!
• Show the Jesse’s Lumi Prints color copy (below).

• Show campers your sample shirt. Let them know that just like Jessi they are going to use a creative way to dye, or change the color of, a white t-shirt.
• Instead of sunlight they’re going to use water and tissue paper. When the tissue paper gets wet, it will dye the shirt and the color will come off onto the fabric!
• Point out that the colors on your shirt are cool colors, blues and greens, because those colors are calming and relaxing for bedtime.
• Explain that tomorrow, when the shirt is dry, they will add designs to it using stencils.

**Introduce the Innovator’s Mindset: BE REFLECTIVE ★**

• Point to this on your Innovator’s Mindset poster.
• Define the Mindset element in the context of today’s lesson. Say: *As we work today we’re going to practice being reflective, which means noticing what’s happening as we work. This technique works best if we pay attention to the different steps and make sure the t-shirt is wet and the tissue paper is flat, so we’ll help each other do that today.*

**Demo & Discussion: Tissue Paper Tie-Dye Overview (15 min)**

**What You’ll Need to Cover: Overview**
• Demo how to wet the t-shirt and wring it out. ★
• Demo how to tear the tissue paper and place it on the t-shirt. ★
• Demo how to spray the t-shirt with more water. ★

**What You’ll Need to Cover: Details**

**Demo how to wet the t-shirt and wring it out ★**
• The first step is to get the fabric wet – this is very important! The tissue paper color will only bleed into the shirt if it is wet.
• Demo how to dunk the shirt in water so it gets soaked. It shouldn’t be a shirt puddle, but it should be pretty wet. Show how to squeeze the water out gently over the bin to eliminate any excess.
• Spread the shirt out on the cardboard and make sure it’s flat.

**Demo how to tear the tissue paper and place it on the t-shirt ★**
• Put on your gloves.
• Tell campers that their goal is to cover the entire shirt with tissue paper.
• Demo how to press the paper onto the wet shirt so it’s flat. Campers can tear the tissue paper into smaller pieces if they want.
• Sometimes the tissue paper sticks when it gets wet, and with wet gloves on, they’ll have to be determined and work carefully.

• Support BEING REFLECTIVE ★ – Demo how to notice each piece and make sure it’s pressed flat. Have campers be on the lookout for any of your pieces that are bunched up.
• It’s also crucial that the fabric stays wet while they are working, so demo how to use the spray bottle to wet the shirt and the tissue paper again.
• Show how to overlap the pieces and continue to press them down. Campers can overlap several pieces of tissue paper. This will help the color on the shirt. Only demonstrate a part of the shirt in the interest of time.

**Demo how to spray the t-shirt with more water ★**
• Once the t-shirt is totally covered with tissue paper, campers can do a final spray-down and a pat-down to really make sure everything is flat.
• Support BEING REFLECTIVE ★ – Verbalize how you’re paying attention to how you’re spraying. You shouldn’t spray so much that puddles are forming on the shirt, but you need to spray enough that everything is stuck to the shirt.
• Tell campers everyone will peel the tissue paper off at the same time as a final step. You will show them how to do this later when it’s time.
• Review the Mindset Challenge ★ – Remind campers to think carefully about what they’re doing during each step. They want to make sure the shirt is wet enough but not too wet, that the shirt is covered, and that the tissue paper is flat.
Camper Work Time: Tissue Paper Tie-Dye (30 min)

During Work Time Campers Will...

**CREATE**
1. Dip the t-shirt in the bin of water.
2. Wring it out gently over the bin so the excess water falls back in.
3. Lay the wet shirt out flat on the cardboard work surface.
4. Start tearing tissue paper into different-sized pieces and laying them on the wet shirt.
5. Continue tearing tissue paper and placing it all over the front of the shirt, overlapping the pieces.
6. Spray the shirt to keep the fabric wet.
7. When the entire front of the shirt is covered with tissue paper, spray the shirt down with water and make sure everything is flat.

**EVALUATE & SHARE**
8. As a class, take a walk around the room and look at everyone’s designs while waiting for the tissue paper to set.

CREATE
9. Peel the tissue paper off the shirt.

How Your TL Can Help
Encourage campers to keep adding layers, filling in white spaces, and making sure the shirts are wet.

Facilitate the Project Steps

**CREATE (Steps 1-7)**
- Make sure campers are being careful with the bins of water and are finding a nice balance between a wet shirt and a soggy shirt.
- Help campers get the hang of tearing the tissue paper and placing it on the shirt. The tissue paper can stick to hands and to itself when it’s wet, so campers will need to pay attention to make sure it’s lying flat on the fabric, which is important for the colors to bleed into the fabric.
- Walk around and spritz campers’ shirts as they’re working to make sure the fabric is staying wet enough. You can also spritz on top of the tissue paper, especially if campers are moving slowly.

**EVALUATE & SHARE (Step 8)**
- Campers can really just keep going and going with this project, so don’t get too worried if it looks like they are filling up their shirts quickly.

**CREATE (Step 9)**
- Make sure everyone returns to their shirts, and then quickly demo how to peel the tissue paper off.
- Have campers begin to peel the tissue paper off. It would be helpful to have little bins, buckets, or trays for campers to place the used tissue paper in right away for easy clean up.

Support BEING REFLECTIVE ★

Suggest strategies that help and encourage campers to be reflective

Some specific strategies for today:
- Noticing what’s working well and sharing their techniques with their neighbors
- Asking a buddy where they could put more tissue paper
- Watching someone else’s technique
Recognize reflective campers
This encourages the camper and helps others see how they can be reflective as well. Recognition can be just verbal or include some kind of physical award. Be sure to be specific about how you see campers being reflective.

Some ways you might see reflection today:
- Using any of the strategies mentioned above
- Changing their strategy if they’re having a hard time laying the paper down flat or covering the shirt
- Being intentional about how they’re placing paper down and experimenting in an intentional way

Ask the Guiding Questions that support being reflective

Clean Up (5 min)

- Keep leftover tissue paper for the next rotation.
- Write campers’ names on the shirt tags before you put them aside. If the tags are too wet to write on, write on tape and stick it on the tags.
- Have campers help you replace smocks at each spot.

Lesson Wrap Up (10 min)

Recognition and Reflection (BE REFLECTIVE)
Help campers see how they or others embraced the Innovator’s Mindset and why this is important for innovation.

Suggested recognition and reflection activity
- Have campers high-five a neighbor if they dyed a white t-shirt using tissue paper today!
- Have campers touch their noses if they practiced being reflective by paying attention to making sure their tissue paper was flat.
- Ask: Did you discover a good way to do this?
- Have campers touch their toes if they practiced being reflective by paying attention to covering all the white spots on their t-shirts.
- Ask: Do you think our shirts look better all covered with color than with just a few spots of color?
- Have campers flap their chicken wings if they noticed someone else being reflective by working carefully.
- Ask: Who was it and what were they doing?
Day 4
Nighttime T-Shirt, Part 2 of 2
Nighttime Stencils

The Big Picture

Lesson Breakdown

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<td>10 min</td>
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<tr>
<td>Camper Work Time: Mixing Blue Colors</td>
<td>15 min</td>
</tr>
<tr>
<td>Create three new blue paint colors by mixing various amounts of blue, turquoise, violet, green, white, and black paint.</td>
<td></td>
</tr>
<tr>
<td>Demo &amp; Discussion: Stenciling Overview</td>
<td>5 min</td>
</tr>
<tr>
<td>Camper Work Time: Stenciling</td>
<td>20 min</td>
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<tr>
<td>Arrange stencils on their tie-dyed t-shirts and fill them in using their unique shades of blue.</td>
<td></td>
</tr>
<tr>
<td>Clean Up</td>
<td>5 min</td>
</tr>
<tr>
<td>Wrap Up</td>
<td>5 min</td>
</tr>
<tr>
<td>Transition</td>
<td>5 min</td>
</tr>
</tbody>
</table>

GIA Focus

Innovator’s Knowledge Focus: SKILLS AND TECHNIQUES
Innovator’s Mindset Focus: BE VISIONARY – I believe it’s my place to turn ideas into reality.
How to Create Today’s Project

Step-by-Step Pictorial

This is intended to help you understand how to create today’s project. It doesn’t include everything campers will do today, like the guided color mixing. It also doesn’t describe how you’ll facilitate this lesson for campers. You’ll need to read the “Play-by-Play” section for this information.

Stenciling

Fig. 1 – Using a stencil

Fig. 2 – Close-up of the stencil

- Select a stencil and one of the three mixed shades of blue to start (campers will mix shades of blue in a previous activity).
- Place the stencil on the t-shirt and hold it with one hand. Use the other hand to fill in the stencil with paint. Use an up-and-down stamping motion with the paintbrush to fill it in.
Get Ready!

Lesson Materials
* (starred) items are choice materials; un-starred items are required for each camper

Intro Materials
☐ sample of a t-shirt with a few stencils on it (1 per LI)

Demo & Discussion: Mixing Blue Colors Overview
☐ materials from the Mixing Blue Colors activity, for the demo (1 set per LI)

Camper Work Time: Mixing Blue Colors
☐ paint, acrylic, blue (1 tsp. per camper)
☐ paint, acrylic, turquoise (1 tsp. per camper)
☐ paint, acrylic, white (1 tsp. per camper)
☐ paint, acrylic, black (0.5 tsp. per camper)
☐ paint, acrylic, violet (0.5 tsp. per camper)
☐ paint, acrylic, green (0.5 tsp. per camper)
☐ cup, plastic, 3.5 oz., for mixing paint (3 per camper)
☐ paintbrush, flat, 1" (1 per camper)
☐ container, plastic, deli, 16 oz., for holding water (1 per 2 campers)

Demo & Discussion: Stenciling Overview
☐ all materials from the Stenciling activity, for the demo (1 set per LI)

Camper Work Time: Stenciling
☐ mixed paint colors in 3.5 oz. cups (3 per camper)
☐ paintbrush, flat, 1", for filling in stencils, continue to use the same one (1 per camper)
☐ container, plastic, deli, 16 oz., for water, continue to use the same one (1 per 2 campers)
☐ stencil, plastic, Celestial (1 set per 4 campers)
☐ stencil, plastic, Fun Shapes (1 set per 4 campers)
☐ tray, lunch, for passing out and holding stencils (1 per 4 campers)
☐ sponge, 3" x 4", for wiping down stencils if needed (4 per classroom)
☐ tie-dyed t-shirt on 16" x 20" cardboard (1 per camper)

Fig. 3 – More stencils
Fig. 4 – Shirt filled with stencils

Use all three paint colors, and as many stencils as desired.
Preparation

Days earlier

- Cut stencils into individual or pairs of shapes. Try to leave as much space as possible around the stencil shapes so it’s easier for campers to hold on to them. Some of the smaller stars can stay together in clusters. If there are some stencils that don’t have enough space around them to hold them, put a roll of blue tape on the back.

Day before

- Lay the shirts on the 16" x 20" cardboard and have them sorted by team in order to distribute them quickly.
- Create an example on your own t-shirt of what a stencil or two looks like. Be sure to leave plenty of room to add stencils during the demo.
- Sort stencils onto lunch trays for quick distribution after the Demo & Discussion (1 set of each per 4 campers, 1 tray per 4 campers).
- Set up a paint station where campers can easily get paint.
  - The paint will be distributed by an adult, so make sure you set this up in a way that has enough room for a line to form, and won’t be obscuring other camper work areas.
  - You will need the bottles of blue, turquoise, violet, white, green, and black paint.
  - Have 3.5 oz. plastic cups (3 per camper) at the paint station.
- Place paintbrushes and deli containers for water at the table groups.

Morning of

- Fill the deli containers with water.

Suggested Materials Management

- Take a look at the stencils in between rotations and wipe them down or rinse them off.
- You can keep mixed colors that are clean and have a lot left over for other rotations to use.

Suggestions for Large Classes

None

Check In With Your TL

Make sure your TLs are clear about their role in helping today’s lesson run smoothly. Specific ways TLs can help today are listed in the dotted overview boxes throughout the lesson.

On the Board

DESIGN and BE VISIONARY

- Tell me about the color/design you’re imagining. What’s your plan for trying to achieve that?
- What do you see around the room that gives you an idea about a color to mix/how to use your stencils?
- Do you imagine a lighter/darker color? A pattern? More designs?

Vocabulary

None today
Teaching the Lesson: Overview

Instructional Priorities & Supporting Innovation

These are the key lesson elements you’re expected to communicate/support today. Think of this as the blueprint of a successful lesson. When applicable we’ve included details about why an element is important for innovation.

Demo & Discussion: Mixing Blue Colors Overview
★ Demo and discuss the TECHNIQUES for creating different kinds of blue using the paint colors available.

Demo & Discussion: Stenciling Overview
★ Demo and discuss the TECHNIQUES for successful stenciling.

Throughout the Lesson
★ Support the Innovator’s Mindset Challenge: BE VISIONARY – Campers imagine the blues they want to mix and envision how they want to add designs to their shirts.
Why – Challenging campers to think creatively, not just about their final goals but about how to achieve them, increases the likelihood that campers will follow through on their original visions and helps them build confidence in their ability to turn their ideas into reality.

Teaching the Lesson: Play-by-Play

Introduction (5 min)

Build excitement for today’s project
• Remind campers of the amazing job they did dyeing their shirts yesterday.
• Announce that today they’re going to add some nighttime designs including stars, moons, and planets on top of the cool colors they created yesterday!
• Tell campers that to go with the nighttime theme they’re going to use blue to paint their designs on, but this doesn’t mean all their designs will be the same color! There are hundreds of different kinds of blue and it will be up to them to imagine and create just the blues they want.

Introduce the Innovator’s Mindset: BE VISIONARY ★
• Point to this on your Innovator’s Mindset poster.
• Define the Mindset element in the context of today’s lesson. Say: Today we’re going to practice being visionary by imagining colors and t-shirt designs and then making those ideas happen!
Demo & Discussion: Mixing Blue Colors Overview (10 min)

What You’ll Need to Cover: Overview
- Review what mixing colors means.
- Review and discuss how to make light and dark blues.
- Go over the process for getting and mixing paint.
- Have campers decide on the first color they are going to create and support BEING VISIONARY.

What You’ll Need to Cover: Details

Review what mixing colors means
- Show campers the paint colors.
- Tell them you’re imagining a light blue paint color, but you don’t see the color you want in front of you.
- Ask: What should I do?
- Have campers guide you through combining one of the blues with white to make it lighter.
- Make sure everyone knows this is called color mixing – something artists do all the time to make the exact colors they’re imagining.

Review and discuss how to make light and dark blues
- Tell campers that everyone will mix three different kinds of blue.
- They already helped you create a light blue, but what if you wanted a dark blue? Ask campers how you could create that.
- Make sure campers know they can mix purple with blue to get a darker color, and/or they can add a tiny bit of black to the blue.
- Explain that since black is such a strong color, they should always start with a small amount, and add more if they need to.
- Campers will also mix a third blue of their choice. For example, they might do turquoise with a little bit of purple, mix that for a while, and then add a little bit of white.
- Demonstrate mixing a few different blue colors and take suggestions from campers about what colors to use.
- Be sure to emphasize that the color is mixed when you cannot see the individual colors anymore, and they are completely blended together. If you can still see swirls or ribbons, you need to keep mixing.

Go over the process for getting and mixing paint ★
- Explain that campers will mix one color at a time in a little plastic cup.
- To get paint, campers will visit the paint station where an adult will squirt two paint colors in the cup to start.
- Campers can let the adult know if they just want a little bit of one color, or the same amount of each.
- Then, campers will head back to their seats and start mixing their colors.
- Once they feel they’ve mixed those thoroughly, they can go back and get a squirt of another color to help create the color they have in mind, or they can call that blue finished and visit the paint station with a brand new cup to start a new color.
- Emphasize that each time campers are starting on mixing a completely new color, they need to clean the paintbrush in the water.
- Demonstrate how to clean a brush in water by rubbing it on the bottom of the water container and then blotting it on a paper towel so it’s not dripping wet.
- Let campers know that after everyone has mixed three colors, you will stop the class to show them how to use the stencils on their t-shirts.
- Emphasize that it’s important to stop and listen at this time even if they don’t feel like they are done mixing; they will have more time after the stenciling demo.

Have campers imagine the first color they are going to create and support BEING VISIONARY ★
- Tell campers one of the keys to success for the mixing step is imagining ahead of time what color of blue they want to create.
- Explain that everyone will envision the blue they want to create, or look around the room and find inspiration from a blue object.
- For this first go-round, have campers share what kinds of blue they are going to mix up before they can visit the paint station. Will they be light, dark, blue with green, or blue with purple?
- If you have a small class, you can send the TL to the paint station while you dismiss campers one by one.
- If you have a larger class, wait until everyone has shared, and then both you and the TL can work the paint station(s) while everyone gets paint at the same time.
- There will be a little bit of a line for the first color, but after that, things should get more staggered out.
Camper Work Time: Mixing Blue Colors (15 min)

What You’ll Need to Cover: Overview

**DESIGN & CREATE**
1. Decide what kind of blue to create for the first color.
2. Visit a color mixing station and choose two colors to start mixing.
3. Return to the mixing station for more color(s) if needed.
4. When the first color matches the original vision, decide on the next blue to mix.
5. Visit the color mixing station with a new cup and repeat the process.
6. Wash the brush out before mixing the next color.
7. Again, decide on the third blue color to make and repeat the process to create it.

How Your TL Can Help
Help you squeeze paint for campers.

Facilitate the Project Steps

**DESIGN & CREATE (Steps 1-7)**

- Make sure you and the TL are not squeezing too much paint into campers’ mixing cups. They don’t need that much paint for the stenciling, and they will be able to use more colors in each mix if you are conservative with the amount of paint they have in each cup.
- Ask campers what color they are trying to make when they visit you at the paint station. It’s important that they keep the goal in mind, and don’t get too lost in just mixing over and over again.
- Remind campers to clean their brushes in between new blues.
- Give campers a few minutes’ warning for moving on to the last color so you can stop the class at the same time and demo how to use the stencils.
- When it’s time to regroup, have campers leave all their paint at the tables and gather around you for the next demo.

Support BEING VISIONARY ★

Suggest strategies that help and encourage campers to be visionary

Some specific strategies for today:

- Closing their eyes and imagining the blue color they want to create
- Looking around the room to find the blue color they want to create
- Getting inspiration by seeing the kinds of blues other campers are mixing

Recognize visionary campers

This encourages the camper and helps others see how they can be visionary as well. Recognition can be just verbal or include some kind of physical award. Be sure to be specific about how you see campers being visionary. Some ways you might see vision today:

- Using any of the strategies mentioned above
- Taking time to imagine a second or third color before mixing

Ask the Guiding Questions that support being visionary

Demo & Discussion: Stenciling Overview (5 min)

What You’ll Need to Cover: Overview

- Demo how to position the stencils over the t-shirt. ★
- Demo how to fill in the stencils with paint. ★
- Demo cleaning the brush and using different stencils and paint colors. ★
- Have campers imagine t-shirt designs and support BEING VISIONARY. ★

What You’ll Need to Cover: Details

**Demo how to position the stencils over the t-shirt ★**

- Once campers have created all three paint colors, they get to use them in a really fun way to add designs on their t-shirts!
- Explain that using stencils will allow them to create the same design over and over again with different colors.
- Emphasize that the key to creating a nice stencil is keeping it still while you fill in the empty space.
- Show campers how to use one hand to hold the stencil in place and let them know that asking a buddy to help is also really useful.
- Demo this with your TL or even with another camper.
Demo how to fill in the stencils with paint ★
- Explain that they will just dip the end of the brush into the paint color that they want, and then fill in the space by moving the brush up and down, like quick stamping, instead of painting.
- This gets better coverage, and it is a better technique for keeping the stencil in place.
- They should make sure they are filling the space all the way, and it’s okay if they paint over the edge of the stencil.
- They will probably want to do two layers of paint.
- Demo how to carefully lift the stencil to check how it looks.
- If campers need to put it back on because they missed a spot, they should try to line it up again carefully. This will probably be hard for Nebbies. It’s okay if they aren’t super successful; it’s more about having the intention.
- After showing campers what a clean and well-done stencil looks like, demo another one where you let the stencil move and slide as you are filling it in. Reveal the painted part underneath and see if campers can tell you what happened.
- Emphasize the importance of keeping the stencil still as they work.

Demo cleaning the brush and using different stencils and paint colors ★
- Tell campers they can use the same stencil a few times, or switch it up every time.
- Mostly they just need to be aware of where they’ve already painted and watch out for smearing wet paint as they move the other stencils around.
- The other thing they need to pay attention to is cleaning the brush before they want to use a new color of paint.
- If they forget to clean the brush, they will start mixing their blues.
- Tell campers they should use all three of their paint colors at least once, and they can fill the entire shirt with stencils.

Have campers imagine t-shirt designs and support BEING VISIONARY ★
- Have campers envision the first stencil they want to use, where they’ll use it, and which color blue they’ll fill it in with.
- Encourage campers to imagine what else they’ll want to do. Ask:
  - Do you want to use the first stencil again all over the shirt, or change to a new stencil?
  - Will you make a pattern?
  - Will you put your stencils in straight lines or all scattered around?

- When campers have a vision for the first stencil they want to use, have them share it with you and start stenciling!

**Camper Work Time: Stenciling (20 min)**

**During Work Time Campers Will...**
**CREATE**
1. Select a stencil and place it on the shirt. If it’s a small stencil, have a buddy help with holding it in place.
2. Fill in the stencil with the desired paint color using a stippling motion.
3. Carefully check to see that all of the negative space is filled in with paint.
4. Fill in the t-shirt with a variety of stencils. Use all three paint colors.

**How Your TL Can Help**
- Work with campers who haven’t finished mixing their three blues yet.
- Help keep stencils clean.

**Facilitate the Project Steps**
**CREATE (Steps 1-4)**
- Guide campers who are still mixing to help them wrap it up and start with the stenciling.
- Keep an eye on the state of the blue tape on the stencils and replace as necessary.
- Wipe down stencils that are getting super wet and gloppy.
- Help campers work with each other and support each other by showing them how to take turns holding the stencils in place.
- Check that campers are using all their paint colors and filling the t-shirt space.
- If some campers finish early, have them circulate around and hold stencils for those who are still working.
- Support BEING VISIONARY ★ – Use the same strategies described previously.
Clean Up (5 min)

- Have one or two campers help set aside the leftover mixed blues for the next rotation. Campers in your next rotations can check out that table for inspiration and, if they want, use some of the different blues.
- Have campers put brushes by the sink or in buckets of water.
- Acrylic paint dries relatively quickly as long as campers didn’t glob it on too thickly. So if you need to, you should be able to stack shirts from the first rotation to make space for the third rotation.

Lesson Wrap Up (5 min)

Recognition and Reflection (BE VISIONARY)
Help campers see how they or others embraced the Innovator’s Mindset, and why this is important for innovation.

Suggested recognition and reflection activity
- Hold up a few t-shirts and have campers count how many different kinds of blue they see in the stencil shapes.
- Congratulate campers for being visionary by imagining and creating so many different blues!
- Ask campers to share something they imagined that they were able to create. Maybe it was a pattern they made, the position of their stencils, a specific color, or something else. Recognize campers for making their visions a reality!
Day 5

*Bedtime Buddies*

Today campers create a set of soft characters, inspired by the traditional craft of Guatemalan Worry Dolls, to join them at bedtime. They also stencil a pouch to put them in.
How to Create Today’s Project

Step-by-Step Pictorial

Creating a Bedtime Buddy

![Fig. 1](image1)

Choose an object for the doll’s body and place a glue dot on the top for attaching the head.

![Fig. 2](image2)

Attach the material for the head to the top of the body. Make sure it is stable.

![Fig. 3](image3)

To prepare for wrapping the body with yarn, place a glue dot at the top of the body.
Adhere one end of the yarn to the glue dot, and begin wrapping the yarn around the doll’s body.

Continue wrapping tightly with one hand while holding with the other.

Fig. 4

Fig. 5

Fig. 6

Fig. 7 – Tying off the yarn
When the yarn is almost all the way wrapped around, tie it off and snip off the excess as shown. (You’ll help campers with this step.)

Use markers to create a face for the doll.

Add arms by wrapping a pipe cleaner around the body and twisting the ends together in the center.
Add embellishments with metallic pipe cleaners, pom-poms, and other materials.

When finished making the bedtime buddies, use the bingo daubers in a stippling motion to fill in the stencil spaces.
Add stencil designs to both sides of the pouch.

When finished stenciling, pull the cardboard out from inside the pouch and place the buddies inside!
Get Ready!

Lesson Materials
* (starred) items are choice materials; un-starred items are required for each camper

Intro Materials
☐ sample of a bedtime buddy (1 per LI)
☐ samples of dowels, corks, blocks, and yarn, for giving an overview of the project (1 set per LI)

Demo & Discussion: Securing and Wrapping
☐ all materials from Camper Work Time, for demoing (1 set per LI)

Camper Work Time: Creating Bedtime Buddies
head and body materials
☐ *dowel, wood, ½" x 3" (2 per camper)
☐ *dowel, wood, 3/8" x 3" (1 per camper)
☐ *cork, tapered, size 8 (2 per camper)
☐ *bead, wood, round, 1", w/ 7/32" hole (2 per camper)
☐ *cube, wood, 1" (1 per camper)

Wrapping and Embellishment Materials
☐ glue dots, ½" (6 per camper)
☐ *yarn, variegated (pink, rose, peach, lavender, gold), skein (10 ft. per camper)
☐ *yarn, variegated (brights, multicolored), skein (10 ft. per camper)
☐ pipe cleaner, asst. colors, 12" (3 per camper)
☐ *pom-pom, asst. sizes and colors (5 per camper)
☐ *plug, wood, flathead, 0.5" (1 per camper)
☐ *cork, asst. sizes (3 per camper)
☐ *pipe cleaner, metallic, asst. colors, 12" (3 per camper)
☐ marker, washable, asst. colors (1 set per 4 campers)

bedtime buddies pouch
☐ pouch, muslin, natural, 5" x 7" (1 per camper)
☐ cardboard, corrugated, 5.5" x 3.5", for inserting inside muslin pouch (1 per camper)
☐ stencils, plastic, Celestial (1 set per 4 campers; from yesterday)

☐ stencils, plastic, Fun Shapes (1 set per 4 campers; from yesterday)
☐ bingo dauber, blue, 4 oz. (1 per 4 campers)
☐ bingo dauber, purple, 4 oz. (1 per 4 campers)
☐ bingo dauber, green, 4 oz. (1 per 4 campers)
☐ bingo dauber, red, 4 oz. (1 per 4 campers)

Extension
☐ extra suminagashi prints
☐ paper, newsprint, 9" x 12", for drawing (2 per camper)
☐ marker, washable, asst. colors (1 per 4 campers)
☐ paper, butcher, white, 36" x 250 ft., for drawing a nighttime scene (6-10 feet; get from camp office)

Preparation

Days earlier
☐ Insert the 5.5" x 3.5" cardboard sheets into the 5" x 7" pouches. This will prevent the bingo daubers from bleeding through the muslin and will allow campers to stencil on both sides. Be sure to save these if you’re teaching this theme again.
☐ Cut pipe cleaners (metallic and regular) in half to make 6" pieces (3 of each per camper).
☐ Cut yarn into 8-10 ft. lengths (3 per camper).
☐ Prepare Glue Dot Gardens with individual strips (6 glue dots per camper).
☐ Create a sample bedtime buddy for the Introduction.

Day before
☐ Set up materials on trays at table groups:
  • dowels
  • tapered corks
  • beads
  • cubes
  • Glue Dot Garden
  • pom-poms
  • pipe cleaners
  • flathead plugs
  • assorted corks
  • markers

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Make a yarn station where campers can come grab the yarn after they’ve created the body for a doll.

Set up the pouch station:
- muslin pouches with cardboard inserts (1 per camper)
- stencils (1 set of each per 4 campers)
- bingo daubers (1 of each color per 4 campers)

**Suggested Materials Management**
The lengths of yarn are pretty long and will easily get unruly. Even though it might seem easier to just make a big yarn pile, try to keep them as separate units for camper accessibility.

**Suggestions for Large Classes**
None

**Check In With Your TL**
Make sure your TJs are clear about their role in helping today’s lesson run smoothly. Specific ways TJs can help today are listed in the dotted overview boxes throughout the lesson.

**On the Board**
**Guiding Questions**
BE DETERMINED
- Is everything attached securely? What can you do to make sure your doll stays together?
- What can you do to improve how you’re wrapping your yarn?
- What else can you do to make your buddy look just the way you want?

**Vocabulary**
**securing** — attaching something so it doesn’t move  
**wrapping** — covering something

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**Teaching the Lesson: Overview**

**Instructional Priorities & Supporting Innovation**

These are the key lesson elements you’re expected to communicate/support today. Think of this as the blueprint of a successful lesson. When applicable we’ve included details about why an element is important for innovation.

**Demo & Discussion: Securing and Wrapping**
- Demo all the TECHNIQUES needed to successfully assemble, wrap and embellish the dolls, including using glue dots.

**Throughout the Lesson**
- Support the Innovator’s Mindset Challenge: BE DETERMINED — Campers stay focused to make sure their materials are attached well and wrapped tightly.
  - Why — Encouraging campers to really take their time today will allow them to really experience and enjoy the process and reinforces the idea that innovation isn’t about rushing to “be done.”
Teaching the Lesson: Play-by-Play

Introduction (5 min)

Welcome campers and make a quick story connection
The Maker Faire is today! Do you think Lucy will get there in time? I sure hope so. Let’s put the finishing touches on the incredible creations you all designed for your rooms so we’ll be ready to show Lucy when she arrives.

Build excitement for today’s project
• Tell campers that all week they’ve been working on creating things they can use for bedtime and they’ll finish out the week by creating fun bedtime buddies.
• Explain that they can play with the dolls, but they are also meant to go under their pillows. Campers can tell them what kinds of good dreams they want to have before they go to sleep.
• Tell campers that in some cultures, like in Guatemala, they also make dolls to put underneath their pillows. These are similar to what campers will be making, only much smaller.
• Invite campers to keep them for themselves or give them as gifts!

Introduce the Innovator’s Mindset: BE DETERMINED ★
• Point to this on your Innovator’s Mindset poster.
• Define the Mindset element in the context of today’s lesson. Say: As we work today, we’ll practice being determined. It’s important that our bedtime buddies are wrapped tight with yarn all the way around their bodies so they’re soft and look good. We’ll need to stay focused and keep working until we reach that goal!

Demo & Discussion: Securing and Wrapping (10 min)

What You’ll Need to Cover: Overview
• Give an overview of the project.
• Demo and discuss how to assemble/secure the head and body. ★
• Demo wrapping the body in yarn. ★
• Demo adding arms and embellishments to the bedtime buddies. ★
• Give a brief overview of the pouch station.

What You’ll Need to Cover: Details
Give an overview of the project
• Tell campers they’ll create their little friends with wood, cork and yarn.
• Then they’ll make a little bag to keep them safe, and they’ll use the same nighttime stencils that they used for their shirts.

Demo and discuss how to assemble/secure the head and body ★
• Review materials campers can choose for the head and body.
• Show a few different options, like a short body and square head or a tall body and a cork head.
• Demo how to use a glue dot to attach the body and head they’ve chosen by placing the glue dot face-down on one surface, scratching the back, and slowly peeling the backing off.
• Show campers how to test if the head is secure by lightly shaking the doll back and forth.

Demo wrapping the body in yarn ★
• Review the Mindset Challenge ★ – Explain that to make their buddies soft and colorful they’ll wrap the dolls’ entire bodies with yarn. The yarn should be tight and there should not be any gaps in between, which will take determination and focus to achieve.
• Show how to place a glue dot on the top of the body as shown in the pictorial.
• Take a piece of yarn, find one end, and stick that to the glue dot.
• Use one hand to hold the yarn and one hand to wrap the yarn all the way around the body.
• Support BEING DETERMINED ★
  • Show campers what happens if you wrap carelessly (there will be gaps) or wrap too loosely the yarn starts to fall off.
  • Tell campers that to help them concentrate while they’re wrapping, they can think about all the good dreams they want to have, or want other people to have.
• Demo how to wrap almost all the way to the end of the body object, leaving a little space where you are holding the body. Then go back up the body until you reach the end of the yarn. Leaving the space at the end is important because it will help ensure that the yarn doesn’t slip off the bottom.
• Instruct campers to raise their hands for assistance when they get to the end of the yarn. You or the TL will have to secure the end for them.
• Simply slip the yarn under another piece once or twice, and then make a knot and snip off any excess as shown in the pictorial.

**Demo adding arms and embellishments to the bedtime buddies ★**
• Demo how campers can add arms with pipe cleaners. Wrap a pipe cleaner around the body, overlap the pieces and twist them so they are tight.
• Demo this a few times in the circle, but be aware that you’ll probably need to assist campers when they reach this step during their work time as well.
• Show campers they can draw a face with marker and add other embellishments on the head or body with pom-poms, smaller corks, more pipe cleaners, etc.
• Let campers know they should attach everything with glue dots.
• Show campers all the materials and quickly ask for one or two ideas about how campers could use them. If this is hard, be more specific and ask things like, “How could I add a pom-pom on the doll’s head?”

**Give a brief overview of the pouch station**
• Let campers know they can create one to three dolls, and when they are done they will move to the pouch station to make a little bag for them to live in.
• Let campers know that they will get instructions when they get to the station, but in general, they will be stenciling on the bag using the same nighttime stencils as yesterday, but this time they will be using bingo daubers.

**Camper Work Time: Creating Bedtime Buddies (35 min)**

<table>
<thead>
<tr>
<th>During Work Time Campers Will...</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CREATE (bedtime buddy)</strong></td>
</tr>
<tr>
<td>1. Choose one head and body from dowels, corks, beads or blocks and attach them with a glue dot.</td>
</tr>
<tr>
<td>2. Place a glue dot at the top of the body and stick the end of a piece of yarn to the glue dot.</td>
</tr>
<tr>
<td>3. Wrap the yarn tightly all the way around the body, overlapping until the end of the piece.</td>
</tr>
</tbody>
</table>

**Facilitate the Project Steps**

<table>
<thead>
<tr>
<th>CREATE (bedtime buddy) (Steps 1-6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Help campers figure out the best way to hold and wrap their dolls.</td>
</tr>
<tr>
<td>• Make sure they are keeping things tight!</td>
</tr>
<tr>
<td>• If it’s hard to move around the room to campers who need help securing the end of the yarn, you or the TL could stay in a central location, and campers could come to you.</td>
</tr>
<tr>
<td>• Remind campers to think about what kinds of dreams they want to have as they are wrapping. Encourage them to think about good dreams for other people as well.</td>
</tr>
<tr>
<td>• Make sure campers aren’t using the body and head materials as embellishments. You just want to make sure there is enough for all rotations and the next time you teach the lesson.</td>
</tr>
</tbody>
</table>

4. Have an adult tuck the end of the yarn in and tie it off.
5. Draw a face with markers, add arms with pipe cleaners, and add embellishments with the other materials.
6. Repeat steps 1-5 to create up to three bedtime buddies.

**Extension**
• Campers can create little blankets or sleeping bags for their buddies with scrap paper.
• They can also use the bingo daubers and stencils on their pillowcases and suminagashi prints.

**How Your TL Can Help**
• Help campers tie and cut their yarn.
• Facilitate for campers who are still wrapping when you need to give campers directions for the pouch station.
CREATE (pouch) (Steps 7-9)
• At the pouch station, show campers how to hold the stencil over the bag and keep it steady with one hand.
• Show them/let them know that it might be easier to have a partner help them hold the stencil in place.
• Show campers how to use the bingo daubers in an up-and-down motion to get the ink out. This is the only way they can use the bingo daubers.
• Dragging or rubbing the bingo daubers on the fabric will not work well, and it will also damage the daubers.
• Just like before, campers should keep going until they’ve filled in the entire stencil.
• Encourage campers to do a few stencils, and then put their bedtime buddies inside to see how the pouch looks when it is filled. They can see if there are other places they can add stencils to on the front or back.
• Campers can write their names on the backs with a marker or Sharpie.

Support BEING DETERMINED ★
Suggest strategies that help and encourage campers to be determined
Some specific strategies for today:
• Focusing on one step at a time
• Working slowly so they are less likely to have to redo their work
• Asking for help or advice from a neighbor or adult
• Helping their neighbors check their work, or having their neighbors check their own work

Recognize determined campers
This encourages the camper and helps others see how they can be determined as well. Recognition can be just verbal or include some kind of physical award. Be sure to be specific about how you see campers being determined. Some ways you might see determination today:
• Using any of the strategies mentioned above
• Taking something apart or redoing it to get it just right
• Not giving up and having a positive attitude if the wrapping is a little tricky
• Helping to create an environment that helps people stay focused

Ask the Guiding Questions that support being determined

Clean Up (5 min)
• Have campers place all unused yarn back at the yarn station.
• Have campers place all other doll materials back on the trays at the center of their tables.
• Make sure campers’ names are on their pouches and their buddies are in the pouches.

Lesson Wrap Up (10 min)

Review (SKILLS AND TECHNIQUES)
Give campers a chance to review what skills and techniques they learned and used to make their awesome creations today.

Suggested review activity
• Have campers scratch an imaginary glue dot in the air or on their knees, noses, etc. if they secured their bedtime buddies’ heads and bodies together well.
• Have campers give a thumbs-up and wrap imaginary yarn around it if they:
  ▪ Secured their yarn with a glue dot
  ▪ Wrapped the yarn tightly and covered all the spaces

Recognition and Reflection (BE DETERMINED)
Help campers see how they or others embraced the Innovator’s Mindset, and why this is important for innovation.

Suggested recognition and reflection activity
• Have campers share what was hard about this activity, and what they did to move through the parts that were difficult.
• Have campers share how their bedtime buddies would look if they were not careful and determined.
• Have campers share what they like most about their bedtime buddies.