![TNTP logo]

# Science Assignment Review Protocol

The assignment review protocol is intended to help teachers, leaders, and other stakeholders answer the question, "Does this task give students the opportunity to meaningfully engage in worthwhile grade-level content?" If students have not yet completed the task, users only review the quality of the task. If students have completed the task, users first review the quality of the task and then analyze students' performance.

## Content: Does this assignment align with the expectations defined by grade-level science standards?

| | | |
|---|---|---|
| **What grade-level or grade-band College and Career Ready standard(s) does the assignment focus on?** | *Standard(s):* | |
| **Does this assignment require students to make sense of a phenomenon and/or design a solution to a problem grounded in a grade-appropriate DCI or a grade-appropriate SEP?** | *Yes* | *No* |
| | *Evidence:* | |
| **Does the assignment contain questions and/or tasks that reach the depth of grade-level standard(s)?** | *Yes* | *No* |
| • The assignment focuses on a Disciplinary Core Idea that is appropriate for the grade-level. <br> • The assignment asks students to leverage a grade-appropriate element of the Science and Engineering Practices (SEPs) to develop, deepen and/or apply their understanding of the grade-appropriate Disciplinary Core Idea(s) (DCI). <br> • The assignment leverages grade-appropriate elements of the Crosscutting Concepts (CCC) to support students with making connections within and across scientific disciplines. | *Evidence:* | |

### Overall Content Rating
Overall, do the content demands of this assignment align with the expectations defined by grade-level standards?

| **0 – No Opportunity** | **1 – Minimal Opportunity** | **2 – Sufficient Opportunity** |
|---|---|---|
| The assignment provides no opportunity to make sense of a phenomenon or design a solution to a problem and does not reach the depth of grade-level science standard. | This assignment includes an opportunity to make sense of a phenomenon or design a solution to a problem but does not reach the depth of grade-level science standard. | This assignment includes an opportunity to reach the depth of a grade-level science standard and asks students to make sense of a phenomenon or design a solution to a problem. |

## Practice: Does the assignment provide meaningful opportunities for students to engage in sensemaking through grade-appropriate science and engineering practices?

| | | |
|---|---|---|
| **Does the assignment include an opportunity for students to develop scientific literacy?** <br> • Does the assignment provide students with the opportunity to speak, write, read, listen, or model (with a grade-appropriate DCI)? | *Yes* | *No* |
| | *Evidence:* | |
| **Does the sequence of questions in the assignment lead/require students to make sense of the phenomenon or design problem?** <br><br> • Does the primary task or majority of questions of the assignment give students opportunities to make sense of the phenomenon or design problem through grade-appropriate SEPs? <br> • If the assignment is based on an experiment, analysis, or other investigation, are the majority of questions grounded in it AND require students to connect it to the overall phenomenon/design problem? | *Yes* | *No* |
| | *Evidence:* | |

### Overall Practice Rating
Overall, to what extent does the assignment provide meaningful practice opportunities for this content area and grade level?

| **0 – No Opportunity** | **1 – Minimal Opportunity** | **2 – Sufficient Opportunity** |
|---|---|---|
| The assignment provides no opportunity to engage in sense making through grade appropriate science and engineering practices. | The assignment includes an opportunity to develop scientific literacy, but these opportunities are **not** intentionally sequenced to facilitate student sensemaking. | The assignment includes an opportunity to develop scientific literacy, **and** these opportunities are intentionally sequenced to facilitate student sensemaking. |

## Relevance: Overall, does the assignment give students an authentic opportunity to connect academic standards to real-world issues and/or contexts?

| **Does the assignment establish a phenomenon or design problem as a real-world scenario?**<br>• Is there context to ensure the phenomenon or design problem is clear and relevant? | *Yes* | *No* |
|---|---|---|
| | *Evidence:* | |

| **Does the assignment connect academic standards to real-world issues or concepts?**<br>• Do students have an opportunity to connect the content of the lesson to current events, local people and places or important disciplinary topics or debates? To their own lives and/or the world around them? | *Yes* | *No* |
|---|---|---|
| | *Evidence:* | |

| **Does the assignment give students a chance to share and defend their thinking when speaking or writing about content?**<br>• Do students have an opportunity to develop a claim or model and defend their thinking?<br>• Does the assignment provide opportunity for students to share their developing thinking, or are all student responses likely to look the same? | *Yes* | *No* |
|---|---|---|
| | *Evidence:* | |

### Overall Relevance Rating
Overall, to what extent does the assignment give students an authentic opportunity to connect academic standards to real-world issues and/or contexts?

| **0 – No Opportunity** | **1 – Minimal Opportunity** | **2 – Sufficient Opportunity** |
|---|---|---|
| The assignment does not connect academic content to real-world experiences using a phenomenon or design problem. | The assignment connects academic content to a relevant phenomenon or design problem and to real-work issues/concepts, but students do not have an opportunity to share their developing thinking through claims or modeling. | The assignment connects academic content to a relevant phenomenon or design problem and to real-work issues/concepts, and students have an opportunity to share their developing thinking through claims or modeling. |

## Student Performance

**Which students met the expectations of the assignment, as communicated by the directions and/or scoring key?**
• *If no directions and/or scoring key is provided, assume 80% accuracy and completion meets the assignment expectations.*

| **Student 1** | **Student 2** | **Student 3** | **Student 4** | **Student 5** | **Student 6** |
|---|---|---|---|---|---|
| *Evidence:* | | | | | |

**Which students met the expectation of the target standard(s) for the assignment?**
• *If the assignment meets the demands of the standards, then student performance on the standards should match that of the assignment*
• *If the assignment does not meet the demands of the standards, then student performance likely won't meet the demands of the standards*

| **Student 1** | **Student 2** | **Student 3** | **Student 4** | **Student 5** | **Student 6** |
|---|---|---|---|---|---|
| *Evidence:* | | | | | |