

# Teaching Prep

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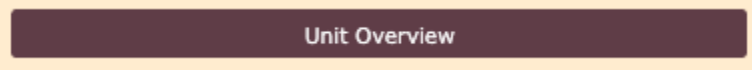
## Total time: about 45-60 minutes

This page will guide you through how to prepare for and teach an ASD OpenSciEd unit. This is a quick orientation to the unit and its instructional flow before materials prep. You will preview the storyline, identify key teacher supports, and become familiar with how student ideas build across the unit.

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## 1. Read the Unit Overview & Storyline (20-25 minutes)

*Click this button on the website:*

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Begin by reading the **Unit Overview** and **Unit Storyline** to understand the unit's standards, purpose, flow, and key ideas.

As you preview the storyline:

- Notice how the lessons are organized into lesson sets and the purpose of each lesson set.
- Notice how student ideas build over time from initial observations to evidence-based explanations and design solutions.
- Pay attention to how the anchor phenomenon drives student questions and investigations throughout the unit.
- Notice that lessons do not equal days. Many lessons are intentionally designed to span multiple instructional days to support deeper sensemaking and investigation work over time.
- Stop at the end of the Unit Storyline section during this prep phase. Do not continue into the additional resources or lesson-by-lesson materials yet.

**Focus on:**

- What students are trying to figure out throughout the unit
  - Which SEEd standards are bundled and developed across the unit
  - How the storyline moves the students' initial ideas to evidence-based explanations
  - How lessons connect to support sensemaking over time
  - The role of each lesson set in building understanding
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## 2. Review Student Science Notebooks (5 minutes)

*Click this button on the website:*

Student Notebook

Look through the student **Science Notebook** to preview how students document and revise their thinking throughout the unit.

As you review the notebook, notice:

- How students return to ideas multiple times across the unit
- How models, writing, and discussions support sensemaking
- How scientific language and vocabulary develop over time
- How students gather evidence and communicate explanations

Decide whether you'll use a **digital** or **printed** notebook, but do not print yet.

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## 3. Plan for Sensemaking (5 minutes)

*Click this button on the website:*

Assessments OSE

Briefly preview the unit's assessment system. This section includes student assessments, teacher assessment tools, scoring guidance, and instructional supports connected to student sensemaking throughout the unit.

You are not reviewing every assessment document. Instead, familiarize yourself with the types of supports available and where they are located for later use during teaching.

As you preview this section, notice:

- How assessments are embedded throughout the unit
- How students demonstrate understanding through investigations, modeling, explanation, and design
- How teacher support and scoring guidance connect to the progression of student ideas

Keep the end in mind: SEEd standards are performance expectations focused on what students can do with science ideas and practices over time, not just what they can recall.

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## 4. Communicate with Families (5 minutes)

*Click this button on the website:*

Home Communication

This helps families understand what students will explore and how they can support sensemaking from home. Review the options provided and choose how best to communicate with your parents (letter, email, text, etc.)

Share the **Home Communication** letter as soon as appropriate for your unit. For most units, this means after students have experienced the first lesson.

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## 5. Preview Teacher Supports & Unit Prep (10–15 minutes)

*Click this button on the website:*

Teacher Manual

This section is designed to familiarize you with the embedded teacher supports available throughout the unit. You are not deeply studying every section yet. Instead, preview where key supports are located so you can return to them during teaching and materials prep.

Explore these areas of the Unit Front Matter:

- Science Safety
- SEEd Alignment with the Three Dimensions
- Unit Structure
- Leveraging Students' Backgrounds
- About the Science
- Developing Scientific Language
- Unit Materials & Preparation
- Scope and Sequence/Pacing Information

As you preview these sections, notice:

- How the unit supports student sensemaking over time
- How scientific language is intentionally developed throughout the unit
- How student backgrounds and experiences are leveraged during instruction

NEXT: Scroll down or click for [Materials Prep](#)

# Materials Prep

# Materials Prep

Total time: about 30–60 minutes before beginning unit instruction, then ongoing lesson-by-lesson prep.

This page will help you organize materials, printables, and instructional resources for the unit. The ASD OpenSciEd system includes several different support documents that work together. Each resource has a different purpose.

You are not expected to prepare every lesson all at once. Instead, use these systems to organize materials efficiently, understand what is already available, and identify any larger setup needs ahead of time.

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## 1. Start with the All Unit Prep Document (15–20 minutes)

***Click this button on the website:***

Unit & Lesson Prep

The All Unit Prep document is the main organizational hub for unit materials and preparation.

This document includes:

- Unit Materials Overview
- Printables Overview
- Lesson-by-lesson materials lists
- Lesson prep instructions
- Setup references and preparation supports
- Printing guidance and print shop links
- References to additional teacher supports embedded throughout the unit

As you review this document:

- Familiarize yourself with the overall structure of the unit materials
- Identify any investigations or setups that may require additional preparation time
- Notice which materials are reusable vs consumable
- Notice which items are optional, digital, or paperless
- Look ahead for any larger preparation needs, such as wave bins, engineering materials, outdoor investigations, or storage considerations
- Recognize that many lesson preparation supports are already embedded directly into the lesson prep sections

You do not need to deeply study every lesson prep page during this phase.

## ***Optional: Use the Materials Inventory Checklist for School or Team Coordination***

The [Materials Inventory Checklist](#) is a simplified inventory coordination tool designed to help schools, teams, secretaries, or purchasing support staff quickly identify which materials are already available and which may still need to be gathered or purchased.

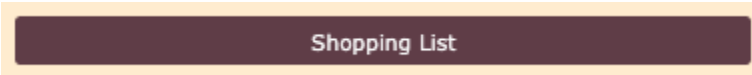
This checklist is optional and is not meant to replace the instructional details found in the All Unit Prep document or lesson prep pages.

Some schools may find this helpful for:

- coordinating grade-level shared materials
  - checking existing inventory
  - organizing reusable materials
  - supporting school purchasing systems
  - simplifying communication with support staff
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## **2. Review the Shopping List Spreadsheet (5–10 minutes)**

***Click this button on the website:***

Shopping List

The Shopping List Spreadsheet is a procurement planning support tool that helps schools, teams, or teachers organize which materials may need to be gathered or purchased for the unit.

This document works alongside the Unit Materials Overview found in the All Unit Prep document. It is designed to help organize purchasing and materials coordination, not replace the lesson prep guidance or instructional setup supports.

As you review this document:

- Identify which materials may already exist in your classroom or school
- Coordinate reusable materials across grade-level teams when possible
- Determine which consumable materials may need replenishing
- Consider how materials will be organized into classroom or unit storage systems

## Amazon Lists

The linked Amazon lists on the Shopping List spreadsheet are optional sourcing support tools. They are included to help clarify item specifications or provide examples of materials that work well for investigations.

Materials do not need to be purchased from Amazon and may be sourced from district inventory/warehouse, local vendors (Dollar store, Walmart, Home Depot), classroom supplies, donations, or other purchasing systems.

Use the Amazon lists to:

- better understand what a material item refers to
- review example product types or specifications
- compare pricing or alternate sourcing options

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## 3. Review Printables & Printing Options (10–15 minutes)

*Click this button on the website:*

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The Print Shop Suggestions document helps organize the printable materials used throughout the unit. Consider storing materials in “lesson set” bags within entire-unit bins. Be aware that materials are often used across multiple lessons and multiple units.

This document includes:

- recommended print settings
- reusable vs consumable printables
- color vs black-and-white printing suggestions
- binding and collating recommendations
- specialty printing guidance for items such as transparencies

As you review this document:

- Decide which materials you would like printed versus used digitally
- Identify reusable materials that may benefit from cardstock or laminating
- Notice any specialty printing notes or preparation recommendations
- Coordinate with your school’s printing systems or support staff as needed

ASD is continuing to build and refine ASD OpenSciEd printing supports and Print Shop storefront systems to help simplify access to unit printables, but it will take some time.

You do not need to print everything at once. Many teachers choose to organize printing in phases throughout the unit.

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## **4. Organize Unit Materials & Storage Systems (5–10 minutes)**

Before beginning instruction, decide how materials will be organized and stored throughout the unit.

As you begin instruction, think about how materials will move through the unit over multiple lessons and investigations.

- identify shared grade-level materials
- group materials by investigation or lesson set
- organize reusable materials into labeled unit bins
- prepare reusable student materials ahead of time
- organize printables separately from consumable investigation supplies

Some investigations require larger setup preparation or storage considerations. The All Unit Prep document and lesson prep pages will identify these areas in advance.

Tip: Lessons do not equal days. Most investigations, engineering tasks, or setup materials span multiple instructional days. Planning for multi-day investigations and engineering projects can make ongoing lesson preparation more manageable.

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## **5. Digital Setup (approx. 0-10 minutes, as needed)**

- Identify any required digital components in your unit.
  - Verify that required OSE simulations and/or websites load correctly for yourself and for your students.
  - Prepare to share access to OSE simulations and/or website links with students via your district-provided solutions, such as Google Classroom, Blocksi, Classlink, or Clever.
  - If using shared devices, test before class to ensure functionality.
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## 6. Organize for Easy Reuse (approx. 0-10 minutes, as needed)

- Reusable materials (cups, thermometers, insulation) should be safely cleaned. **Follow all safety recommendations.**
- Please return all shared materials clean, organized, complete, and ready for the next teacher to use. Thoughtful care of shared resources helps ensure they remain usable and accessible for everyone.
- We suggest maintaining your own running materials log to simplify restocking of consumable items and any future purchasing requests. The Materials Inventory Checklists can be printed and used for this purpose (linked above).

A quick review of the lessons and materials list before each lesson set saves hours later.