

Getting Started

Getting Started with the Life Science Materials

Welcome to EL Education's curriculum. This is your guide to get started with the materials for the Life Science Module.

Begin by reading the **Module Overview**. Each module is one or two units long and provides eight to nine weeks of instruction. It is designed to take students deeper into the science topics they are already exploring in Module 2 of EL Education's 3-5 Language Arts curriculum; it is not intended to be a comprehensive life science course.

In the module overview you will find many of the same features of the EL Education Language Arts modules including the Guiding Questions, the 4T's, an overview of assessments and standards, and a Module-at-a-Glance chart.

You will also find science-specific features such as suggested **Original Student Investigations**, **CCSS ELA Connections**, and a **Preparation and Materials section**. Pay careful attention to the Preparation and Materials section. Some of the science-specific materials require significant advance preparation and the Preparation and Materials section will help you organize in advance the materials you need each week. Additional information about the needed materials is provided in each lesson sequence.

Next, read through **Lesson Sequence 1**.

Original Student Investigations

Duckweed and Habitat

Students plan and carry out an original investigation to answer the question "Under what conditions in a pond does duckweed grow well?" First, students learn about the different places in a pond habitat and identify conditions that vary by location in the pond (i.e., duration of direct sunlight, water depth, water quality). They then create a test to recreate those conditions and

CCSS ELA Connections

This module is designed to address NGSS standards. But the module intentionally incorporates content, protocols, and skills that align with EL Education's ELA Grade 3 Module 2. Both the ELA and Life Science Modules focus on frogs and shared texts, including *Bullfrog at Magnolia Circle* and *Everything You Need to Know about Frogs and Other Slippery Creatures*. In both the

Preparation and Materials

For basic lesson preparation, refer to the materials list and Teaching Notes in each lesson sequence. The following are science-specific materials that will require significant advance preparation. More information on quantities and specific instruction is in the materials list in each lesson sequence.

Before beginning the Grade 3 Life Science Module

- Consider purchasing aquatic plants to grow in your classroom, including water lilies.
- Consider purchasing or acquiring aquatic animals so students can observe the animals throughout their life cycle. Work with a local wildlife expert to find and raise a native frog or other amphibian species. If you have acquired the animals locally and are implementing one of the frog ponds that your students are designing in Unit 2, consider letting the adult animals go in the new home. If you have ordered them online, do not let animals loose in the local habitat.

The Life Science Module has “lesson sequences” instead of “lesson plans.” A lesson sequence is a series of activities that build on each other and are linked by guiding questions and learning targets. Lesson sequences are designed for scheduling flexibility and are not confined to a specific length of time. For example, while some lesson sequences account for 3 hours of instruction and should be spread out over several days, others may take only 1 hour of instruction. The **Agendas** in each lesson sequence have section breaks which provide a natural stopping point each day. The **Module-at-a-Glance** chart in the Module Overview will also help you plan which lesson sequences to teach in each week.

Agenda

1. **Opening**
 - A. Reading Aloud: Letter from the Principal (10 minutes)
2. **Work Time**
 - A. Introducing Learning Targets: “The Magic Bow” (5 minutes)
 - B. Structured Discussion: What Can We Do to Make Playing Together Fun? (15 minutes)
 - C. Independent Writing: What Can We Do to Make Playing Together Fun? (20 minutes)
3. **Closing and Assessment**
 - A. Reflecting on Learning (10 minutes)



Module-at-a-Glance

Week 1

Approximately 3 hours of instruction

Unit 1: Lesson Sequence 1 (1.5 hours)

Instructional Focus

- Launch module with an anchoring phenomenon: multiple images showing the diversity of life
- Gather students’ background knowledge about variation among organisms, within a species, and within families
- Introduce the student science notebook and Scientists Meeting protocol

Another unique feature of the Life Science lesson sequences is the **Preparing to Teach: Self-Coaching Guide**. At the end of each part of the lesson, there is a numbered list of questions or prompts to help you reflect on the instruction before you begin teaching your students. Each number corresponds to a red number in superscript at different points in the lesson. As you read through the lesson, use these prompts to help you organize materials and instruction, adapt the instruction for your specific students, and plan to be flexible as you lead students through the inquiry-based instruction.

- Move students into pre-determined groupings and assign each group to a beginning station. Remind students to bring a pencil and their student science notebook with them ⁽²⁾.
- Invite students to begin working at the first station ⁽³⁾.
- Monitor time and facilitate transitions ⁽⁴⁾ ⁽⁵⁾.
- Direct students to return to their seats once they have visited all three stations.

Preparing to Teach: Self-Coaching Guide

1. How will I set up and distribute materials at stations?
2. How can I best group students for information gathering?
3. How can I best support students during station learning?
4. What can students work on if they finish the stations early?
5. How will I signal to students it’s time to move?

Read through the **Student Science Notebook**. Note that students will use this notebook throughout each lesson sequence. Each notebook is organized into entries and each entry is broken up into different sections. The table of contents will help students quickly find each entry. If your school has purchased the bound Student Science Notebooks, you will already have these on hand to distribute; otherwise, you can assemble the notebooks yourself from the Teacher Supporting Materials.

Grade 3: Life Science Module

Student Science Notebook