

LESSON GOALS

Lesson Title/Description and Source:

Science/Engineering Learning Progression: *How is this lesson situated in the instructional unit designed to develop conceptual understanding of the core science/engineering concepts and scientific/engineering practices? How is this instructional unit situated in the larger learning progression (over time) for these core concepts and scientific/engineering practices?*

Science/Engineering Inquiry Learning Cycle: *How is this lesson situated in the Inquiry Learning Cycle? Which stage(s) will be the focus of the lesson?*

Core Science/Engineering Idea(s) That All Learners Will Understand Today: *What are your specific science/engineering goals for today's lesson? What do you intend all students will know and understand about science/engineering as a result of today's investigation?*

Relevant Standards: *What standards (e.g. school, district, state, national) will be addressed during the lesson?*

Science/Engineering Practices and Discourse: *What science/engineering practices and discourse will students develop while working on these core science/engineering ideas?*

Explanations, Evidence, Arguments: *About which ideas related to the science/engineering goals will it be most productive and appropriate to ask students to generate and justify claims, explanations, or arguments?*

Evidence: *How will you know that all learners understand? What evidence will you collect?*

Embedded Formative Assessment:

- *What science/engineering ideas will be the focus of the embedded formative assessment task or prompt? What meta-cognitive skills will students develop within this science/engineering investigation?*
- *How will student reflect about their understanding of the core science/engineering ideas?*
- *What strategy or prompt will you embed within the investigation to provide you with formative assessment data/information that you will use to inform your instructional next steps and give feedback to students?*

Focus Question: *What question will you use to focus the investigation and support students in making connections between the investigation and the core science idea and/or scientific practices and discourse?*

Prior Knowledge: *What previous knowledge will this lesson build on? What science language, concepts, or ideas do students need to know in order to begin work on this investigation?*

Metacognition: *On what specific scientific/engineering ideas will you focus students' reflections about their thinking and self-assessments of their understanding, progress, and needs? Where in the investigation will these be most productive?*

Instructional Focus: *Which one or two questions from the Teacher Reflection Tools will be the focus of your work on your teaching practice during this lesson? What Scientifically Productive Teaching Routines might support that work and where in the investigation will that be most appropriate?*

