

Grade 1: Module 4: Labs

2 – Practice Stage

Labs: Practice Stage

Days 5–10

Labs continue to take place in four stages, and the purposes of each remain the same (see Module 2 Practice stage).

What stays the same from previous stage(s):

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

What is different from previous stage(s):

- During the Practice stage, students visit two Labs per day.
- During the Practice stage, the learning targets change to reflect students' work in the Labs.



Practice Stage: At-a-Glance

Guiding Question

Create Lab

How can I create a collage puppet of my story bird?

Engineer Lab

How can I design and build a bird's nest that holds together and supports weight?

Imagine Lab

How can I write a story using my knowledge of birds?

Research Lab

How can I discover more about the birds near me?

Learning Target(s)

Create Lab

I can create colored collage paper to use to create my puppet.

Engineer Lab

I can describe the materials and methods birds use to build nests.

I can work with a partner to make multiple plans for my bird's nest.

I can work with a partner to explore multiple materials to build a bird's nest.

Imagine Lab

I can write a story about my expert bird using story elements and my knowledge about birds.

Research Lab

I can use a variety of resources and research reading strategies to research our local birds.

Create Lab

Create Lab Checklist (SL.1.1, SL.1.5, SL.1.6)

Engineer Lab

Engineer Lab Checklist (SL.1.1, SL.1.5, SL.1.6)

Imagine Lab

Imagine Lab Checklist (W.1.3, SL.1.5)

Research Lab

Research Lab Checklist (RI.1.5, RI.1.7, W.1.7, W.1.8)

Practice Stage: Daily Schedule

Lab Component	Time
Storytime	10 minutes
Setting Lab Goals	5 minutes
In the Lab, Part I	20 minutes
In the Lab, Part II	20 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.

In advance:

- Choose a text from your classroom library or the Grade 1: Labs Recommended Storytime and Research Book List (in the Labs Teacher Guide)
- Consider creating a focus question for Storytime.
- Post: Focus question (optional).

Materials

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

Experience (identical during all four stages of Labs)

- Follow the routine established in Modules 1–3 to engage students with the **Labs song and text for Storytime**.

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.

Logistics:

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

In advance:

- Decide on a system of storage and movement of Labs notebooks.
- Post:
 - Guiding question for each Lab, learning target(s) for each Lab, and Labs schedule.
 - Labs schedule for students to review as they transition to their second Lab.

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)
- ☒ Labs notebook (one per student)
- ☒ Pencils (one per student)

Experience

- Tell students that today they will visit two Labs.
- Review the learning target(s) and **Labs schedule** with students.
- Invite students to open their **Labs notebook** and follow the routine established in Modules 1–3 to guide them through setting goals:
 - Review the sentence starters at the top of the page.
 - Invite students to notice what Lab they will visit first and second and to make a goal for each Lab.
 - Direct students to record their goals for the day in their Labs notebook using a **pencil**.
- Tell students that their most important goals for the day are to think about the learning target, show respect for materials, show respect for other students in their group, and have fun!
- Invite students to put on their imaginary lab coats and goggles to show they are ready for learning and fun!

Practice Stage: In the Labs**40 MINUTES**

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

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

- Similar to Modules 1–3, the cycle of goal-setting and reflecting is meant to increase student ownership and intentionality. Continue to support students with predictable structures of reflection and familiar sentence frames.

In advance:

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

Materials

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

Experience

- Gather students whole group by singing the conclusion of the **Labs song**.
- Remind students of the guiding question for the specific Lab the class focused on today and guide them through their reflection:
 - Ask a reflective question.
 - 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.
 - As appropriate, use the corresponding Lab checklist to track student progress toward the targeted literacy standards for this Lab.
- 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 a collage puppet of my story bird?

Learning Target

- I can create colored collage paper to use to create my puppet.

Teaching Notes

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

- Students glue the sorted collage paper squares onto cardstock to create collage paper for their expert bird collage puppets.

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 create a variety of collage papers. They may choose to create collage papers with various shades of one color.

Habits of character:

- During the Practice stage of the Create Lab, students continue to practice their perseverance. Similar to the Launch stage, students may have difficulty in achieving a “perfect” result right away, leading to a sense of frustration or failure. On the other hand, some students will need to be pushed in their craftsmanship and encouraged to attempt multiple drafts or work carefully and slowly to achieve their personal best.

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 collages as they continue to work on them in future Labs.
- Consider having a folder for each student’s work in progress and leftover materials.

In advance:

- Prepare four workstations by placing the bins of paper collage squares and glue sticks at each one.

Materials

Continued materials:

- ☑ Collage paper: teacher model #1 (from the Launch stage; one to display)
- ☑ Bins of sorted collage squares (several per workstation)

Additional materials:

- ☑ Cardstock (several sheets per student at each workstation)
- ☑ Glue sticks (one per student and one for teacher modeling)

Experience

- Welcome students to the Create Lab!
- Remind students that in the Create Lab, they are layering with small pieces of paper to create a collage paper for their expert bird puppet.
- Tell students that they will now use the skill of layering to create a variety of collage papers.
- Display the **collage paper: teacher model #1**.
- Using a total participation technique, invite responses from the group:

“What do you notice about this collage paper?” (Responses will vary, but may include: The paper collages are different colors. It is all one color, but the paper has collage squares with different shades of red. The paper squares cover the entire piece of cardstock so no white is showing.)
- Using a piece of **cardstock** and a **bin of sorted collage squares**, demonstrate how to use the **glue stick** to glue down and layer the small pieces, covering all white space underneath. Tell students that when they layer to collage, they need to put the paper on top of other pieces to cover all of the white space.
- Involve students in the process of layering by asking them for advice on where to glue the next few collage squares.
- Using a total participation technique, invite responses from the group:

“What might be difficult about creating collage paper? How might you overcome this difficulty?” (Responses will vary, but may include: It may be hard to get the collage squares to cover the entire piece of cardstock; it takes a lot of time to layer.)
- Transition students to their workstations and invite them to begin collaging.
- Circulate and support students as they work, reinforcing the habit of perseverance as needed.
- Remind students that they do not need to finish their collages today. They will return to the Create Lab many times over the coming days and weeks.
- 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.
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



Practice Stage: In the Engineer Lab

Guiding Question

- How can I design and build a bird's nest that holds together and supports weight?

Learning Targets

- I can describe the materials and methods birds use to build nests.
- I can work with a partner to make multiple plans for my bird's nest.
- I can work with a partner to explore multiple materials to build a bird's nest.

Teaching Notes

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

- Students continue to explore the bird nest materials and try to build several nests to practice using the materials.

What is new about this stage of this Lab:

- During the Practice stage, students have a greater degree of independence, both in their work in the Lab and in their movement during Lab time.

Habits of character:

- Responsibility continues to be a key to the success of this Lab, as students are working with a partner with a variety of materials that need to be cared for and properly organized. Additionally, these materials are easily used as toys, so students need to show responsibility (and, perhaps, be given gentle reminders) to remain focused on the goals of the Lab.
- Because students work with a partner in this Lab, they must also exhibit respect for one another by collaborating and sharing materials and roles equitably.

Logistics:

- During the Practice stage, students have only 20 minutes in the Engineer Lab.

In advance:

- Pre-determine partners within Lab groups, as students work cooperatively in this Lab.
- Prepare workstations by placing a set of bird nest materials (per pair of students) at each one.

Materials

Continued materials:

- ☒ Bird nest materials (one set per pair and one set to display)
- ☒ Nest photographs (three or four per workstation and one to display)

Additional materials:

- ☒ Bird nest model (new; teacher-created)

Experience

- Welcome students to the Engineer Lab!
- Using a total participation technique, invite responses from the group:
“What are we exploring in the Engineer Lab?” (Guide students toward the understanding that they are trying out bird nest materials and building different types of bird nests.)
- Display the **bird nest model**.
- Using a total participation technique, invite responses from the group:
“What is the same and different about this nest and the one you tried to make during the Engineer Lab last time?” (The nests are made of different materials. They are different sizes.)
- Remind students to collaborate by negotiating with a partner on whose ideas to use or how to combine thinking, taking turns with materials, and talking about how the plan is working and adjusting accordingly.
- Move students into pre-determined pairs and Turn and Talk:
“What kind of nest do you plan to make today?”
“What bird nest materials might you try to use?”
- Select a few pairs to share out.
- Invite students to begin working on the bird nests, using the **nest photographs** and bird nest materials to create their nests.
- Circulate and support students as they work. Reinforce the habit of collaboration and responsibility as students navigate the sharing of materials.
- As students work, ask them questions about their creations:
“Which nest photograph inspired your creation? Why?”
“Which material is working well? Which is not?”
- Use the Engineer Lab Checklist to track student progress toward the targeted literacy standards for this Lab.
- 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.
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



Practice Stage: In the Imagine Lab

Guiding Question

- How can I write a story using my knowledge of birds?

Learning Target

- I can write a story about my expert bird using story elements and my knowledge about birds.

Teaching Notes

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

- Students continue to:
 - Refer to the Story Elements Chart anchor chart and Common Problems of Birds anchor chart to ensure that their stories contain all the parts of a quality story.
 - Use the Story Elements planner in their Labs notebook to plan their narrative as they show that they have carefully planned all the parts of a quality story.

What is new about this stage of this Lab:

- During the Practice stage, students use the Story Writing pages: Story 1 in their Labs notebook to craft their narrative.

Habits of character:

- Students continue to create imaginative scenes, but this time in writing. As needed, continue to remind them of specific strategies and rationale for planning and executing a written piece.

Logistics:

- Similar to the Launch stage, students visit the Imagine Lab and use the Story Elements planner and Story Writing pages in the Imagine Lab section of their Labs notebook.

In advance:

- Prepare the Imagine Lab space by posting the Story Elements Chart anchor chart and Common Problems of Birds anchor chart and distributing students' Labs notebooks.
- Consider placing copies of the *Little Kids First Big Book of Birds* and *Did You Know?* texts (from Module 3) at workstations to support students as they remember facts about their expert birds.

Materials

Continued materials:

- ✓ Story Elements Chart anchor chart (begun in the Launch stage)
- ✓ Common Problems of Birds anchor chart (begun in the Launch stage)

- ☑ Labs notebook (from the Launch stage; one per student and one to display)
 - Story Elements Planner: Story 1
 - Story Writing Pages: Story 1
- ☑ *Little Kids First Big Book of Birds* (optional; from Module 3; one or two per workstation)
- ☑ *Did You Know?* (optional; from Module 3; one or two per workstation)

Experience

- Welcome students to the Imagine Lab!
- Remind students of the primary goal of the Imagine Lab: to plan and write a story that shows what they know about their expert bird.
- Using a total participation technique, invite responses from the group:

“What common problem of birds might you choose for your expert bird?” (Responses will vary based on which bird students began planning for during the Launch stage.)
- Choose one of the expert birds that students created during the Launch stage as an example.
- Direct students’ attention to the **Story Elements Chart anchor chart** and invite them to think about the various elements of their story. Remind them that the elements they choose must make sense for the bird they are writing about. (Example: If their expert bird is a woodpecker, then an appropriate setting would be an area with trees. The woodpecker might have a problem with its beak, since it is an important body part that helps it to survive. Another character that helps it would likely be a person or animal that would live in or near a wooded area, too, such as a squirrel.)
- Invite students to Think-Pair-Share their ideas for their own story:

“Who are the main characters in your story?”

“Where does your story take place?”

“What is your bird’s problem?”

“Who are the helpers? What do the helpers do?”

“What happens to your bird?”
- Listen in as students share with a partner and offer guidance and suggestions as necessary.
- Give students specific, positive feedback on their ideas and offer more if they need additional support to think of an engaging and relevant story.
- Display the **Story Elements Planner: Story 1** in the **Labs notebook** and remind students that they already started to plan their stories. Share that they will finish up their plan and begin writing today.
- Invite students to refer to the ***Little Kids First Big Book of Birds*** and ***Did You Know?*** texts for ideas about setting or problems their expert bird might have.
- Display the **Story Writing Pages: Story 1** in the Labs notebook and remind students that they will use these pages to draft their story.
- Transition students to their workstations to work on finishing their plans and writing their stories.
- Circulate and support students as they work, focusing on using the Story Elements planner and Story Writing pages.

- As students work, use the Imagine Lab Checklist to track progress toward the targeted literacy standards for this Lab.
- At the conclusion of the Lab time, signal students to clean up their Lab space.
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



Practice Stage: In the Research Lab

Guiding Question

- How can I discover more about the birds near me?

Learning Target

- I can use a variety of resources and research reading strategies to research our local birds.

Teaching Notes

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

- Students continue to:
 - Use multiple types of resources (photographs, websites, texts) to research birds in their local community.
 - Record drawings and facts based on what they have learned in the Research section of their Labs notebook.

What is new about this stage of this Lab:

- During the Practice stage, students build upon their understanding of the body parts of local birds and research other facts about the bird they have chosen to research:
 - What does it eat?
 - Where does it live?
 - What is special about the bird?

Habits of character:

- Similar to Module 2, the Research Lab helps students build their skills of responsibility and collaboration. Students are expected to remain focused on the research materials, recording facts and questions as they read. They are also encouraged to collaborate with their peers, sharing interesting things they learned, and to support one another in solving tricky words or understanding new, complex ideas.

Logistics:

- Students continue to research local birds through various research materials and deepen their understanding by answering more research questions.

In advance:

- Prepare workstations by placing one set of research materials at each workstation to support learning about a local bird. Each workstation should be dedicated to one of the six or eight identified local birds. Consider using the following to create each set of research materials:
 - One or two texts: field guides of birds in your geographical region; other module texts or texts from the recommended reading list that contain information about local birds.
 - One or two devices on which students can access a website : Recommended: Cornell ornithology (https://www.allaboutbirds.org/?gclid=CPz0xsPQptICFYGHfgodk_APEA, <http://www.audubon.org/bird-guide>)
 - Three or four photographs: Find images of local birds on Flickr and add simple captions or other text features that contain pertinent information about the bird's body.
- Consider forming new Lab groups based on students' progress, strengths, and needs as exhibited in the Module 3 Labs.

Materials**Continued materials:**

- ☒ Local Bird model research materials (one set to display)
- ☒ Labs notebook (one per student and one to display)
- ☒ Local Bird research materials (one set per workstation)

Experience

- Welcome students to the Research Lab!
- Remind students that their goal in the Research Lab is to answer the question: "How can I discover more about the birds near me?"
- Display the Local Bird research pages in the **Labs notebook** and remind students that during the Launch stage they used the **Local Bird research materials** to answer the questions:
 - "What does the bird look like?"
 - "How does it use its body parts to survive?"
- Turn and Talk:
 - "Which local bird did you research? What does the bird look like, and how do its body parts help it survive?" (Responses will vary.)***
- Draw students' attention back to the Local Bird research pages of the Labs notebook. Point out the additional research pages and the questions on each page:
 - "What food does this bird eat?"***
 - "Where does the bird live?"***
 - "What else is special about this bird?"***
- Point out that each page contains a space for sketching and a space for recording the facts they have learned that answer the research question on that page.
- Remind students that since there is one set of research materials per workstation, they will need to collaborate with their Lab group, be kind, and take turns.

Caring for Birds

Module 4: Practice Stage

- Transition students to workstations.
- Circulate and support students as they work, focusing on research reading and note-taking strategies. Use the Research Lab Checklist to track student progress toward the targeted literacy standards for this Lab.
- 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.
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.