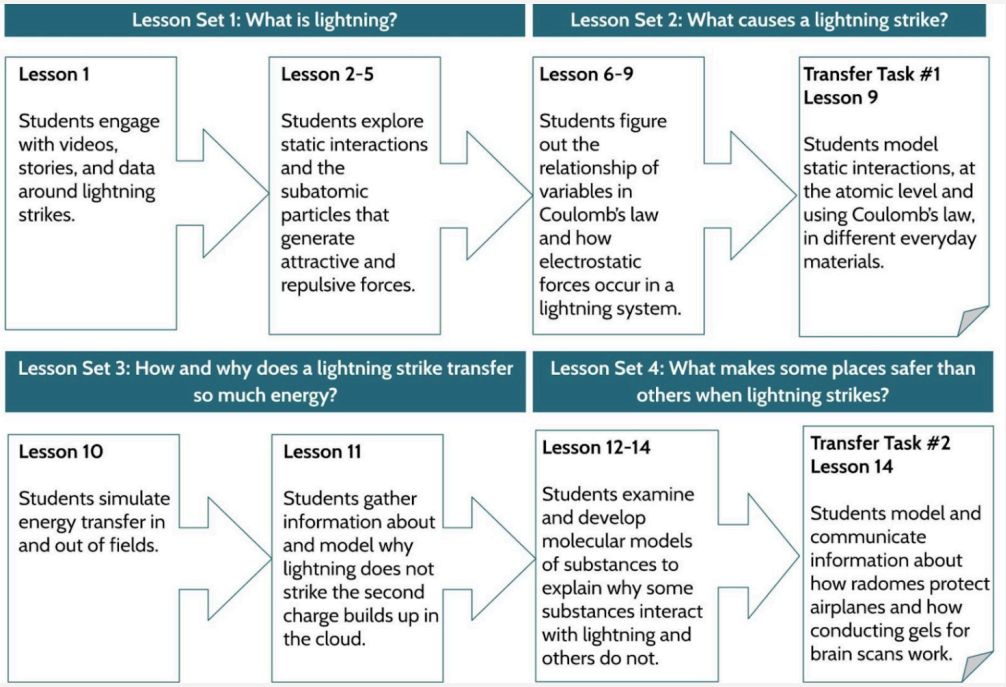
C.2 Structure & Properties of Matter



Unit Structure



Before Teaching the Unit

Watch the unit webinar.

Read the unit storyline.

Join the Facebook Group for the course.

Review the Assessment System Overview in the Unit Overview to complete the Grading Planning Tool for the unit.

Review the Unit Overview, Material List and Lesson Teacher Edition to check for the required materials and supplies necessary for the unit. Take note of these unit-specific items related to materials:

- Depending on your background, it may be helpful to consult the Unit Overview materials for a refresher on the importance of electric fields, and energy transfer in and out of fields, in explaining chemical phenomena.
- If this unit was not preceded by others that support students in strong particle and energy transfer models, such as C.1 Thermodynamics in Earth's Systems, you will need to provide supplementary instruction.
- The water dropper used in Lessons 2 and 3 requires some advance construction. See the video in Lesson 2 for more information.

- The water dropper in Lessons 2 and 3 works best in lower humidity (<40%). If necessary, run a dehumidifier or large fan. Guidance is also provided to adjust order of lessons in the case of a short humid spell. Investigations in Lessons 4, 5, and 7 may also benefit from dehumidification.
- Depending on the materials sourced, the Lesson 7 and 13 investigations may require extra setup time the first implementation.
- Lesson 5 is particularly important, as students, through modeling and discussion, shift from a focus on attraction and repulsion to an understanding of the movement of charge (electrons) between atoms.

While Teaching the Unit

- Watch teacher set-up videos for investigations.
- Keeping a running record of class discoveries and investigations throughout the unit to help absent students catch up and as a reference for future years. Approaches could include a teacher version of a student notebook, or a running shared Google document.
- Organize handouts and digital materials as you go for future use.

After Teaching the Unit

- Store the materials for the water droppers in the containers used for the tanks.
- Make notes of future revisions, modifications.
- Take pictures of posters, consensus models and exemplary student work.
- Survey students at end of unit for feedback and self-reflection.

Unit Fast Facts for Planning

Unit Length	14 Lessons, 29 Days
Lessons with Hands-On Investigations	2, 3, 4, 5, 7, 13
Lessons Requiring Student Devices	5, 7, 8, 9 (optional), 10, 11
Lessons that Require In-Advance Material Preparation	2, 3, 4, 5, 7, 13 Color copies: 12, 13
Lessons with Mid-Point or Summative Assessment Moments	5, 9, 11, 14