

Kindergarten: Module 2: Labs

2 – Practice Stage

Labs: Practice Stage

Days 5–10

Each of the Labs unfolds across an entire module and takes place in four stages: Launch, Practice, Extend, and Choice and Challenge.

2. The Practice stage serves three purposes:

- To practice using materials and navigating the Labs before introducing new materials and an additional layer of complexity in the Extend stage.
- To build independence in meeting Lab goals and transitioning between various components of the Labs schedule.
- To continue applying the habits of character in each Lab.

What stays the same from previous stage(s):

- During the Practice stage, the materials, tasks, and guiding questions are identical to those of the Launch stage.

What is different from previous stage(s):

- During the Practice stage, students visit two Labs per day.

The chart below and on the following page shows the guiding question, learning target(s), and ongoing assessment for each Lab during this specific stage.

(Note: The guiding question for a given Lab remains the same for the entire module. By contrast, the learning target(s) become more refined and precise from stage to stage.)



Practice Stage: At-a-Glance

Guiding Question

Create Lab

How can I create scenes that show how weather affects people?

Engineer Lab

How can I design and build a weatherproof shelter?

Imagine Lab

How can I use my imagination to create a world of play for myself and others?

Research Lab

How can I use photographs to research extreme weather events?

Learning Target(s)

Create Lab

I can create detailed weather scenes.

Engineer Lab

I can use a variety of materials to build a shelter.

Imagine Lab

I can show respect for Lab materials and my peers

I can collaborate with my Lab group to imagine exciting weather stories.

Research Lab

I can notice details in photographs of extreme weather events.

Ongoing Assessment

Create Lab

Create Lab Checklist (**SL.K.1a, SL.K.4, L.K.1d, L.K.1f**)

Engineer Lab

Engineer Lab Checklist (**SL.K.1a, SL.K.4, L.K.1d, L.K.1f**)

Imagine Lab

Imagine Lab Checklist (**SL.K.1a, SL.K.4, L.K.1d, L.K.1f**)

Research Lab

Research Lab Checklist (**SL.K.1a, SL.K.4, L.K.1d, L.K.1f, W.K.7, W.K.8**)

Labs are one hour long in all four stages. During the Practice stage, this hour is divided as follows:

Practice Stage: Daily Schedule

Lab Component	Time
Storytime	10 minutes
Setting Lab Goals	5 minutes
In the Lab	40 minutes
Reflecting on Learning	5 minutes

Practice Stage: Storytime**10 MINUTES****Teaching Notes****Purpose:**

- Review the Storytime Teaching Notes in the Launch stage document as needed.
- Similar to the Launch stage, continue to choose texts that meet the following criteria:
 - Include illustrations of beautiful landscapes or cityscapes in a variety of weather conditions
 - Show characters in a variety of settings reacting to a variety of weather events
 - Show people or animal characters that create shelters to protect them from various elements of weather

In advance:

- Choose a text from your own classroom library or the K–5 Recommended Texts list (stand-alone document).
- Consider creating a focus question for Storytime (see example in the Experience section below).
- Post: Focus question (optional).

Materials

- ✓ Labs song (one to display; see supporting materials)
- ✓ Text for Storytime (chosen by teacher; see Teaching Notes)

Experience (identical during all four stages of Labs)

- Gather students whole group by singing the (start of the) **Labs song**.
- Introduce the **text for Storytime**.
- Consider giving students a focus question with which you would like them to listen, especially as it supports their work in the Labs. (Examples: “While I read this story aloud, think about the ways in which the characters collaborate, or work together” or “While I read this story aloud, think about the question: ‘How is the main character affected by the weather in this story?’”)
- Read aloud the text for Storytime slowly, fluently, and without interruption.

Practice Stage: Setting Lab Goals**5 MINUTES****Teaching Notes****Purpose:**

- Students continue to use this time to reinforce executive functioning skills by focusing their attention, making a plan for their time, exhibiting self-regulation, and following instructions. All students, but especially primary learners, need to learn and practice the behaviors associated with executive functioning.

- Students may need additional support remembering the second Lab they will be visiting on any given day. Consider posting the Labs schedule in a clearly visible location and pause to review it before students transition to their second Lab.

Logistics:

- During the Practice stage, Lab groups visit two different workstations for 20 minutes each.

In advance:

- Post: Guiding question for each Lab, learning target(s) for each Lab, and Labs schedule.

Materials

- ☑ Learning target(s) (one to display for each Lab; see Practice Stage: At-a-Glance for the specific target(s) for each Lab)
- ☑ Labs schedule (one to display)

Experience

- Tell students that today they will visit two Labs.
- Review the **learning target(s)** for each Lab.
- Review the **Labs schedule** with students.
- Invite students to turn and talk with an elbow partner:
*“Which Lab will you visit first? What will your goal be when you are there?”
 (Responses will vary, but may include: I am going to the Engineer Lab. My goal is to finish my shelter.)*
- Provide students with a sentence frame as needed. (Example: “Today, I will be visiting the ____ Lab first. When I’m there, my goal is to ____.”)
- Revisit the Labs schedule. Point to the column labeled Lab 2.
- Invite students to turn and talk with an elbow partner:
*“Which Lab will you visit second? What will your goal be when you are there?”
 (Responses will vary, but may include: I will be going to the Research Lab. My goal is to take notes with my research partner.)*
- Provide students with a sentence frame as needed. (Example: “Today I will be visiting the ____ Lab second. When I’m there, my goal is to ____.”)

Practice Stage: In the Labs

- Refer to the In the Labs section on the following pages for detailed plans on each specific Lab.

Practice Stage: Reflecting on Learning**5 MINUTES****Teaching Notes****Purpose:**

- Recall that the Reflecting on Learning portion of Labs serves as a bookend to Setting Lab Goals. This time should both invite students to recall how they spent their time in the Labs and to reflect on their experience in the Labs.
- Continue to support students with predictable structures of reflection (such as repeated protocols) as well as familiar sentence frames.

In advance:

- Post: Sentence frames or picture clues for any reflection questions you will use regularly (optional).

Experience

- Gather students back together whole group by singing the (conclusion of the) Labs song.
- Remind students of the learning target(s) for their Labs and invite them to think about the goals they made at the beginning of Lab time.
- Ask a reflection question, giving students think time before they respond. This promotes more considerate responses and supports English language learners. Examples:

“What is something you did really well in the Labs today to meet the learning target(s)?” (Responses will vary, but may include: I showed respect for materials. I helped clean up).

“What is something you struggled with in the Labs today?” (Responses will vary, but may include: I had a hard time drawing a tree in my weather scene).

“How did you get past a difficult obstacle?” (Responses will vary, but may include: I tried a few times before I could get my shelter to stand up on its own).

“What is something you want to do better in Lab time tomorrow?” (Responses will vary, but may include: I want to find more information about winter weather).

“What was your favorite part of the Labs today? Why?” (Responses will vary, but may include: I liked acting out our stories in the Imagine Lab).

- Invite students to use a silent signal to indicate when they are ready to share.
- Invite students to share with a partner, a small group, or the whole class, as time permits.
- Continue to reinforce specificity in students’ responses (e.g., referring back to their goal, referring back to the learning target(s), giving concrete examples, etc.).



Practice Stage: In the Create Lab

Guiding Question

- How can I create scenes that show how weather affects people?

Learning Target

- I can create detailed weather scenes.

Teaching Notes

How this stage of this Lab builds on previous stage(s):

- Students continue to draw landscapes or cityscapes, focusing on details that show the weather in their picture.

What is new about this stage of this Lab:

- Students have a greater degree of independence, both in their work in the Lab and in their movement during Lab time.
- Students have the option of adding color to their landscapes or cityscapes. Choose which coloring tool, or combination of coloring tools, works best for your students. Watercolor paints work well to fill space in a landscape or cityscape. Colored pencils work well to add details.
- Some students may need additional support with this drawing process, as their drawings may not look exactly like the photograph in front of them. As a result, students may want to begin their drawing multiple times or habitually erase. Remind students that drawing is a learned skill that comes with practice and perseverance.

Habits of character:

- During the Practice stage of Create Lab, perseverance continues to be an important habit of character. Often students become frustrated in the drawing process or in the creating of multiple drafts.

Logistics:

- During the Practice stage, Lab groups spend 20 minutes in the Create Lab. Since students have limited time, they will need a system and space to store their drawings as they continue to work on them in future Labs.

In advance:

- Prepare the Create Lab by placing photographs of landscapes or cityscapes (as inspiration for students' pictures) paper, pencils, and coloring tools in the Lab space (see materials).
- Consider whether the storage system previously established for storing student work is working and change as necessary.

Materials

Continued materials:

- ☑ Photographs of landscapes and cityscapes (several per workstation)
- ☑ Settings and Weather anchor chart (begun in the Launch stage)
- ☑ Paper (blank; one piece for teacher modeling; two pieces per student; if available, watercolor paper)
- ☑ Pencils (one per student or a cup of pencils per workstation)

Additional materials:

- ☑ Coloring tools (colored pencils, crayons, or watercolors; one set per student)

Experience

- Remind students that in the Create Lab they are drawing landscapes or cityscapes.
- Remind students that their landscape or cityscape should include details that show the weather.
- Tell them that they may begin a new drawing or continue a drawing from a previous session.
- Encourage students to use the **photographs of landscapes and cityscapes** to help them if they feel stuck, if they want to try out a new type of setting or weather, or if they need ideas for the details to add to their own landscapes.
- Remind students that they can also look at the **Settings and Weather anchor chart** for ideas of places and weather to draw.
- Remind students of the materials of the Create Lab: **paper, pencils, and coloring tools**.
- Tell students that they should draw their landscape or cityscape completely with pencil before they begin to add color.
- Review the types of coloring tools they have available and how they are best used. (Watercolors are great to fill backgrounds and make various colors for sky, ground, buildings, etc. Colored pencils are wonderful tools to capture smaller details and fine lines.)
- If students feel they are finished with one drawing, they may put it away in the designated storage space and begin a new one.
- It will be helpful for students to have a range of drawings to return to as they choose which ones to revise or create new drafts during the Choice and Challenge stage.
- Invite students to being working.
- Circulate and support students as they work to include details in their landscapes or cityscapes that show weather.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- Give Lab groups or individual students specific positive feedback for responsible and respectful cleanup behaviors. (Example: “Thank you for separating each material you used and putting each where it belongs.”)
- As Lab groups are ready, transition them back to the whole group for Reflecting on Learning.



Practice Stage: In the Engineer Lab

Guiding Question

- How can I design and build a weatherproof shelter?

Learning Target

- I can use a variety of materials to build a shelter.

Teaching Notes

How this stage of this Lab builds on previous stage(s):

- Students continue to create shelters using a variety of materials.

What is new about this stage of this Lab:

- Students have a greater degree of independence, both in their work in the Lab and in their movement during Lab time.

Habits of character:

- The Engineer Lab helps students build their skills of goal-setting and reflection. The Engineer Lab has a clear shared goal by the time students reach the Choice and Challenge stage: to create a model shelter resistant to both “wind” and water. This clearly defined end goal will help them reflect on their own progress and set benchmark goals for their work along the way.
- Responsibility is also an important habit of character to be learned and practiced in the Engineer Lab, as students are working independently with a variety of materials that need to be cared for and properly organized.

Logistics:

- During the Practice stage, students have only 20 minutes in the Engineer Lab. They will need a system and space to store their projects as they continue to work on them.

In advance:

- Prepare the Lab space by placing photographs of various weather-related shelters, cardboard, toothpicks, craft sticks, modeling clay, liquid glue, and tape to build a shelter of their own (see materials list).
- Consider:
 - Providing tape dispensers for easier student use.
 - Whether the storage system previously established for storing student work is working and change as necessary.

Materials

Continued materials:

- ✓ Photographs of various weather-related shelters (several in the Engineer Lab)
- ✓ Cardboard (various sizes; two or three pieces per student)

- ☑ Toothpicks (several per student; in a container to share)
- ☑ Craft sticks (several per student; in a container to share)
- ☑ Modeling clay (one package to share)
- ☑ Liquid glue (one container per student)
- ☑ Tape (one roll per workstation or pre-cut 6-inch strips)

Experience

- Review the proper handling and storage of the materials students will be using in the Engineer Lab.
- Remind students of the size limitations, if you placed any, so they can store their shelter between Lab sessions.
- Remind students of the materials they already explored at the Engineer Lab: **photographs of various weather-related shelters, cardboard, toothpicks, craft sticks, modeling clay, liquid glue, and tape.**
- If students feel they are finished with one shelter, they may put it away in the designated storage space and begin a new one.
- Invite students to begin working.
- As they work, remind students that they do not need to finish their shelter today. They will return to the Engineer Lab many times over the next days and weeks.
- Circulate and support students as they work.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- As Lab groups are ready, transition them back to the whole group for Reflecting on Learning.



Practice Stage: In the Imagine Lab

Guiding Question

- How can I use my imagination to create a world of play for myself and others?

Learning Targets

- I can show respect for Lab materials and my peers.
- I can collaborate with my Lab group to imagine exciting weather stories.

Teaching Notes

How this stage of this Lab builds on previous stage(s):

- Students continue to use a variety of imaginative play materials to create their own imaginative play scenarios.

- Students continue to use materials of the Imagine Lab to create and act out exciting weather-related stories.
- Students continue to show respect for materials and one another.

What is new about this stage of this Lab:

- All Imagine Lab materials will now be in one space, giving students the option of what they want to do during this time.

Habits of character:

- The Imagine Lab continues to incorporate multiple types of materials to allow students to create a world of play for themselves and others. Respect for these materials, and respect for peers, is necessary for the success of the Imagine Lab.

Logistics:

- Because students now have access to all Imagine Lab materials, it is important they set a clear goal for how they want to spend their time in the Imagine Lab.

In advance:

- Prepare the Imagine Lab space by placing building blocks, white boards and dry erase markers, hand or finger puppets, dress-up materials, and other possible materials for students to create a variety of imaginative play scenarios (see materials list). Other possible materials might include modeling clay, common kitchen materials and safe cooking utensils, and felt or magnet boards.

Materials

Continued materials:

- ✓ Story dice (one pair to share)
- ✓ Building blocks (one set of wood or linking blocks)
- ✓ White board (one large to share or several small) and dry erase markers (one per student)
- ✓ hand or finger puppets (several to share)
- ✓ dress-up materials (several to share)
- ✓ Other possible materials: modeling clay, common kitchen materials and safe cooking utensils, felt or magnet boards

Experience

- Review with students the proper handling and use of the **story dice**.
- Consider practicing a couple of rounds as a whole group or with the Lab group in the Imagine Lab to formatively assess students' understanding of this tool.
- Remind students of the variety of ways they might use these stories within the Imagine Lab:
 - Use building blocks to create a set, and then puppets to act out the story within that set.
 - Use the white board to draw their story idea.
 - Use dress-up materials to become the characters of their story about weather.
- Remind students of the importance of showing respect for Imagine Lab materials and their peers.

- Invite students to turn and talk with an elbow partner:
“In what ways might you show respect for materials?” (put away materials before I move on to new ones, clean up materials at the end of Lab time)
“In what ways might you show respect for one another?” (share materials, use my body safely, include others in my imaginative play)
- Tell students that today they will have 20 minutes in the Imagine Lab. Invite them to begin exploring materials and imagining.
- As students work, circulate and support them, specifically in the area of creating stories using the story dice and respecting both materials and peers.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- Give Lab groups or individual students specific positive feedback for responsible and respectful cleanup behaviors. (Example: “I love seeing everyone handling materials carefully as they put them in their proper place.”)
- As Lab groups are ready, transition them back to the whole group for Reflecting on Learning.



Practice Stage: In the Research Lab

Guiding Question

- What kind of weather is the most powerful?
- How can I use photographs to research extreme weather events?

Learning Target

- I can notice details in photographs of extreme weather events.

Teaching Notes

How this stage of this Lab builds on previous stage(s):

- Students continue to study photographs of extreme weather events to notice details and take notes.
- Students continue to consider the question: “What kind of weather is the most powerful?”
- Students continue to work collaboratively with a research partner to learn about extreme weather.

What is new about this stage of this Lab:

- Students now have access to all of the photographs of extreme weather events in one place.
- Students use single words, phrases, or images to capture notes about what they see.

Habits of character:

- The Research Lab builds students’ skills as collaborators as they work with a research partner throughout this process.

Logistics:

- Students will need a note-taking storage system for their sticky notes. Consider which option works best for your classroom:
 - Dedicating a bulletin board to students: “Notices and Wonders of Extreme Weather.” In this system, students can display their notes alongside other research partnerships. They can read each other’s notes and even begin to sort notes into groups or patterns.
 - Giving research partnerships large, blank pieces of paper on which they can stick their notes. Each piece of paper could be dedicated to a different type of weather (one piece for winter weather, one piece for water weather, etc.) Then, one side of each piece of paper could be dedicated to noticings, while the other side is dedicated to wonders.

In advance:

- Prepare note-taking storage system.
- Consider placing photographs in a variety of bins or binders by weather type. Also consider placing photographs in plastic sleeves or have them laminated to make them more durable.

Materials**Continued materials:**

- ☒ Photographs of extreme weather events (several different types in the Research Lab)
- ☒ Sticky notes (one package per partnership)
- ☒ Magnifying glasses (one per student)

Additional materials:

- ☒ Pencils (one per partnership)

Experience

- Remind students:
 - Of the research question they are pursuing in the Research Lab: “What kind of weather is the most powerful?”
 - Of their source of information: photographs of different weather events.
 - That they should be looking at the photograph with their research partner to:
 1. Identify what kind of weather they are looking at.
 2. Zoom in closely to see details.
 3. Jot a note, or notes, on a sticky note to help remember.
- Introduce students to the note-taking storage system. Tell them this is where they will store their notes during, or at the end of, each Research Lab session.
- Remind students of the types of notes they might take: a single word, a short phrase, or a picture. They can choose, as long as it helps them to remember what they were looking at.
- Tell students that today they will have 20 minutes in the Research Lab and remind them of the materials available to them: **photographs of extreme weather events, sticky notes, magnifying glasses, pencils.**

- Invite students to begin exploring photographs and taking notes.
- As students work, circulate and support them, specifically in the area of working alongside their research partner and jotting notes about details they see.
- At the conclusion of In the Lab time, signal students to clean up their Lab space.
- Give Lab groups or individual students specific positive feedback for responsible and respectful cleanup behaviors. (Example: “It is great to see students working together to organize materials in the Research Lab, even if it is not a material you used.”)
- As Lab groups are ready, transition them back to the whole group for Reflecting on Learning.