

3D Assessment Rubric (Revisions 01-28-19)

TEACHER/PRE-POST Assessment: Total score (35)

Which grade level, unit and standards was the assessment was designed to assess?	
<u>Target PE(s)</u>: What is the specific evidence outcome, NGSS performance expectation, or lesson level performance expectation that this assessment was designed to address?	
Write one sentence about why you chose the assessment to share with us.	
Write one thing you would change about this assessment if you were to reuse it.	
Scoring Guide. If you do not have the scoring guides or rubrics to upload, describe how you developed a grade for the assessment.	

Overall Comments:

Category 1: Appropriateness of the Scenario (Phenomenon to explain or Problem to solve)		0	1	2	Score	Comments/Evidence
Describe Scenario:						
1a-i	Authenticity of scenario <ul style="list-style-type: none"> - There is something for students to figure out (complex, options for Ss to reconcile) 	Not a real problem for students to figure out. Nothing to explain or solve. Solution is obvious.	There is something for students to figure out. There is one viable solution path.	There is something for students to figure out. There are multiple viable solution paths for students to reconcile.		
1a-ii	<ul style="list-style-type: none"> - Extent to which the scenario uses real and scientifically accurate data, artifacts, or scientific models or simulations 	Scenario is not real and/or does not include scientifically accurate ideas.	Scenario is made-up, but leverages scientifically accurate ideas or findings from real situations.	Scenario is real and scientifically accurate.		
1b	Supports sensemaking <ul style="list-style-type: none"> - Assesses the extent to which evidence from the scenario is needed to solve problem or explain phenomenon. 	Students do not need to use information from the scenario to complete task(s).	Students need to use information from the scenario to complete task(s).	Students need to analyze or interpret information from the scenario to complete task(s).		
1c	Application of understanding Task requires students to use and apply their understanding to explain the phenomenon or solve the target problem.	Task does not require students to use or apply their learned knowledge. Task can be completed by restating learned knowledge as declarative knowledge.	Task requires students to use and apply their learned knowledge to explain or make predictions about a new phenomenon or solve a new problem			

1d	Multiple modes for demonstrating understanding	Students only have one way to demonstrate understanding	Students can use multiple ways to demonstrate understanding (e.g., diagrams, words)			
Category 1 Total Score (8)						

Category 2: Disciplinary Core Ideas		0	1	2	Score	Comments/Evidence
Target DCI element(s):						
Alignment of content focus with the NGSS						
2a-i	Intention to align assessed content with ideas in the NGSS <ul style="list-style-type: none"> - Did the teacher specify one or more target PEs or DCI elements for assessment? 	Teacher identified content foci for assessment, but did not specify one or more target PEs or DCI elements. or Teacher did not specify content focus for assessment.	Teacher specified one or more target PEs or DCI elements for assessment.			
2a-ii	Alignment of assessed content with the NGSS <ul style="list-style-type: none"> - Was the assessed content aligned with ideas found in the NGSS? 	Assessed content is not aligned with any DCI elements found in the NGSS.	Assessed content includes some ideas that are aligned with DCI elements found in the NGSS and some that are not.	All of the assessed content is aligned with DCI elements found in the NGSS.		

2a-iii	Grade / grade band appropriateness <ul style="list-style-type: none"> - Evidence from grade-band endpoints from NRC Framework and Assessment Boundaries 	Foregrounded assessment topics, as evidenced by questions and scoring guide, are not grade-level appropriate. They either focus on information that should have been assessed previously or should be assessed in a later grade bands.	Foregrounded assessment topics, as evidenced by questions and scoring guide, are grade-level appropriate and build upon previously learned knowledge. Previous grade-band knowledge is not the primary focus of this assessment task.			
Extent to which targeted content area or DCI elements are assessed and aligned with assessment goal						
2b-i	Items address targeted DCI elements/content focus <ul style="list-style-type: none"> - Are the items assessing targeted DCI elements OR reported content focus? 	Assessment items do not address any targeted DCI element or content foci.	Assessment items partially address targeted DCI element(s) or content foci.	Assessment items address all targeted DCI element(s) or content foci.		
2b-ii	Assessed DCI elements or content align with assessment goal <ul style="list-style-type: none"> - Assessment goal could include demonstrating PE or answering overall question. - Do assessed DCI elements/content align with assessment goal? - Are there assessed ideas that distract from the assessment goal? 	Assessment includes some items that assess DCI elements or content that distract from or are not aligned with assessment goal.	Assessment only includes items that assess DCI elements or content that are appropriate and align with assessment goal.			
Category 2 Total Score (7)						

Category 3: Science and Engineering Practices		0	1	2	Score	Comments/Evidence
Target SEP element(s):						
Alignment with the NGSS						
3a-i	Identification of target PEs, SEPs, or SEP elements <ul style="list-style-type: none"> - Targeted SEPs can be identified through PE. - Did the teacher specify one or more target PEs or SEP elements for assessment? 	Teacher did not specify any target PEs, SEPs, or SEP elements for assessment.	Teacher specified one or more target PEs, SEPs, or SEP elements for assessment.			
3a-ii	Alignment of expected performance with the SEPs <ul style="list-style-type: none"> - As students demonstrate their understanding, are students expected to use practices in ways that are aligned with the NGSS? - Are the items assessing targeted SEP elements OR reported use of SEPs? 	<p>Students are expected to demonstrate their understanding in ways that are <i>not</i> aligned with the SEPs.</p> <p>Assessment items do not address any targeted SEP(s) or SEP element(s).</p>	<p>Students are expected to demonstrate their understanding in ways that are <i>somewhat</i> aligned with the SEPs.</p> <p>Assessment items partially address targeted SEP(s) or SEP element(s).</p>	<p>Students are expected to demonstrate their understanding in ways that are <i>completely</i> aligned with the SEPs.</p> <p>Assessment items address all targeted SEP(s) or SEP element(s).</p>		
3a-iii	Grade / grade band appropriateness <ul style="list-style-type: none"> - Reference NGSS Appendix F and <u>DPS Science Competencies</u> 	Expected use of science and engineering practices, as evidenced by questions and scoring guide, are not grade-level appropriate. The focus of the expected performance is either well above or well below targeted grade bands.	Expected use of science and engineering practices, as evidenced by questions and scoring guide, is grade-level appropriate and does not include elements that are well above or well below grade-band.			

Extent to which targeted SEP elements are assessed and aligned with assessment goal						
3b-i	<p>Opportunities for students to use SEPs to complete task(s)</p> <ul style="list-style-type: none"> - Are there opportunities for students to use the SEPs to demonstrate their understanding? 	Assessment does not include opportunities for students to use the SEPs to complete task(s).	Assessment includes some opportunities for students to use SEPs to complete task(s).	Assessment includes opportunities for students to use SEPs to complete task(s) throughout the assessment.		
3b-ii	<p>Assessed SEPs or SEP elements align with assessment goal</p> <ul style="list-style-type: none"> - Assessment goal could include demonstrating PE or answering overall question. - Do assessed SEPs or SEP elements align with assessment goal? - Are there assessed SEPs or SEP elements that distract from the assessment goal? 	Assessment includes some items that assess SEPs or SEP elements that distract from or are not aligned with assessment goal.	Assessment only includes items that assess SEPs or SEP elements that are appropriate and align with assessment goal.			
Category 3 Total Score (7)						

Category 4: Integration of Crosscutting Concepts		0	1	2	Score	Comments/Evidence
Target CCC element(s):						
Alignment with the NGSS						
4a-i	Identification of target CCCs or CCC elements <ul style="list-style-type: none"> - Targeted CCCs can be identified through PE. - Did the teacher specify one or more target PEs or CCCs elements for assessment? 	Teacher did not specify any target PEs, CCCs, or CCC elements for assessment.	Teacher specified one or more target PEs, CCCs, or CCC elements for assessment.			
4a-ii	Alignment of expected performance with the CCCs <ul style="list-style-type: none"> - As students demonstrate their understanding, are students expected to use crosscutting concepts in ways that are aligned with the NGSS? - Are the items assessing targeted CCC elements OR reported use of CCCs? 	<p>Students are expected to demonstrate their understanding in ways that are <i>not</i> aligned with the CCCs.</p> <p>Assessment items do not address any targeted CCC(s) or CCC element(s).</p>	<p>Students are expected to demonstrate their understanding in ways that are <i>somewhat</i> aligned with the CCCs.</p> <p>Assessment items partially address targeted CCC(s) or CCC element(s).</p>	<p>Students are expected to demonstrate their understanding in ways that are <i>completely</i> aligned with the CCCs.</p> <p>Assessment items address all targeted CCC(s) or CCC element(s).</p>		
4a-iii	Grade / grade band appropriateness <ul style="list-style-type: none"> - Reference NGSS Appendix G 	Expected use of crosscutting concepts, as evidenced by questions and scoring guide, are not grade-level appropriate. The focus of the expected performance is either well above or well below targeted grade bands.	Expected use of crosscutting concepts, as evidenced by questions and scoring guide, is grade-level appropriate and does not include elements that are well above or well below grade-band.			

Extent to which targeted CCC elements are assessed and aligned with assessment goal						
4b-i	<p>Opportunities for students to use CCCs to complete task(s)</p> <ul style="list-style-type: none"> - Are there opportunities for students to use the CCCs to demonstrate their understanding? 	Assessment does not include opportunities for students to use the CCCs to complete task(s).	Assessment includes some opportunities for students to use CCCs to complete task(s).	Assessment includes opportunities for students to use CCCs to complete task(s) throughout the assessment.		
4b-ii	<p>Assessed CCCs or CCC elements align with assessment goal</p> <ul style="list-style-type: none"> - Assessment goal could include demonstrating PE or answering overall question. - Do assessed CCCs or CCC elements align with assessment goal? - Are there assessed CCCs or CCC elements that distract from the assessment goal? 	Assessment includes some items that assess CCCs or CCC elements that distract from or are not aligned with assessment goal.	Assessment only includes items that assess CCCs or CCC elements that are appropriate and align with assessment goal.			
Category 4 Total Score (7)						

Category 5: 3-D Integration		0	1	2	Score	Comments/Evidence
5a	Assessment coherence	Assessment tasks are discrete and have no explicit connection with the scenario.	Some, but not all, of the assessment tasks are explicitly connected to the scenario.	Assessment tasks are explicitly connected to the scenario.		
5b	Assessment tasks integrate 3-D	Completion of assessment task involves attention to 0-1 dimension. If 2 or more dimensions are present, there is no evidence of integrating the dimensions. Each dimension is assessed separately.	Completion of assessment task requires integrated attention to 2 of the three dimensions.	Completion of assessment task requires integrated attention to all 3 dimensions.		
5c	Scoring guide assesses students' mastery of PE	Scoring guide assesses student performance related to one dimension or whether the response is right/wrong.	Scoring guide assesses student performance related to two dimensions.	Scoring guide assesses student performance related to their understanding of the DCI(s) and use of SEP(s) and CCC(s).		
Category 5 Total Score (6)						