

Grade 1: Module 3: Labs Overview

Purpose of this document

This document provides a big-picture overview of Labs for Grade 1, Module 3. Specifically, the tables on the following pages outline the guiding questions and targets for each Lab, describe how that Lab connects to students' learning in the module lessons, and explain how each Lab evolves through the four stages (from Launch through Choice and Challenge). A Suggested Day-by-Day Schedule is also included to show how the Labs can unfold over the course of the module.

A brief reminder about the purpose of Labs within EL Education's K–2 Language Arts Curriculum

Labs are an important feature of the K–2 curriculum because they support and extend student learning from the module lessons. They are designed to help teachers ensure that *all* of their students get the time to build content knowledge, become immersed in oral language, play and explore, and practice skills and habits of character they need—both to live joyfully and to be fully successful and proficient.

Labs are one hour long and support the module lessons. These two hours of content-based literacy instruction are complementary, working together to accelerate the achievement of all students.

A few considerations when planning Labs for any given module

- You don't necessarily have to run all four Labs. Ask yourself:
 - Is the work in a particular Lab critical scaffolding for the module performance task (in terms of either a literacy standard such as narrative writing or developing skills such as scientific drawing)? If so, don't omit this Lab!
 - Would students be more successful with more limited choices?
 - Are students already doing something similar in a STEM or art class?
 - Can you access or modify all of the required materials? (See the Labs Supplemental Materials List in the front matter.)
- You can modify Labs to incorporate more writing. Ask yourself:
 - Would students benefit from formally writing up their learning and notes from the Research Lab?
 - Would students benefit from writing more narratives in the Imagine Lab?
 - Would students benefit from more formal written reflection, particularly during the Choice and Challenge stage?

- You can flex your weekly or daily schedule based on student needs, accessibility of materials, and time available. See the Day-by-Day Schedule at the end of this document. Ask yourself:
 - Do students need more or less time in a given Lab based on evidence I have gathered in previous Labs or in the module lessons?

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
CREATE LAB	Learning Target:	Learning Target:	Learning Target:	Learning Targets:
Guiding Question: How can I create a sculpture of a bird that shows the form and function of its body parts?	I can sculpt the beak, wings, and feet of a mallard duck.	I can sculpt the beak, wings, and feet of a mallard duck.	I can create a complete sculpture of a mallard duck.	<ul style="list-style-type: none"> • I can create a sculpture of a bird for which I am an expert. • I can explain how the body parts I sculpted help the bird to survive.
Summary of Lab: In the Create Lab, students use a variety of materials and skills to create a realistic three-dimensional sculpture of a bird. Through a carefully scaffolded sequence, students first learn to sculpt specific parts of a mallard duck and then transfer their artistic skills as they create a sculpture of a chosen expert bird.	Purpose of Launch Stage: <ul style="list-style-type: none"> • Students examine pictures of the parts of a mallard duck, working together to identify the various shapes and details that make these parts. • Students explore with clay, attempting to sculpt the various shapes and add details of mallard duck parts. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students have a greater degree of independence, both in their work in the Lab and in their movement during Lab time. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students apply their knowledge of sculpting separate body parts as they complete a sculpture of a whole mallard duck. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students use all they have learned about sculpting with clay to create a sculpture of a new bird, ideally the bird they are focused on in their expert groups during the module lessons. • Students use all of the tools as sculptors, the Bird Sculpture Criteria List anchor chart, and peer feedback to complete a final sculpture. • Students are challenged to explain how the various parts of their bird's body work to help the bird survive.
Connection to Module Lessons: Students use their knowledge of bird body parts and their function (from Module 3) to help design and create their bird sculptures.				

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	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
ENGINEER LAB	Learning Target:	Learning Target:	Learning Target:	Learning Target:
Guiding Question: How can I use my knowledge of birds to design a solution to a human problem?	I can match human inventions to different animal forms and functions.	I can match human inventions to different animal forms and functions.	I can design a solution to a human problem based on birds' feathers and their function.	I can design a solution to a human problem based on birds' feathers, beaks, or feet and their function.
Summary of Lab: In the Engineer Lab, students use their knowledge of the function of bird body parts, specifically feathers, beaks, and feet, to design solutions to human problems. The Engineer Lab connects to Next Generation Science Standard 1-LS1-1. Students focus on the following science and engineering practice: <i>Use materials to design a device that solves a specific problem or a solution to a specific problem.</i> Students focus on the following cross-cutting concept: <i>Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world.</i>	Purpose of Launch Stage: <ul style="list-style-type: none"> To help students understand the connection between natural phenomenon and human invention. To build background knowledge around various examples of biomimicry. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students have a greater degree of independence, both in their work in the Lab and in their movement during Lab time. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students use birds' bodies, specifically their feathers, as inspiration in designing a solution to a human problem. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students are no longer restricted to the feathers of birds, but instead may use the form and function of multiple body parts (feathers, beaks, or feet) as their inspiration for a challenge.
Connection to Module Lessons: Students apply learning from the module lessons about how birds use their bodies to survive as they design solutions to human problems.				
EXPLORE LAB	Learning Target:	Learning Target:	Learning Target:	Learning Target:
Guiding Question: How can I learn more about birds by exploring the properties of different bird parts?	I can learn about birds' bones by building with hollow materials.	I can learn about birds' bones by building with hollow materials.	I can complete a series of beak challenges to learn more about birds' beaks.	The Explore Lab does not go to the Choice and Challenge stage in this module.

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
Summary of Lab: In the Explore Lab, students learn more about bird bones and beaks as they engage in a series of challenges using materials that simulate these specific parts of birds.	Purpose of Launch Stage: <ul style="list-style-type: none"> Students are introduced to the purpose and materials of the Explore Lab. Students work together to answer the question “Can hollow materials be both light and strong?” 	New in This Stage of the Lab: <ul style="list-style-type: none"> As opposed to being limited to a single challenge or a single type of structure, students design and build one structure of their choice, or a variety of them, limited only by the use of hollow materials. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students engage in a series of challenges related to beaks. Specifically, they explore which beak “is best for the job” when accessing and collecting different types of food. 	
Connection to Module Lessons: In the module lessons, students have a basic understanding of birds’ bones, but this Lab expands on this learning. The beak challenges in the Explore Lab are an extension of similar beak challenges presented to students in the module lessons.				
IMAGINE LAB	Learning Targets:	Learning Targets:	Learning Targets:	Learning Targets:
Guiding Question: How can I use poetry and movement to learn more about birds?	<ul style="list-style-type: none"> I can build knowledge about birds through poetry. I can improve my reading fluency by reading poetry aloud. I can create movement to match poetry about birds. 	<ul style="list-style-type: none"> I can build knowledge about birds through poetry. I can improve my reading fluency by reading poetry aloud. I can create movement to match poetry about birds. 	<ul style="list-style-type: none"> I can build knowledge about birds through poetry. I can improve my reading fluency by reading poetry aloud. I can create movement to match poetry about birds. 	<ul style="list-style-type: none"> I can build knowledge about birds through poetry. I can improve my reading fluency by reading poetry aloud. I can create movement to match poetry about birds.
Summary of Lab: In the Imagine Lab, students learn more about birds through a study of poetry. Specifically, students practice reading poetry fluently and use movement to represent what they learn about birds and their body parts.	Purpose of Launch Stage: <ul style="list-style-type: none"> Provide students the time, space, and materials to create a world of imaginative play. Recall that guided play is most successful when students have greater ownership over the experience after the teacher has established the purpose and expectations. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students have access to all of the poems as well as the continued imaginative materials in one space, allowing them greater choice, independence, and responsibility. 	New in This Stage of the Lab: <ul style="list-style-type: none"> N/A 	New in This Stage of the Lab: <ul style="list-style-type: none"> N/A
Connection to Module Lessons: Students read various informational texts about birds and their body parts. A working knowledge of this content supports students as they engage in poetic expression of them.				

Suggested Day-by-Day Schedule for Grade 1, Module 3

Please note that this is a *recommended* schedule for implementing Labs in Module 3. Teachers may modify this schedule based on student needs, accessibility of materials, and time available. (For example, teachers may decide to launch the Labs in a different order, open only two Labs each day of the Practice stage, or add time to a particular stage if students need more time to meet the targets.) As adjustments are made, the key is to keep the overall purpose of Labs in mind.

Labs: Day-by-Day Schedule

Labs comprise five components: Create Lab, Engineer Lab, Explore Lab, Imagine Lab, and Research Lab. However, to help scaffold student experience and support teachers in materials management, a maximum of four Labs are running during any given time.

Day	Rotation	Create Lab	Engineer Lab	Explore Lab	Imagine Lab
Day 1 Launch		All Students			
Day 2 Launch			All Students		
Day 3 Launch				All Students	
Day 4 Launch					All Students
Day 5 Practice	In the Lab, Part I	Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
	In the Lab, Part II	Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 6 Practice	In the Lab, Part I	Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
	In the Lab, Part II	Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 7 Practice	In the Lab, Part I	Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
	In the Lab, Part II	Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 8 Practice	In the Lab, Part I	Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
	In the Lab, Part II	Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 9 Practice	In the Lab, Part I	Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
	In the Lab, Part II	Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 10 Practice	In the Lab, Part I	Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
	In the Lab, Part II	Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 11 Extend Transition		All Students			All Students
Day 12 Extend Transition			All Students	All Students	

Day	Rotation	Create Lab	Engineer Lab	Explore Lab	Imagine Lab
Day 13 Extend	In the Lab, Part I	Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
	In the Lab, Part II	Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 14 Extend	In the Lab, Part I	Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
	In the Lab, Part II	Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 15 Extend	In the Lab, Part I	Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
	In the Lab, Part II	Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 16 Extend	In the Lab, Part I	Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
	In the Lab, Part II	Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 17 Extend	In the Lab, Part I	Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
	In the Lab, Part II	Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 18 Extend	In the Lab, Part I	Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
	In the Lab, Part II	Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 19 Extend		Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
		Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 20 Extend		Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
		Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 21 Extend		Lab Group 1	Lab Group 2	Lab Group 3	Lab Group 4
		Lab Group 4	Lab Group 3	Lab Group 2	Lab Group 1
Day 22 Extend		Lab Group 2	Lab Group 1	Lab Group 4	Lab Group 3
		Lab Group 3	Lab Group 4	Lab Group 1	Lab Group 2
Day 23 Choice/Challenge Transition	In the Lab, Part I	Create Lab Students		Engineer Lab Students	
	In the Lab, Part II		Engineer Lab Students	Create Lab Students	
Day 24 Choice/Challenge	In the Lab, Part I	Create Lab Students		Engineer Lab Students	
	In the Lab, Part II		Engineer Lab Students	Create Lab Students	