

## High Quality Assessment Content Validity Review Tool

To understand the review process and the use of the review tool, go to:

[How to use the Assessment Review Tool](#)

<b>Content Area: Science</b>
<b>Name of Assessment: Diagnoser: <a href="http://diagnoser.com/">http://diagnoser.com/</a></b>
<b>Reviewer: Content Collaborative</b>
<b>Date of Review: 09/20/12</b>

**Abstract:** Diagnoser online tool with test bank questions listed grades 6-12. We noted that CDE 5th grade Standards 2.2 Body Systems correlates with the test bank questions. We evaluated 5 questions under mixtures and solutions to correlate with CDE 5th grade Standard 1.1 (Mixtures and Solutions). Test questions are grouped content standards, topic specific and can be selected for formative assessment (students are retaught throughout the test). Misconceptions are noted as facets. Learning activities are included.

Assessment Profile	
<b>Item Types - check all that apply (note: there is often overlap among certain item types):</b>	<b>Check All That Apply</b>
<b>Selected Response</b> (multiple choice, true-false, matching, etc.)	x
<b>Short Answer</b> (short constructed response, fill in a graphic organizer or diagram, explain your thinking or solution, make and complete a table, etc.)	x
<b>Extended Response</b> (essay, multi-step response with explanation and rationale required for tasks)	
<b>Product</b> (research paper, editorial, log, journal, play, poem, model, multimedia, art products, script, musical score, portfolio pieces, etc.)	
<b>Performance</b> (demonstration, presentation, science lab, dance or music performance, athletic performance, debate, etc.)	
<b>Process</b> (creation, development, design, exploration, imagining, visualization, experimentation, invention, revision)	
<b>The assessment includes:</b>	<b>Check All That Apply</b>
<b>Teacher directions</b> (may include prerequisites/description of instruction before giving the assessment e.g., this assessment should be given after students have learned ...)	x
<b>Scoring Guide/Rubric:</b> facets explains the misconceptions, but no scoring guide for responses, however students receive immediate corrective feedback to change wrong answers.	x
<b>Sample evidence to show what student performance might look like:</b> facets	x
<b>Materials</b> (if needed to complete the assessment) computers	x
<b>Estimated time for administration:</b> depends on number of teacher selected questions	x
<b>Student Directions &amp; Assessment Task/Prompt</b> – what does the student see/use? Computer screen, multiple choice prompts with boxes (short constructed responses) to explain answers	x
<b>Other:</b> There are developmental lessons that address the Colorado state standard and prescriptive lesson that address the common facets of misunderstanding.	x

### A high quality assessment should be...Aligned

Alignment	Rating Column	Comments
<b>1a.</b>		
Grade Level(s): 5		
Indicate the Colorado Academic Standards and Grade Level Expectations evaluated by the Assessment: SC09-GR.5-S.1-GLE.1		
Indicate the intended DOK range of the Grade Level Expectations:1-3		
Indicate the intended DOK of the assessment (list DOK levels) : 2		

<p><b>1b.</b> Describe the content knowledge/concepts assessed by the set of items or the performance task: Addresses conservation of mass, understanding the difference between mixtures and solutions, dissolving and separating mixtures.</p>		
<p><b>1c.</b> List the skills/performance assessed: explaining, compare and contrast, describe (predict), calculate</p>		
<p><b>1d.</b>To what extent do you see a strong content match between the set of items reviewed or the task and the corresponding Colorado Academic Standard/s? <b>Use the definitions below to select your rating.</b></p> <p><b>Full match</b> – all tasks or items fully address or exceed the relevant skills and knowledge described in the corresponding state standard/s.</p> <p><b>Close match</b> – most tasks or items address the relevant skills and knowledge described in the corresponding state standard/s.</p> <p><input type="checkbox"/> <b>Partial match</b> – many tasks or items partially address the skills and knowledge described in the corresponding state standard/s.</p> <p><input type="checkbox"/> <b>Minimal match</b> – some tasks or items match some relevant skills and knowledge described in the corresponding state standard/s.</p> <p><input type="checkbox"/> <b>No match</b> – task or most items are not related to the skills and knowledge described in the corresponding state standard/s.</p>		
<p><b>Please provide evidence from both the standards and assessment to support your response: Includes separation, and impact on mass before and after separation</b></p>		
	<p>Full Match=5; Close Match=4; Partial Match=3; Minimal Match=2; No Match= 1</p>	
<p><b>Aligned to Colorado Academic Standards Rating</b></p>	<p><b>5</b></p>	
<p><b>1e.</b> Are the set of items or tasks reviewed as cognitively challenging as the grade level expectations? <b>Use the definitions below to select your rating.</b></p> <p><input type="checkbox"/> <b>More rigorous</b> – most items or the tasks reviewed are at a higher DOK level than the range indicated for the grade level expectations.</p> <p><input checked="" type="checkbox"/> <b>Similar rigor</b> – most items or the task reviewed are similar to the DOK range indicated for the grade level expectations.</p> <p><input type="checkbox"/> <b>Less rigor</b> – most items or the task reviewed are lower than the DOK range indicated for the grade level expectations.</p> <p><b>Please provide evidence from both the grade level expectations and assessment to support your response: For example, students are asked what is mass and students need to be able to know that they should add the weight of each.</b></p>	<p><b>Rating Column</b></p>	<p><b>Comments</b></p>
	<p>Similar Rigor=2, More Rigor=2, Less Rigor=1</p>	
<p><b>Rigor Level Rating</b></p>	<p><b>2</b></p>	

## A high quality assessment should be...Scored using Clear Guidelines and Criteria

<p><b>Scoring Guide Present</b></p> <p><input checked="" type="checkbox"/> <b>Answer key, scoring template, computerized/machine scored</b></p> <p><input type="checkbox"/> <b>Generalized Rubric</b> (e.g., for persuasive writing, for all science labs)</p> <p><input type="checkbox"/> <b>Task-Specific Rubric</b> (only used for the particular task)</p> <p><input type="checkbox"/> <b>Checklist</b> (e.g., with score points for each part)</p> <p><input type="checkbox"/> <b>Teacher Observation Sheet/ Observation Checklist</b></p>	<p><b>Check all that apply:</b></p> <p><input checked="" type="checkbox"/></p> <p><b>Rating Column</b></p> <p>Yes=3, Somewhat=2, No=1</p>	<p><b>Comments</b></p>
<p><b>Scoring Guide Appropriate to Task Rating</b></p>	<p><b>N/A</b></p>	
<p><b>2a.</b> Does the rubric/scoring criteria align to Colorado Academic Standards in this assessment. <b>Provide an explanation of your response: no rubric, but feedback on facets of misunderstandings for incorrect answers.</b></p>	<p>Yes=3, Somewhat=2, No=1</p>	

<b>Rubric Aligned to Standards Rating</b>	<b>N/A</b>	
<b>2b. Are the score categories clearly defined and coherent across performance levels? Provide an explanation of your response: no rubric, but feedback on facets of misunderstandings for incorrect answers.</b>	<b>Yes=3, Somewhat=2, No=1</b>	
<b>Rubric/Scoring Coherent Rating</b>	<b>N/A</b>	
<b>2c. To what degree does the rubric/scoring criteria address all of the demands within the task or item? Provide and explanation of your response. no rubric, but feedback on facets of misunderstandings for incorrect answers. no rubric, but feedback on facets of misunderstandings for incorrect answers.</b>	<b>High=3, Moderate=2, Low or None=1</b>	
<b>Rubric/Scoring Aligned with Task Rating</b>	<b>N/A</b>	
<b>2d. Based on your review of the rubric/scoring criteria, do you think the scoring rubric would most likely lead different raters to arrive at the same score for a given response. no rubric, but feedback on facets of misunderstandings for incorrect answers.</b>	<b>Yes=3, Somewhat=2, No=1</b>	
<b>Rubric/Scoring Different Raters Same Rating</b>	<b>N/A</b>	
<b>2e. Is there student work (e.g., anchor papers, video, portfolio) which illustrates student mastery? If so, describe. If not, what student work would be needed? Not present.</b>	<b>Yes=3, Somewhat=2, No=1</b>	
<b>Student Work Samples Rating</b>	<b>N/A</b>	

## A high quality assessment should be...FAIR and UNBIASED

FAIR and UNBIASED <i>(the areas below should be discussed relative to the needs of ELLs, gifted and talented students, and students with disabilities)</i>	Rating Column	Comments
<b>3a.</b> To what extent are most of the items or the tasks designed and formatted to be visually clear and uncluttered (e.g., use of white space, graphics, and illustrations)? <b>Provide an explanation of your response: no pictures, heavy on reading, clear and uncluttered</b>	High=3, Moderate=2, Low=1	
<b>Clear &amp; Uncluttered Rating</b>	<b>3</b>	
<b>3b.</b> To what extent are most of the items or the task presented in as straightforward a way as possible for a range of learners? <b>Provide an explanation of your response: having illustrations would support a wider range of learners.</b>	High=3, Moderate=2, Low=1	
<b>Straight Forward Rating</b>	<b>2</b>	
<b>3c.</b> To what degree is the vocabulary and context(s) presented by most of the items or task free from cultural or other unintended bias? <b>Provide an explanation of your response: Uses scientific language. Depends on a classroom frame of reference.</b>	High=3, Moderate=2, Low=1	
<b>Free of Cultural or Unintended Bias Rating</b>	<b>3</b>	
<b>3d.</b> Does the assessment use appropriate levels of academic language for the grade and content area? <b>Provide an explanation of your response. The language is correlated to the state standards and there is some paired vocabulary.</b>	Yes=3, Somewhat=2, No=1	
<b>Academic Language Rating</b>	<b>3</b>	
<b>3e.</b> Does the assessment limit the usage of words that can be confused with one another (homonyms)? (Examples: ate/eight; sell/cell; allowed/aloud; beet/beat; by/buy). Paired vocabulary, carefully use of standards based language, appropriate scientific terms for the grade level.	Yes=3, Somewhat=2, No=1	
<b>Confusing Language Rating</b>	<b>3</b>	
<b>3f.</b> If applicable, what type of accommodations are provided to ensure that English Learners and/or Students with Disabilities can fully access the content represented by the task or set of items reviewed?  <i>Accommodations are commonly categorized in five ways: presentation, response, setting, and timing and scheduling:</i> <ul style="list-style-type: none"> <li>o <b>Presentation Accommodations</b> —Allow students to access information in ways that do not require them to visually read standard print. These alternate modes of access are auditory, multi-sensory, tactile, and visual.</li> <li>o <b>Response Accommodations</b> —Allow students to complete activities, assignments, and assessments in different ways or to solve or organize problems using some type of assistive device or organizer.</li> <li>o <b>Setting Accommodations</b> —Change the location in which a test or assignment is given or the conditions of the assessment setting.</li> <li>o <b>Timing and Scheduling Accommodations</b> —Increase the allowable length of time to complete an assessment or assignment and perhaps change the way the time is organized.</li> <li>o <b>Linguistic Accommodations</b>—Allow English language learners (ELLs) to access academic construct measured by reducing the linguistic load of an assessment. The accommodation is based on an ELL's limited English language proficiency, which is different than an accommodation based on a student's disability or a cognitive need.</li> </ul>		
<b>3g:</b> Are there adequate accommodations permitted for this assessment? <b>Provide an explanation of your response: not evident</b>	Yes, Several allowed=3; Yes, Some allowed=2; None allowed =1	
<b>Adequate Accommodations Allowed Rating</b>	<b>N/A</b>	

## A high quality assessment...Increases Opportunities to Learn

Opportunities to Learn <i>(the areas below should also be discussed relative to the needs of ELLs, gifted and talented students, and students with disabilities)</i>	Rating Column	Comments

<b>4a.</b> Does this assessment engage a student in thinking that connects to a real world, new context, situation, problem or challenge? <b>Provide an explanation of your response: classroom setting problems/scenarios are addressed.</b>	High=3; Moderate=2; Low or None=1
<b>Engagement Rating</b>	<b>2</b>
<b>4b.</b> To what extent do you think the knowledge and skills tested by the assessment can provide good information about what students have learned in the classroom? <b>Provide an explanation of your response: includes the facets of learning</b>	High=3; Moderate=2; Low or None=1
<b>Classroom Learning Rating</b>	<b>3</b>
<b>4c.</b> To what degree do the results from this assessment (scores and student work analysis) foster meaningful dialogue about learning expectations and outcomes with students and parents? <b>Provide an explanation of your response: instant feedback on answers, learning guides to support, knowledge of misconceptions.</b>	High=3; Moderate=2; Low or None=1
<b>Learning Expectations/Outcomes Rating</b>	<b>3</b>
<b>4d.</b> To what extent do you believe the assessment can clearly communicate expectations for academic excellence to students? <b>Provide an explanation of your response: not evident</b>	High=3; Moderate=2; Low or None=1
<b>Communicate Academic Excellence Rating</b>	<b>1</b>
<b>4e.</b> Based on the content evaluated by the task or the set of items reviewed, to what extent do you think teachers can use the results (scores and student work analysis) to understand what competency on standard/s look like? <b>Provide an explanation of your response: responses are directly related to the standards and content based as well as misconceptions</b>	High=3; Moderate=2; Low or None=1
<b>Competency on Standards Rating</b>	<b>3</b>
<b>4f:</b> Based on the content evaluated by the task or the set of items reviewed, to what extent do you think teachers can locate where the assessment evidence is represented within the curriculum, student learning objectives, or lesson? <b>Provide an explanation of your response: a section for reports along help guide for trouble shooting</b>	High=3; Moderate=2; Low or None=1
<b>Locate Evidence Rating</b>	<b>3</b>

Summary	Earned	Possible
Standards Rating	5	5
Rigor Rating	2	3
Subtotal	7	8
		87.5%
Scoring Guide Appropriate Rating	N/A	3
Rubric Aligned w/Standards Rating	N/A	3
Rubric/Scoring Coherent Rating	N/A	3
Rubric/Scoring Aligned with Task Rating	N/A	3
Inter-rater Reliability Rating	N/A	3
Student Work Samples Rating	N/A	3
Subtotal	0	18
		0.0%
Clear & Uncluttered Rating	3	3
Straight Forward Rating	2	3
Free of Cultural or Unintended Bias Rating	3	3
Academic Language Rating	3	3
Confusing Language Rating	3	3
Adequate Accommodations Allowed Rating	N/A	3
Subtotal	14	18
		77.8%
Engagement Rating	2	3
Reflects Classroom Learning Rating	3	3
Reflects Learning Expectations/Outcomes Rating	3	3
Communicates Academic Excellence Rating	1	3
Competency on Standards Rating	3	3

Locate Evidence Rating	3	3
Subtotal	15	18
		83.3%
Grand Total	36	62
		58.1%

This assessment is: Place an 'X' in the appropriate box

Fully Recommended	x
Partially Recommended	
Not Recommended	

Science Diagnoser directly correlates with state standards, addresses misconceptions, provides learning guides, teaching guidance on learning activities, organizes results, gives direction for reteaching it provides a solid tool for formative assessment and summative, we fully recommend the assessment











