

Kindergarten: Module 3: Labs

Teacher Guide

Kindergarten: Module 3:

Labs Overview

Purpose of this document

This document provides a big-picture overview of *Labs* for Grade K, 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 Target:
Guiding Question: How can I create a collage that shows multiple parts of a plant?	I can create collages of leaves.	I can create collages of leaves.	I can create collages of flowers.	I can create a collage of a complete plant.
Summary of Lab: In the Create Lab, students create paper collages of plants to demonstrate their growing skills as artists and scientists. Through a carefully planned sequence of experiences, students first learn to collage leaves of plants and then deepen their craft as they create a multi-layered collage of an entire plant.	Purpose of Launch Stage: <ul style="list-style-type: none"> • Students closely examine the art of collage and practice collaging a leaf of their choice. • Students explore how to create the various shapes and textures by tearing, cutting, and layering construction paper onto a template. 	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. • Students continue to create a variety of paper collage leaves. The choice of leaf templates, shades of green, and use of tearing or scissors will allow for further practice. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students apply their knowledge of plants and their skill of layering to collage a flower with all of the parts (e.g., stem, petals, leaves). • Students' collages go beyond layering and collaging with a single color; they include a variety of colors selected to accurately layer and cover the different parts of the plants. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students complete a final paper collage of a complete plant using all of the collage skills, the Paper Plant Collage Criteria List anchor chart, and peer feedback.
Connection to Module Lessons: Students build skill in the art of collage, which will be applied during the creation of the module performance task.				

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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 create a storyboard that shows the life of a plant?	I can sketch a stage of plant growth.	I can sketch a stage of plant growth.	I can revise my sketches of plant growth.	I can create a storyboard that shows the life cycle of a plant.
Summary of Lab: This Engineer Lab connects to Next Generation Science Standard KLS-1. While creating a storyboard to show the life cycle of a plant, students focus on the following science and engineering practice: <i>Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s).</i>	Purpose of Launch Stage: <ul style="list-style-type: none"> Students are introduced to the purpose and the materials they will use in the Engineer Lab. Students build background knowledge about the idea of plant parts and the life cycle of plants. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students build upon their understanding of plant growth as they prepare for the creation of the final life cycle of a plant storyboard by beginning to sketch the different stages of plant growth. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students revise their sketches of the stages of plant growth to prepare for the final product: a life cycle of a plant storyboard. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students use their revised sketches, the Life Cycle of a Plant Storyboard Criteria List anchor chart, Life of a Plant Storyboard template, and peer feedback to complete their Life of a Plant Storyboard.
Connection to Module Lessons: Students extend their knowledge of what plants need to live and grow to understand what happens as a plant cycles through life.				

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
EXPLORE LAB	Learning Targets:	Learning Targets:	Learning Targets:	
Guiding Question: How can I use the skills of a plant scientist to learn about plants?	<ul style="list-style-type: none"> I can use my senses to learn about plants. I can use the tools of a plant scientist to learn about plants. 	<ul style="list-style-type: none"> I can use my senses to learn about plants. I can use the tools of a plant scientist to learn about plants. 	<ul style="list-style-type: none"> I can use my senses to learn about plants. I can use the tools of a plant scientist to learn about plants. 	<p>The Explore Lab does not go to the Choice and Challenge stage in this module.</p>
Summary of Lab: In the Explore Lab, students use a variety of tools and a Checklist for Our Class Garden to study classroom plants and what they need to grow and be healthy. Specifically, students observe and gather data on plant parts, water use, and growth.	Purpose of Launch Stage: <ul style="list-style-type: none"> Students are introduced to the purpose and materials of the Explore Lab. Students engage in an exploration of plants, how they change and grow, and what they, as plant scientists, can do to help the growth of plants. 	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. Students are introduced to the Checklist for Our Class Garden, with which they will begin completing challenges from the checklist and recording their observations. 	New in This Stage of the Lab: <ul style="list-style-type: none"> Students build upon their knowledge of plants and how they change and grow by trying new challenges and tracking new discoveries with the Checklist for Our Class Garden. 	
Connection to Module Lessons: Students use their knowledge of what living things need to grow and survive, built through reading, writing, and discussing during the module lessons, and apply it to the plants that the class grows.				

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
IMAGINE LAB	Learning Target:	Learning Target:	Learning Target:	Learning Target:
Guiding Question: How can I use movement to better understand living things?	I can use movement to represent plants as living things.	I can use movement to represent plants as living things.	I can use movement to represent animals as living things.	I can use movement to show how animals depend on plants.
Summary of Lab: In the Imagine Lab, students use movement to represent plants, animals, and the interaction between the two. They use their imaginations and work with their Lab groups to create masks, build sets, dress up, and pretend to be the living things.	Purpose of Launch Stage: <ul style="list-style-type: none"> • Similar to Modules 1–2, the Imagine Lab continues to 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. • In this module, the Imagine Lab becomes a more guided experience, as students use movement to represent what they learn about living things. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students have access to the various materials in one space, allowing them greater choice. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students are invited to use movement to represent different animals. They have the option to create an animal mask to wear while representing the animal through movement. 	New in This Stage of the Lab: <ul style="list-style-type: none"> • Students are challenged to combine their movements for plants and animals to create a scene that shows how animals depend on plants, specifically trees, to meet their needs.
Connection to Module Lessons: Students use information and knowledge gained from reading about, writing about, and discussing how living things are interconnected and dependent to demonstrate the interactions that living things might have with one another.				

Suggested Day-by-Day Schedule for Grade K, 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

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	

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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

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Day	Rotation	Create Lab	Engineer Lab	Explore Lab	Imagine Lab
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	
Day 25 Choice/Challenge	In the Lab, Part I	Create Lab Students		Engineer Lab Students	
	In the Lab, Part II		Engineer Lab Students	Create Lab Students	
Day 26 Choice/Challenge					
Day 27 Choice/Challenge Feedback Day	In the Lab, Part I	Create Lab Students		Engineer Lab Students	
	In the Lab, Part II		Engineer Lab Students	Create Lab Students	
Day 28 Choice/Challenge Addressing Feedback	In the Lab, Part I	Create Lab Students		Engineer Lab Students	
	In the Lab, Part II		Engineer Lab Students	Create Lab Students	
Day 29 Choice/Challenge Prepare to Share	In the Lab, Part I	Create Lab Students		Engineer Lab Students	
	In the Lab, Part II		Engineer Lab Students	Create Lab Students	
Day 30 Choice/Challenge Celebrate	All Students				