## Rubric for Science Assessment Items, Tasks, and Prompts

<table>
<thead>
<tr>
<th>Level</th>
<th>Dimension 1: Alignment to Focal PE(s)</th>
<th>Dimension 2: Appropriateness of Scenario</th>
<th>Dimension 3: Integration of Science and Engineering Practices</th>
<th>Dimension 4: Integration of Crosscutting Concepts</th>
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| 4     | • Every prompt elicits elements of a Disciplinary Core Idea (DCI) in combination with a Science and Engineering Practice (SEP) and/or a Crosscutting Concept (CCC) which have been unpacked from the target Performance Expectation(s) (PE).  
• The answers required are appropriate for the grade or grade band of the students.  
• The rubric(s) assigns the level of quality of student responses in all three dimensions. | • The scenario can be explained by the application of elements of the SEPs and CCCs to explain how or why (science) phenomenon occur or justify a solution (model) to a design challenge.  
• The scenario is accessible to all groups of learners. | • Multiple prompts require students to use specific elements of unpacked SEPs and DCIs.  
• The SEP from the focal PE are paired with one or more complimentary SEPs.  
• Teachers use Task Formats that are appropriate to the grade level or grade band of the PE as outlined in the Matrix of Science and Engineering Practices.  
• The SEP is clearly visible in the tasks. | • Multiple prompts require students to use specific elements of unpacked CCCs and DCIs.  
• The CCC from the focal PE are paired with one or more complimentary CCCs.  
• Teachers use Task Formats that are appropriate to the grade level or grade band of the PE as outlined in the Matrix of the Crosscutting Concepts.  
• The CCC is clearly visible in the tasks. |
| 3     | • Most prompts elicits elements of a Disciplinary Core Idea (DCI) in combination with a Science and Engineering Practice (SEP) and/or a Crosscutting Concept (CCC) which have been unpacked from the target Performance Expectation(s) (PE).  
• Some answers required use of DCI, SEP, and or CCC that are below grade level.  
• The rubric(s) assigns numerical values for student responses and do not differentiate among the dimensions. | • The scenario is more relevant and engaging to the teacher than the students.  
• The scenario is aligned to the topic but it needs additional clarifications so that students can connect it with their understandings.  
• The scenario is likely to be accessible by most groups of learners. | • A single prompt requires students to use specific elements of unpacked SEPs and DCIs.  
• The SEP from the focal PE are the only SEPs used by students.  
• Teachers use Task Formats to write the assessments but some tasks are above or below grade level.  
• The SEP is inferred in the tasks. | • A single prompts require students to use specific elements of unpacked CCCs and DCIs.  
• The CCC from the focal PE is the only CCCs used by students.  
• Teachers use Task Formats to write the assessments but some tasks are above or below grade level.  
• The CCC is inferred in the tasks. |
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| 2     | • The scenario is on topic but does not require the integrated use of a Disciplinary Core Idea (DCI) in combination with a Science and Engineering Practice (SEP) and/or a Crosscutting Concept (CCC) to explain or solve.  
• Some prompts elicit some ancillary restatement of a sub-component of a DCI, CCC, or SEP.  
• Most answers required are below or above the grade level or grade band of the PE.  
• The rubric(s) mostly gives emphasis to a single dimension.  | • It is not obvious to recognize how the scenario is related to the topic.  
• The scenario not likely to be accessible to most learners.  | • The prompts do not requires students to use a science and engineering practice.  | • The prompts do not require students to use a crosscutting concepts. |
| 1     | • The item or task is not asking students to use a SEP or CCC.  
• The item or task response is either correct or incorrect and can be scored with an answer key.  | • There is no scenario in the assessment. The scenario is not likely to be accessible to learners.  | • The items are based on cognitive verbs rather than language from the SEPs.  | • The items are based on cognitive verbs rather than language from the CCCs. |