

Grade 2: 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 remain 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 a sculpture of my favorite dinosaur?

Explore Lab

What can I learn about paleontology by exploring the tools of a paleontologist?

Imagine Lab

How can I use Imagine Lab materials and my imagination to bring paleontology stories to life?

Research Lab

How can I use research skills to learn and wonder about dinosaurs?

Learning Target(s)

Create Lab

I can identify the shapes that make a dinosaur.

I can sculpt the shapes of a dinosaur.

Explore Lab

I can learn about paleontology by exploring the tools of a paleontologist.

I can show respect when using the tools of a paleontologist.

Imagine Lab

I can reenact paleontology stories using my imagination and materials of the Imagine Lab.

I can collaborate with others to reenact paleontology stories.

Research Lab

I can learn new information about dinosaurs using my research materials.

I can ask questions about dinosaurs based on my research materials.

Ongoing Assessment

Create Lab

Create Lab Checklist (**SL.2.1, SL.2.1a, L.2.1d, L.2.4**)

Explore Lab

Explore Lab Checklist (**SL.2.1, SL.2.1a, L.2.1d, L.2.4**)

Imagine Lab

Imagine Lab Checklist (**RL.2.2, RL.2.3, RL.2.5, SL.2.1, SL.2.2**)

Research Lab

Research Lab Checklist (**W.2.5, W.2.7, W.2.8, L.2.4**)

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.
- During the Launch and Practice stages, Storytime should be dedicated to reading, rereading, or retelling narratives about paleontologists and fossils, especially those introduced during the module lessons, but can also include others of the teacher's choice. This supports student work in the Imagine Lab, where they are expected to use materials to collaboratively reenact familiar, content-connected stories.

In advance:

- Choose a text from your own classroom library or the K-5 Recommended Text List (stand-alone document).
- Consider creating a focus question for Storytime (see example in the Experience section below).
- Review the Labs song.
- 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)

- 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 Imagine Lab. (Examples: "While I read aloud this story, think about the ways in which you might use Imagine Lab materials to act it out" or "While I read aloud this story, think about this question: Who are the important characters and what are the important events that I would want to include in a reenactment of 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 workstations for 20 minutes each.

In advance:

- Decide on a system of storage and movement of Labs notebooks. Students will need these during Setting Lab Goals and Reflecting on Learning each day. They will also need the notebooks when visiting the Research Lab.
- 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)
- ✓ Labs notebook (from Launch stage; one per student)
- ✓ Pencils (one per student)

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 open their **Labs notebook** to the section titled “Goal Setting.”
- Review the sentence starters available at the top of the page.
- Using a total participation technique, invite responses from the group:

“Which Lab will you visit first? What is your goal when you are there?” (Responses will vary, but may include: I am going to the Explore Lab. My goal is to find as many objects in my dig that I can.)
- Revisit the Labs schedule. Point to the column labeled Lab 2.

- Using a total participation technique, invite responses from the group:

*“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 find out more about swimming dinosaurs.)*

- Direct students to record their goals for the day in their **Labs notebook** using a **pencil**.
- 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 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 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).

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)
- ☒ Labs notebook (from Launch stage; one per student)
- ☒ Pencils (one per student)

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.

- Invite them to review the goals they recorded at the beginning of Lab time in their **Labs notebook**.
- Invite students to open their Labs notebook to “Reflecting on Learning.”
- Ask a reflection question and direct students to the sentence starters at top of the page, giving them 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 getting the clay parts to stay together.)

“How did you get past a difficult obstacle?” (Responses will vary, but may include: I asked someone in my Lab group to help me find a book about carnivores.)

“What is something you want to do better in Lab time tomorrow?” (Responses will vary, but may include: I want to find more objects in our dig!)

“What was your favorite part of the Labs today? Why?” (Responses will vary, but may include: I liked building with blocks the best today.)

- 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.
- Direct students to use a **pencil** to record one reflection from their Labs experience in their Labs notebook.
- 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.).
- Invite students to give a neighbor a high-five and take off their imaginary lab coat and goggles to indicate the end of the Lab experience.



Practice Stage: In the Create Lab

Guiding Question

- How can I create a sculpture of my favorite dinosaur?

Learning Targets

- I can identify the shapes that make a dinosaur.
- I can sculpt the shapes of a dinosaur.

Teaching Notes

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

- Students continue to:
 - Identify the various shapes that make a dinosaur.

- Use clay to create the shapes of a dinosaur.
- Attach clay to create a complete dinosaur.

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:

- During the Practice stage of the Create Lab, perseverance continues to be an important habit of character. Often students have difficulty in working with clay, especially in forming the right shapes or in getting shapes to attach together properly. Students may require multiple attempts and some support from peers and teachers to achieve a greater degree of mastery over this new material.

Logistics:

- During the Practice stage, Lab groups spend 20 minutes in the Create Lab.
- Because the purpose of the Practice stage is to build skill, not to work toward a product, students will not save their work between visits to the Create Lab. All clay should be put back together so students can begin anew with each experience. This will shift during the Choice and Challenge stage.

In advance:

- Prepare the Create Lab by placing pictures, clay, water, toothpicks, and skewers in the Lab space.

Materials

Continued materials:

- ☒ Air-dry clay (class set)
- ☒ Cup of water (one to share)
- ☒ Skewers (several per student)
- ☒ Toothpicks (several per student)

Experience

- Welcome students to the Create Lab!
- Remind students of the work they began in the Launch stage with identifying shapes of dinosaurs, forming those shapes using clay, and using toothpicks and skewers to attach shapes together to create a complete dinosaur.
- Remind students that the work of an artist takes great perseverance. They will not form perfect shapes on the first attempt, and attaching pieces of a sculpture together can be difficult and even frustrating. That is why they are practicing! With each attempt, they will better understand this new material and their sculptures will become more and more beautiful.
- Remind students of the importance of using water throughout the process, as it makes the clay much easier to form and to attach.

- Circulate and support students as they work. Specifically, support them in helping one another overcome obstacles.
- 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 wetting the clay and placing it back in its container. Doing this will keep our materials nice for other students to use.”)
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



Practice Stage: In the Explore Lab

Guiding Question

- What can I learn about paleontology by exploring the tools of a paleontologist?

Learning Targets

- I can learn about paleontology by exploring the tools of a paleontologist.
- I can show respect when using the tools of a paleontologist.

Teaching Notes

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

- Students continue to learn about paleontology by using the tools of a paleontologist in a simulated dig.

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 is key to the success of this Lab, as students are working independently 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.

Logistics:

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

In advance:

- Prepare:
 - Lab space with one or more simulated dig sites. (If each Lab group has its own dig, place the appropriate dig(s) for that day.)
 - Lab space with the tools of a paleontologist (see materials list).

Materials

Continued materials:

- ☑ Chisel (two or three to share)
- ☑ Small hammers (two or three to share)
- ☑ Paintbrushes (variety of sizes; several to share)
- ☑ Toothbrushes (several to share)
- ☑ Tweezers (several to share)
- ☑ Magnifying glasses (several to share)
- ☑ Simulated dig sites (one for teacher modeling and one per Lab group)
- ☑ Labs notebook (from Launch stage; one for teacher modeling and one per student)
- ☑ Trash can (one to share)

Experience

- Welcome students to the Explore Lab!
- Using a total participation technique, invite responses from the group:
 - “What are we exploring in the Explore Lab?” (We are using the tools of a paleontologist. We are finding treasures by using the tools of a paleontologist.)*
 - “What are some tools we are using in the Explore Lab?” (chisels, hammers, paintbrushes, toothbrushes, tweezers, magnifying glasses)*
- Point out the **simulated dig sites** and review the expectations of safely using tools (using them on the dig, not on our friends or bodies; using them as tools, not as toys, etc.). Remind students that one important job of paleontologists is to record their findings.
- Display the Dig Site recording form in the **Labs notebook**.
- Invite students to follow along in their own Labs notebook.
- Review the various sections, or quadrants, on the Dig Site recording form and how to use these four quadrants.
- Remind students of the importance of maintaining a clean Lab space. Students should use the trash can to dispose of plaster and other waste materials as they dig.
- Invite students to transition to the Explore Lab and begin working.
- Circulate and support students as they work, specifically in the safe and productive use of tools.
- Consider asking students questions to support them as they work toward the learning targets. For example:
 - “What have you learned about being a paleontologist?”*
 - “How do you think tools help paleontologists do their job?”*
 - “What tool do you think is the most helpful? Why?”*
 - “What do you think would be difficult about being a paleontologist?”*
- 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 area for Reflecting on Learning.



Practice Stage: In the Imagine Lab

Guiding Question

- How can I use Imagine Lab materials and my imagination to bring our paleontology stories to life?

Learning Targets

- I can reenact paleontology stories using my imagination and materials of the Imagine Lab.
- I can collaborate with others to reenact paleontology stories.

Teaching Notes

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

- Students continue to use a variety of engaging and malleable materials to create an imaginative world of play for themselves and their peers.
- Students continue to use imaginative play materials to retell or reenact familiar, content-connected narratives.

What is new about this stage of this Lab:

- During the Practice stage, students have access to all the various materials in one space. This allows them greater choice in the materials they would like to use, or decide are the most effective to use, in retelling or reenacting familiar, content-connected stories.

Habits of character:

- Collaboration and respect are key to the success of this Lab. Collaboration is required for students to successfully work with others in planning and executing a retelling, or reenactment, of a familiar narrative. Students will need to productively negotiate with one another as they decide which story to reenact, which parts each student will play, and which materials they will use. Respect is central to the way students make decisions productively and fairly, as well as the way they handle and organize materials of the Imagine Lab.

Logistics:

- Similar to the Launch stage, students visit the Imagine Lab with their Lab group. While there, they should decide on a story they would like to reenact (they will have ample time to reenact multiple narratives), which Imagine Lab materials they would like to use in their reenactment, and which students will be responsible for the various roles available.

In advance:

- Prepare the Imagine Lab space with a variety of imaginative play materials (other possible materials might include modeling clay or felt or magnet boards).

Materials

Continued materials:

- ☑ 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)

Experience

- Welcome students to the Imagine Lab!
- Remind students of the primary goal of the Imagine Lab: to work together and use materials of the Imagine Lab to bring beautiful stories to life.
- Using a total participation technique, invite responses from the group:

“What paleontology or fossil stories that we have read might you retell or reenact today?” (Responses will vary based on which texts students have encountered at this point.)
- Choose one of the stories that students offered as an example. Using a total participation technique, invite responses from the group:

“What characters from this story would you include in your reenactment in the Imagine Lab?” (Responses will vary, based on the text chosen.)

“What are the important events of this story that you would need to include, from beginning to end?” (Responses will vary, based on the text chosen.)

“What materials of the Imagine Lab would you like to use to reenact or retell this story?” (Responses will vary, but may include: I would like to use the white board to draw scenes from the story. I would like to use the dress-up clothes to become the characters and act out different parts of the story. I would like to use blocks to build the set, and then use the puppets to act out the story.)
- Give students specific, positive feedback on their ideas and offer more if they struggle to think of a variety of stories or ways to use the materials of the Imagine Lab. (Consider compiling story titles and ideas of how to use materials on a chart for student reference.)
- Remind students that they will have multiple opportunities to act out stories in the Imagine Lab. This means they should be flexible in the story their group chooses, the materials the group chooses, and the role they are given.
- Point out the materials in the Imagine Lab space: **building blocks, white boards, hand or finger puppets, dress-up materials.**
- Invite students to begin working.
- When visiting the Imagine Lab, offer students concrete strategies for working positively and collaboratively with others, specifically providing language that creates a w experience. (For example: “What story would you like to do today? We can choose my idea tomorrow” or “I think that we could use white boards to draw the story; do you have a different idea?”)
- 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 area for Reflecting on Learning.



Practice Stage: In the Research Lab

Guiding Question

- How can I use research skills to learn and wonder about dinosaurs?

Learning Targets

- I can learn new information about dinosaurs using my research materials.
- I can ask questions about dinosaurs based on my research materials.

Teaching Notes

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

- Students continue to use a variety of research materials to discover new information and answer their questions about dinosaurs.

What is new about this stage of this Lab:

- All Research Lab materials will now be in one space, giving students the option of which dinosaur topic they would like to explore during this time.

Habits of character:

- The Research Lab requires both responsibility and collaboration on the part of students. 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:

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

In advance:

- Prepare baskets, each with a set of research materials on a different dinosaur topic:
 - Basket 1: Carnivores
 - Basket 2: Herbivores
 - Basket 3: Swimmers
 - Basket 4: Fliers
- Consider labeling each basket and each material (with words or pictures) to assist students in the proper storage and organization of research materials.

Materials

Continued materials:

- ✓ Labs notebook (from Launch stage; one for teacher modeling and one per student)
- ✓ Baskets of research materials (one basket per dinosaur-related topic; see Teaching Notes)

Experience

- Welcome students to the Research Lab!
- Invite students to turn and talk with an elbow partner:
 - “What is the important work of a researcher?” (A researcher discovers new and interesting information about a topic. A researcher asks important questions about the materials they are studying.)*
 - “How can we help fellow researchers?” (Share new and interesting facts you have learned. Help each other with tricky new words.)*
- Tell students that today they will have 20 minutes in the Research Lab.
- Display the **Labs notebook** and open to the research section. Invite students to do the same.
- Point out the table at the top, with a variety of icons, which is new to the Practice stage.
- Tell students that because all the research materials are now together, they will have a choice about what they want to research. They should choose a topic (carnivores, herbivores, swimmers, or fliers) to research for that day in the Research Lab and circle the icon showing which topic they chose.
- While still displaying the Labs notebook, model how to do this.
- Invite students to look back at some of the questions they recorded during the Launch stage (or previous Practice stage sessions).
- Invite students to turn and talk with an elbow partner:
 - “What is a question you recorded but have not yet found an answer to?” (Responses will vary.)*
 - “Do you have any new questions about dinosaurs that you have not recorded yet?” (Responses will vary.)*
 - “What is one interesting thing you have learned by studying the research material?” (Responses will vary.)*
- Invite a few students to share out.
- Give students specific, positive feedback on their great thinking. (Example: “It is great to hear students sharing specific facts they have learned. That shows that you are looking closely at the research materials.”)
- Point out the **baskets of research materials** within the Lab space and invite students to begin exploring the research materials, learning exciting new information, and asking important new questions!
- As students work, circulate and support them, specifically in the area of respect toward 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: “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 area for Reflecting on Learning.