

NGSS Curriculum Storyline Tool

Adapted from Brian Reiser's Storyline Tool by Bill Penuel and Philip Bell

MAIN PHENOMENON	Describe the phenomenon or present the design challenge in student-friendly language.	How do you know (evidence) that this phenomenon or design challenge connects to your students' interests and experiences?
	DRIVING QUESTION Driving Question that must be answered to explain the phenomenon or solve the design challenge.	FOR ENGINEERING CHALLENGES: How does solving the challenge address a personal, family, or community need?

Lesson Number	Question/Phenomenon	Science and Engineering Practices	Strategies to Build on Student Interest and Ideas	What They Can Explain / Model Components Developed	Likely New Questions of Students
Lesson 1	Question that needs to be answered first, to build an explanation or solve the challenge	Describe what students will do to answer the question. Each statement should be a complete sentence, in which students are the subject, and verbs come from the Framework's science and engineering practices.	Phenomena should build upon the interests and ideas of students and their communities. Describe strategies you will use to leverage these student resources as they engage in making sense of the phenomena.	Identify the component of the unpacked DCI that students will be able to apply to build an explanation or solve the design challenge. If students are building a model, which model components and relationships does this phenomenon make visible to students to discuss. Name crosscutting concepts students make connections to, at the concluding part of the lesson.	What new questions are likely to emerge from students' activities, that could be answered next to build toward an answer to the driving question or solution to the design challenge? How will you close the lesson to surface these questions and set up the next lesson?
Lesson 2	Question that needs to be answered next, to build an explanation or solve the challenge	...	...	...	...
Lesson 3	Question that needs to be answered next, to build an explanation or solve the challenge	...	...	...	...
Lesson 4	Question that needs to be answered next, to build an explanation or solve the challenge	...	...	<i>Answer (Theory-Based Or Model-Based Explanation) To Driving Question/Solution To Design Challenge</i>	