Kindergarten: Module 4: Labs

Teacher Guide

Kindergarten: Module 4: Labs Overview

Purpose of this document

This document provides a big-picture overview of *Labs* for Grade K, Module 4. 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 three-dimensional (3-D) representation of a tree?	I can use a variety of materials to create a tree trunk and branches.	I can use a variety of materials to create a tree trunk and branches.	I can use a variety of papers to create a tree trunk, branches, and leaves.	• I can choose my favorite materials to make a 3-D tree. • I can create my best 3-D tree.
Summary of Lab: In the Create Lab, students use a variety of materials and explore various techniques to create a 3-D representation of a tree. Through a carefully scaffolded sequence, students first create tree trunks and branches, then leaves, and finally they put all the parts together to build a complete, high-quality tree.	**Purpose of Launch Stage:** • Students closely examine different materials for 3-D art and practice making 3-D trees. • Students explore how to use a combination of Play-Doh, real parts of trees and plants, and paper leaves to create 3-D representations of trees.	**New in This Stage of the Lab:** • Students have a greater degree of independence, both in their work in the Lab and in their movement during Lab time. • Students continue to practice creating 3-D trees.	**New in This Stage of the Lab:** • Students experiment with using a variety of paper products, both recycled and new, to mold 3-D representations of trees, including the tree parts: trunk, branches, and leaves. • Students use more liquid glue and scissors to help create the 3-D trees.	**New in This Stage of the Lab:** • Students use all they have learned about creating a 3-D representation of a tree to make a final product of a 3-D tree using Play-Doh or paper products. • Students make a plan to decide which materials they will use before creating the 3-D tree. • Students use all their 3-D art skills, the 3-D Tree Criteria List anchor chart, and peer feedback to complete a final 3-D tree.
Connection to Module Lessons: Students use their knowledge of trees and their parts (from Module 3) to help design and create their three-dimensional representation of a tree.				

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
ENGINEER LAB	**Learning Targets:**	**Learning Targets:**	**Learning Target:**	**Learning Target:**
Guiding Question: How can I use trees to design a forest play space?	• I can describe a variety of play activities and the parts of a play space. • I can collaborate to design a forest play space.	• I can describe a variety of play activities and the parts of a play space. • I can collaborate to design a forest play space.	I can create a final version of my own forest play space.	I can build a model of one element of my forest play space.
Summary of Lab: This Engineer Lab connects to Next Generation Science Standard KLS-1. While designing a model of a forest play space, students "develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s)." In the Launch, Practice, and Extend stages, students create two-dimensional forest play spaces. In the Choice and Challenge stage, students build a 3-D tree and incorporate at least one play element.	**Purpose of Launch Stage:** • Students build background knowledge about the idea of playing in and around trees. • Students brainstorm different ways kids can play in and around trees and work with a partner to create designs. • Because the Launch stage is open-ended, some students may opt to color, cut, and paste the play elements into the forest. Other students may use this and a combination of drawing. Finally, some students may choose to simply use the templates as a guide and draw their play space themselves.	**New in This Stage of the Lab:** • Students build upon their understanding of parts of a play structure and how they might realistically be used in and around trees. They do this as they prepare for the creation of a model of an aspect of their forest play space design.	**New in This Stage of the Lab:** • Students work independently to plan a final forest play space. Students then have the option to create a model of this play space during the Choice and Challenge stage.	**New in This Stage of the Lab:** • Students use the forest scenes, the 3-D Forest Play Space Criteria List anchor chart, and peer feedback to complete their 3-D forest play space model.
Connection to Module Lessons: Students apply learning from the module lessons about how people interact with and enjoy trees as they design a place to play among a forest of trees.				

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
RESEARCH LAB	**Learning Target:**	**Learning Target:**	**Learning Target:**	
Guiding Question: How can I discover more about the trees near me?	I can use a variety of resources and research reading strategies to learn about the trees near me.	I can use a variety of resources and research reading strategies to learn about the trees near me.	I can create a survey to learn more about the trees near me.	The Research Lab does not go to the Choice and Challenge stage in this module.
Summary of Lab: In the Research Lab, students apply their research skills and use a variety of resources (realia, images, texts, and technology) to learn more about local trees. After researching the trees, students create surveys to learn more about how the people in their school community interact with those trees. Students then analyze the data from their surveys.	**Purpose of Launch Stage:** • Students are introduced to the purpose and materials they will use in the Lab. • Students begin researching different trees in their school and neighborhood community by looking closely at different tree parts and materials.	**New in This Stage of the Lab:** • All Research Lab materials are now in one space, giving students the option of which local tree they would like to explore during this time.	**New in This Stage of the Lab:** • Students focus their line of inquiry and research on a specific question and collect data and information from the school community.	
Connection to Module Lessons: In the module lessons, students study how and why trees are important to communities in a broad way. Students extend their learning about how and why trees are important to communities and apply it by studying trees specific to their local context.				
IMAGINE LAB	**Learning Target:**	**Learning Target:**	**Learning Target:**	**Learning Target:**
Guiding Question: How can I create an imaginative world of play within the trees of my classroom?	I can help create an imaginary forest.	I can help create an imaginary forest.	I can create a world of play within our imaginary forest.	I can collaborate to create and act out a story about something that people do in the forest.

	Launch Stage	Practice Stage	Extend Stage	Choice and Challenge Stage
Summary of Lab: Similar to Modules 1–3, the Imagine Lab continues to be a time for students to create a world of imaginative play. In this module, students do this by creating an imaginary forest in their classroom. Students later use their make-believe space, props, and costumes to role-play how people interact with the forest.	**Purpose of Launch Stage:** • Students begin the process of actually "building" the physical world of play they will be using.	**New in This Stage of the Lab:** • Students have access to the various materials in one space, allowing them greater choice.	**New in This Stage of the Lab:** • Students are invited to use their imaginations to enjoy the classroom forest space they created. • Students can dramatically express all that they know about trees and how people interact with and enjoy trees.	**New in This Stage of the Lab:** • Students continue to collaborate in a world of imaginative play while using props and costumes to play in the classroom forest. • Students are invited to focus their play by choosing a play scenario, assigning characters, negotiating a storyline, and rehearsing for an audience.
Connection to Module Lessons: In the module lessons, students learn how people enjoy and appreciate trees. In this Lab, they directly use that knowledge to demonstrate the many ways they might interact with trees in a forest.				

Suggested Day-by-Day Schedule for Grade K, Module 4

Please note that this is a *recommended* schedule for implementing Labs in Module 4. 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	Research 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	Research 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	Rotation	Create Lab	Engineer Lab	Research 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				