

**Kindergarten:** Module 1: Labs

# 1 – Launch Stage

## Labs: Launch Stage

### Days 1–4

Each of the Labs unfolds across an entire module and takes place in four stages: Launch, Practice, Extend, and Choice and Challenge.

1. The Launch stage serves four purposes:

- To introduce and practice the Lab schedule and routines and lay the groundwork for the habits of character that students will practice in each Lab.
- To orient students to the purpose, guiding questions, and materials of each of the Labs for this module.
- To establish expectations for each Lab.
- To build a sense of wonder and excitement around each Lab. Students should be filled with anticipation, questions, and ideas as they continue on to the next, more independent stages of the Labs.

Each Lab launches with a whole group experience on a separate day, so students can experience a full immersion into each Lab.

During their Lab time, students break up into smaller groups and go to separate work stations (tables or other workspaces around the classroom).

This structure creates a small collaborative atmosphere in which students will work throughout their Labs experience. It also supports the management of materials (since each work station has its own materials).

The chart below 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. In contrast, the learning target(s) become more refined and precise from stage to stage.)*



### Launch Stage: At-a-Glance

#### Guiding Question

##### Create Lab

How can I use shapes, details, and size to draw a toy?

##### Engineer Lab

How can I use everyday materials and my imagination to create a toy?

##### Explore Lab

How are toys the same and different?

##### Imagine Lab

How can I use my imagination to create a world of play for myself and others?

## Learning Target(s)

**Create Lab**

I can identify shapes in a toy.  
I can use shapes to draw a toy.

**Engineer Lab**

I can use everyday materials and my imagination to create a toy.

**Explore Lab**

I can ask questions about toy attributes to discover the “mystery toy.”

**Imagine Lab**

I can show respect for Lab materials and my peers.

## Ongoing Assessment

**Create Lab**

Create Lab Checklist (SL.K.1a, SL.K.1b, SL.K.3, SL.K.5, SL.K.6)

**Engineer Lab**

Engineer Lab Checklist (SL.K.1a, SL.K.1b, SL.K.3, SL.K.6)

**Explore Lab**

Explore Lab Checklist (SL.K.1a, SL.K.1b, SL.K.3, SL.K.6)

**Imagine Lab**

Imagine Lab Checklist (SL.K.1a, SL.K.1b, SL.K.3, SL.K.6)

Labs are one hour long in all four stages. During the Launch 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

**Launch Stage: Storytime****10 MINUTES**

This section provides a brief lesson plan for read-alouds during Labs. Storytime remains identical during all four stages of Labs. Refer back to this section across all four stages.

**Teaching Notes****Purpose:**

- The purpose and structure of Storytime remains identical across all four stages of the Labs and can include a read-aloud of a text or an oral storytelling experience:
  - To increase the time students encounter complex text through read-alouds.
  - To build students' understanding of the structure of narrative and informational texts through read-aloud and oral storytelling.
  - To connect to the content of the Labs (and module), as well as to the habits of character that students practice during Labs.
- Students benefit from seeing the text when it is read aloud. Consider displaying the text with a document camera. This is particularly essential if the illustrations are important or beautiful.
- Some students may benefit from time to verbally process a story as it is being read. Consider using discussion protocols, such as Turn and Talk, to allow them time to verbalize their understanding of stories. Do this judiciously, however; note that Storytime is only 10 minutes.
- During the Launch stage, choose texts that meet these criteria:
  - Support students' understanding of shapes.
  - Illustrate ways that imagination and perseverance can transform something ordinary (materials, spaces, etc.) into something extraordinary.
  - Include a character (fictional or real) who is learning about or demonstrating responsibility.

**In advance:**

- Choose a text from your own classroom library or the Recommended Texts and Other Resources list (stand-alone document).
- Consider creating a focus question for Storytime (see example in the Experience section below).
- Create four heterogeneous Lab groups. Seat students in their Lab groups during Storytime and Setting Lab Goals for easier transitions and more focused discussions. Consider keeping the same Lab groups through the Launch, Practice, and Extend stages of Labs for this module.
- Post: Focus question (optional).
- Review the Labs song.

**Materials**

- ✓ Labs song (one to display; see supporting materials)
- ✓ 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 Labs. (Examples: “While I read this story aloud, think about ways in which the characters collaborate, or work together,” or, “While I read this story aloud, think about this question: How does the main character turn an ordinary object into a toy of his/her own?”)
- Read aloud the text for Storytime slowly, fluently, and without interruption.

**Launch Stage: Setting Lab Goals****5 MINUTES****Teaching Notes****Purpose:**

- Setting Lab Goals is a time to activate and reinforce students’ executive functioning skills: focusing their attention; making a plan for their time; exhibiting self-regulation; and following instructions. All students, especially primary learners, need to learn and practice the behaviors associated with executive functioning.
- Consider using visual displays (anchor charts, Labs schedule, daily agenda, etc.) to support students in understanding and remembering where they are going that day and what is expected of them once they arrive.

**In advance:**

- Post: Guiding question and learning target(s) for the Lab students will be launching that day (see detailed plans for each Lab below).
- Review the Labs song.

**Materials**

- ☑ Learning target(s) (one to display; for each Lab; see Launch Stage: At-a-Glance for the specific targets for each Lab).

**Experience**

- Briefly introduce the Lab that the class will launch today.
- Ask students to Think-Pair-Share something they already know about the name of that Lab to help build background knowledge. (Examples: “Today we are launching the Engineer Lab. What do you already know about engineers?” or “Today we are launching the Imagine Lab. What does it mean to imagine?”)
- Tell students they will be working in small groups called Lab groups, and today all groups will work on the same task. Students should already be seated in their Lab groups so they can begin to remember who they will be working and moving with during Labs.

- Share the **learning target(s)** for the Lab the class is focused on today. Ask students to turn and talk about each of these questions with an elbow partner:
  - \* *“What do you think you will be doing in today’s Lab?”*
  - \* *“How can you show respect for materials?”*
  - \* *“How can you show respect for other students in your group?”*
- 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!

### Launch Stage: In the Lab

40 MINUTES

- Refer to the In the Lab section on the following pages for detailed plans on each specific Lab.

### Launch Stage: Reflecting on Learning

5 MINUTES

#### Teaching Notes

##### Purpose:

- The reflection portion of Labs serves as a bookend to Setting Lab Goals. Students both recall how they spent their time in the Lab and reflect on their experience in the Lab.
- This cycle of goal-setting and reflecting leads to greater intentionality by students as well as a sense of ownership in their learning.
- Students will have varying levels of experience with reflection. For those who may need additional support: Consider using predictable structures of reflection (such as protocols) and familiar sentence frames to support English language learners.

##### In advance:

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

#### Experience

- Gather students back together 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.
- Ask a reflection question, giving students 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 Lab today?” (Responses will vary but may include: I helped clean up my workstations.)*
  - \* *“What is something you struggled with in the Lab today?” (Responses will vary but may include: I could not figure out how to finish my toy in the Engineer Lab.)*
  - \* *“How did you get past a difficult obstacle?” (Responses will vary but may include: I asked a friend to help me when I could not tie the string.)*

- \* *“What is something you want to do better in Lab time tomorrow?” (Responses will vary but may include: I want to be able to finish the toy I am building.)*
- \* *“What was your favorite part of the Lab today? Why?” (Responses will vary but may include: I loved finding the mystery toy.)*

- 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.
- 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.).



## Launch Stage: In the Create Lab

### Guiding Question

- How can I use shapes, details, and size to draw a toy?

### Learning Targets

*I can identify shapes in a toy.*

*I can use shapes to draw a toy.*

### Teaching Notes

#### Purpose:

- In the Create Lab, the Launch stage serves two purposes:
  - Students recognize the various shapes that make a toy.
  - Students become familiar with the materials they will use in the Create Lab.

#### Habits of character:

- The Create Lab intentionally avoids the use of some traditional drawing supports, such as stencils or tracing materials. Instead, students create their own “Artist’s Toolbelt” of skills. This promotes their independence and self-efficacy as artists and learners.
- During the Launch stage of the Create Lab, students build the habit of character of perseverance as they work through multiple drafts of their drawings.

#### Logistics:

- During the Launch stage of the Create Lab, Lab groups visit two different workstations for 20 minutes each.

#### In advance:

- Prepare four workstations by placing pencils, shapes cards, and a toy at each workstation for students to draw toys (see materials list).
- Consider labeling each workstation with a name or number to assist students in transitioning from one to the next.

- Gather a variety of toys, such as stuffed animals, cars, and building toys. (Consider using toys already available from module lessons.)
- Determine the signal (bell, word, silent signal) you will use throughout Labs to let students know when it is time to clean up their station.

### Materials

- ✓ Shapes card (one per pair, see supporting materials)
- ✓ Paper (two blank sheets per student)
- ✓ Pencils (one per student or a cup of pencils per workstation)
- ✓ Toys (one per workstation; see Teaching Notes)

### Experience

- Tell students that in the Create Lab, they will build their own “Artist’s Toolbelt.” This is not a real belt that they wear, but it is a set of skills that artists have to help them create beautiful art.
- Pretend to put on your own imaginary toolbelt and invite students to dramatically do the same with you.
- Tell students that the first tool artists add to their toolbelt is shapes.
- Pretend to hold the idea of “shapes” in your hand and add it to your toolbelt. Invite students to do the same.
- Ask students to work with an elbow partner to list all the shapes they already know.
- Share several examples whole group.
- Introduce students to the **shapes card**. Tell them they can use this to help them identify (name) shapes, as well as to help them draw shapes. Review each shape on the shapes card.
- Direct students’ attention to the four workstations around the room.
- Direct students’ attention to the materials at each workstation: **paper, pencils, and toys**. Remind them that the toys are serving as their model for drawing and are not to be played with during this time.
- Tell students they will be traveling with their Lab groups to two different workstations today, and they will spend 20 minutes at each station.
- Explain that when students arrive at a workstation, they will first work with a partner to look at the toy very closely to identify all the shapes they see. Then, using these shapes, they will each draw the toy on paper.
- Consider modeling this process, working with a student volunteer and with a toy that is not already at one of the workstations.
- Tell students you will use a signal (bell, word, silent signal) to let them know when it is time to clean up their station. Then you will use the signal again when it is time to move to a new workstation.
- Consider inviting students to model this process, and then practice it as a whole class. (It will be important for students to internalize this routine as they move on in the Labs experience.)
- Assign each Lab group to one of the workstations.
- Invite students to begin working.



- Circulate and support students as they work, identifying shapes and including those shapes in their drawings.
- After 18 minutes, signal for cleanup.
- After 2 minutes, signal for students to rotate to a new station, reminding them to use the back of their paper for the next drawing.
- Repeat this process so that each Lab group visits two different workstations.
- 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: “I love that I see this Lab group neatly putting away their papers so they can continue working on them later.”)
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



## Launch Stage: In the Engineer Lab

### Guiding Question

- How can I use everyday materials and my imagination to create a toy?

### Learning Target

*I can use everyday materials and my imagination to create a toy.*

### Teaching Notes

#### Purpose:

- In the Engineer Lab, the Launch stage lets students explore “found” or everyday materials they will use to create their own toy.

#### Habits of character:

- For students who may need additional support or feel “stuck” right out of the gate, gently remind them that their main goal today is to simply try out the materials and persevere. Consider printing pictures of a variety of toys and placing them at workstations to help students generate ideas.

#### Logistics:

- During the Launch stage of the Engineer Lab, students work in their Lab groups at one workstation for 40 minutes.

#### In advance:

- Post Learning Targets.
- Prepare workstations by placing paper, tape, string, and scissors at each workstation for students to design and build a toy of their own (see materials).

- Consider:
  - Pre-cutting cardboard that may be too thick for student-friendly scissors in a variety of sizes or shapes.
  - Providing tape dispensers for easier student use.
  - How to store students' projects, since some students may continue to work on the same toys for several days or weeks.

### Materials

- ☑ Cardboard (various sizes; two or three pieces per student)
- ☑ Paper (various types, colors, and sizes; several blank pieces per student)
- ☑ Tape (one roll per workstation or pre-cut 6-inch strips)
- ☑ String (one roll per workstation or pre-cut 12-inch strips)
- ☑ Scissors (one per pair)

### Experience

- Invite students to close their eyes and picture their favorite toy, or a toy they wish they had, and to give a silent signal when they have it in their minds.
- Ask students to turn and talk with an elbow partner:
  - \* ***“What toy were you thinking about? Why is it your favorite/why do you wish you had it?”***
- Remind students of the learning target for this Lab.
- Tell students that in the Engineer Lab, they will think a lot about what makes a really great toy, and then they will design and build a toy of their own.
- Direct students' attention to the workstations around the room.
- Direct students' attention to the materials at each workstation: **cardboard, paper, tape, string, and scissors.**
- Tell students they will travel with their Lab groups to one workstation today, and the materials in the workstation should be shared among all the members of their Lab group.
- Using a total participation technique, invite responses from the group:
  - \* ***“What does it look like to be fair when sharing materials? What does it sound like to be fair when sharing materials?” (Example: “Students are passing materials to each other.” “Students are saying ‘please’ and ‘thank you.’”)***
- Remind students of the rules that help them stay safe when using scissors.
- Direct their attention back to the learning target and read it aloud:
  - \* ***“I can use everyday materials and my imagination to create a toy.”***
- Using a total participation technique, invite responses from the group:
  - \* ***“What is the very important tool you will be using today that we cannot see and that I cannot hold in my hands?” (imagination)***
- Guide students to understand that imagination is perhaps the most important tool of a toy engineer.
- Consider telling students that the only limitation for their toy is that it must be able to fit on their desktop (or within the constraints of their storage area).

- Direct each Lab group to their workstation for the day.
- Invite students to begin working.
- As they work, remind students that they do not need to finish their toy today. They will return to the Engineer Lab many times over the next days and weeks.
- Circulate and support students as they work, focusing on their sharing and caring for materials.
- 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: “I notice this Lab group is handling each material carefully as they put it away. This keeps the materials in good shape for the next group that works here.”)
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



## Launch Stage: In the Explore Lab

### Guiding Question

- How are toys the same and different?

### Learning Target

*I can ask questions about toy attributes to discover the “mystery toy.”*

### Teaching Notes

#### Purpose:

- In the Explore Lab, the Launch stage helps students build or reinforce a conceptual understanding of toy attributes and the vocabulary of the various attributes of toys.

#### Habits of character:

- During the Launch stage of the Explore Lab, students work in their Lab groups to play a game. This will require intentional instruction and support in collaboration.

#### Logistics:

- After modeling and practicing the Mystery Toy game as a whole group, students spend the remainder of the Lab time with their Lab group at one workstation.
- For students who may need additional support: Consider providing two or three specific questions they might ask during the game. (Example: “Is the toy blue?” or “Does the toy roll?”)

#### In advance:

- Prepare the Toy Attribute cards (see supporting materials).

- Gather a variety of toys, such as stuffed animals, cars, and building toys. (Consider using toys already available from module lessons.) Choose three or four toys to use for teacher modeling. The toys should have some similar and some different attributes.
- Choose a “marker” that students will use to distinguish the mystery toy. For example, the marker can be a square of colored paper.
- Prepare workstations by placing markers, Toy Attribute cards, and a variety of toys at each workstation for students to play the Mystery Toy game (see materials).

### Materials

- ✓ Toys (three or four; for teacher modeling)
- ✓ Marker (one per workstation)
- ✓ Toy Attribute cards (one set per workstation; see supporting materials)
- ✓ Toys (three or four; for the Mystery Toy game)

### Experience

- Tell students that today they will be playing a game called the Mystery Toy.
- In this game, they will be working with their Lab group to figure out which toy is the mystery toy, but they can ask only “yes” or “no” questions to help them figure it out.
- Tell students that they will play as a class first to practice the rules.
- Show students the **toys** you chose to model this game. Show them the **marker** you will use to mark the mystery toy.
- Tell students to close their eyes while you place the marker under one of the toys.
- After placing the marker under a toy, invite students to open their eyes.
- Introduce students to the **Toy Attribute cards**. Tell them these cards will help them ask questions.
- Refer specifically to the Toy Attribute card with colors. Remind students that they can only ask questions that can be answered “yes” or “no.”
- Invite volunteers to ask yes/no questions using the Toy Attribute card with colors to help them. (Example: “Is the toy blue?” Non-example: “What color is the toy?”)
- Repeat this with other Toy Attribute cards (shapes, wheels, texture, and movement).
- After students have asked several yes/no questions, invite them to predict which toy has the marker under it (the mystery toy).
- Encourage students to use the vocabulary of attributes in providing evidence for their answer. Consider providing sentence frames, as necessary. (Example: “I know the color is blue. I know the toy does not have three wheels. So, the toy must be \_\_\_\_.”)
- Once students have the correct answer, review the specific attributes that helped them to figure out the mystery toy.
- Tell students they will be playing this game in their Lab groups today.
- Each workstation has a set of toys, and students will take turns hiding the marker while the other students ask yes/no questions to try to correctly guess the mystery toy.
- Remind students that for games to be fun, they must be played fairly (closing their eyes, taking turns, etc.).

- Assign each Lab group to one of the workstations.
- Invite students to begin playing the game.
- Circulate and support groups as they play.
- 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: “I appreciate how this group is working together to clean up their workstation.”)
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.



## Launch Stage: In the Imagine Lab

### Guiding Question

- How can I use my imagination to create a world of play for myself and others?

### Learning Target

*I can show respect for Lab materials and my peers.*

### Teaching Notes

#### Purpose:

- In the Imagine Lab, the Launch stage serves two purposes:
  - Students are introduced to the purpose of the Imagine Lab.
  - Students are given time to explore the various materials they will use in the Imagine Lab and begin to formulate ideas on how they might use these materials in the future.

#### Habits of character:

- The Imagine Lab incorporates multiple types of materials to allow students to create a world of play for themselves and others. Respect for these materials and for peers is necessary for the success of the Imagine Lab.

#### Logistics:

- During the Launch stage of the Imagine Lab, students work in their Lab groups and rotate among four workstations, spending 10 minutes at each one. Since students are at each workstation for only 10 minutes, they have a limited amount of time to be introduced to each material.

#### In advance:

- Prepare workstations, each with a different type of imaginative play material that will be housed in the Imagine Lab. (Other possible materials might include modeling clay, common kitchen materials and safe cooking utensils, and felt or magnet boards):
  - Workstation 1: building blocks (one set of wood or linking blocks)

- Workstation 2: white board (one large to share or several small) and dry erase markers (one per student)
- Workstation 3: hand or finger puppets (several to share)
- Workstation 4: dress-up materials (several to share)
- Consider labeling each workstation with a name or number to assist students in transitioning from one to the next.

### **Materials**

- ☑ Workstation materials (for students to use to create a world of play for themselves and others; see Teaching Notes)

### **Experience**

- After setting goals for the Imagine Lab, consider walking students as a whole group to each workstation. Remind them that each Lab group will visit all four workstations.
- While at each workstation:
  - Review the proper use and care of materials as well as the way materials should be stored when students are finished.
  - Invite students to share their ideas of what they might imagine or what they might play when using that workstation's materials.
- Consider suggesting imaginative play ideas based on the anchor texts of the module. (Example: Students might consider playacting characters from literary texts they are reading during the module lessons.)
- Assign each Lab group to one of the workstations.
- Tell students that today they will have 9 minutes of exploration time at each workstation. Invite them to begin exploring and imagining.
- As students work, circulate and support them, specifically in the area of respect toward materials and peers.
- After 9 minutes, give the cleanup signal. Take a quick survey of each workstation to be sure students have carefully stored all materials and are ready to rotate.
- Remind students which workstation they will visit next. Invite them to rotate.
- Repeat this process until students have visited each of the four workstations.
- 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 wonderful to see this group storing materials neatly where they found them.")
- As Lab groups are ready, transition them back to the whole group area for Reflecting on Learning.