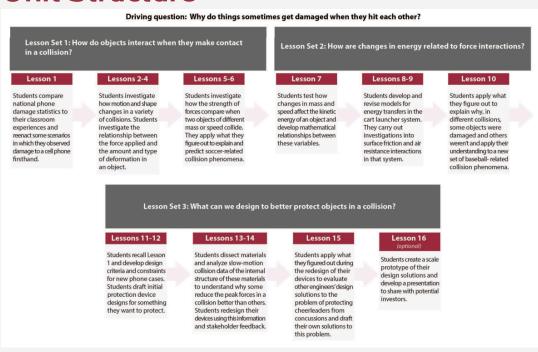
8.1 Contact Forces

Unit Structure





Before Teaching the Unit



Watch the unit webinar.



Read the unit storyline.



Join the Facebook Group for the unit.



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:

- Carefully read the Lesson 2 material preparation in the teacher guide and view the <u>teacher prep video</u>. Preparing the sugar glass in advance takes time. Saltines can be used as an alternative approach.
- <u>Lesson 5</u> and Lesson 9 investigations require extended preparation time. Before conducting them with students, it is helpful to consider the logistics of these investigations and conduct them yourself.
- Lesson 7 teacher guidance and materials provide multiple options for graphing investigation results.
- The consensus discussion in Lesson 8 builds on students' experiences with systems and subsystems from previous units. Students who have not experienced OpenSciEd units before might need scaffolding to consider system and subsystem examples.

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

- 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	16 Lessons, 33 Days
Lessons with Hands- On Investigations	1, 2, 3, 4, 5, 7, 9, 12, 13
Lessons Requiring Student Devices	7, 9

Lessons that Require In-Advance Material Preparation	2, 3, 4, 5, 9	
Lessons with Mid-Point or Summative Assessment Moments	6, 10, 15	