

# Crafting a 3D Assessment Task

STEMTeachingTools.org  
Modified by Iowa Science Writing team

Lesson / Activity / Line in Storyline: \_\_\_\_\_

Building Toward which Standard/Performance Expectation or What Students Are “Figuring Out”:  
\_\_\_\_\_

## STEP 1—Select a DCI Component

What disciplinary core idea (DCI) component(s) (i.e., specific concepts) are the focus of this assessment?

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

## Step 2: Brainstorm possible scenarios for eliciting student understanding—and select one to use using criteria

Possible Scenarios	Draft Language for the Selected Scenario

## Step 3: Select a Practice Element & a CCC Element

a) What Science and Engineering Practices lend themselves to the lesson/activity or the DCI element(s)? Use the foundation box(es) or Appendix F to identify the corresponding elements in your selected standard for this lesson/activity or line in storyline. **These can be supporting SEP(s) not in the selected standard or bundle of standards that would work with the student activity/lesson or identified piece of the storyline.**

Science & Engineering Practice	Element of the Practice

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b) Which Cross-Cutting Concept (CCC) element is related to the DCI(s) or practice elements? Use the foundation box(es) or Appendix G to identify the corresponding elements in your selected standard for this lesson/activity or line in storyline. **These can be *supporting* CCC(s) not in the selected standard or bundle of standards that would work with the student activity/lesson or identified piece of the storyline.**

Crosscutting Concept	Element of the Crosscutting Concept

## STEP 4: Identify the Learning Target/ Purpose Statement/Success Criteria

This might be the PE (Performance Expectation) from NGSS or it will be the combination of the three dimensions selected in Steps 1-3 above.

### Possible Templates:

“Students will ((practice verb clause)) to ((DCI element verb clause)) highlighting that ((CCC clause)).”

“I can.. ((practice verb clause)) to ((DCI element verb clause)) and ((CCC clause)).”

## Step 5: Write 2D or 3D Questions

- Use the [Task Formats for Practices](#) to ask students to show their conceptual understanding. A series of questions should take students through a logical investigation sequence using multiple practices (e.g., analyze data followed by construct an explanation or refine a model).
- Think about how the Crosscutting Concept (CCC) would be observable in student responses. It may be implied by the phrasing of a DCI / Practice question (e.g., cause and effect), or you may need to [add a prompt for a CCC](#) if that is not the case.

## **Step 6: Imagine Student Responses**

Include the key concepts for a proficient response

## **Step 7: Share, Review & Revise**