



SPECTRUM LAB

How to Use the Spectrum Lab

The Spectrum Lab is designed to support student-driven explorations and learning through the online platform and accompanying student notebook. While students can work independently, in most cases the optimum implementation strategy is for teachers to actively facilitate whole class discussion at key moments during the experience.

To support this approach, we developed a set of resources to help you balance student self-guided exploration with teacher-led facilitation. The following resources are available for each of Spectrum Lab's 5 modules and final projects:

- **The online Spectrum Lab for student exploration**
 - This is the core of the student experience. Through the platform, students explore real-world spectra from various scientific fields, engaging in hands-on, inquiry-based learning.
- **Teacher Guides**
 - These guides provide facilitation notes, NGSS-aligned standards; background information, and materials lists – everything you need to confidently lead your students through each module.
- **Classroom Slides**
 - These slides mirror visuals from the online Spectrum Lab and are designed for you to facilitate class discussions and engagement. Slide notes offer additional context to support instruction.
- **Student Notebook Worksheets**
 - The Student Notebook is a companion of the online Spectrum Lab. It includes a mix of concrete and open-ended questions that encourage students to record observations, explain their thinking, and share ideas.
 - NOTE: *To share the notebook with students, you can download it to your local computer or make a copy in your Google Drive. Printing directly from the PDF version of the Student Notebook is the best way to print in black and white.*
- **Student Notebook Answer Keys**
 - Where applicable, the answer keys include clear responses for factual questions. For open-ended prompts, they highlight key ideas and concepts to look for in student responses.

PLEASE NOTE: *To access all educator materials, you will need to create a Data Labs Educator account. This educator account will also give you access to other Data Labs materials.*

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