



Density Scoring Tips

- The causal rubrics are designed to be diagnostic and to help you assess what model a student holds. If you find yourself thinking, “I know it matches this level, but I really should bump this student’s score up a little because he tried so hard” (or did a good job explaining it), then you are thinking of the assessment more as a reward (or in the case of a student who didn’t try, as a punishment) than a diagnostic. Try to think of it as a way to assess what ideas the unit has effectively communicated so far.
- Each question is designed to assess one dimension of causal reasoning. Don’t expect students to tell everything that they know in every answer. (For example, if you find yourself thinking, “The response matches level 4 and shows a grasp of relational density in sinking and floating, but how can I give this student a level 4 when he doesn’t show that he also understands what causes differences in density?”) The diagnostic is designed to assess understanding of one key idea and other parts of the test will assess other dimensions (like what causes differences in density.)
- Often higher-level ideas are hard to conceive of at lower levels of understanding. If a student clearly articulates a higher-level idea and also gives a lower level idea, probably he or she understands the higher-level idea to some extent.
- The rubric indicates what a good model looks like at each causal level. However students’ responses can still be scored at a given causal level even if their models do not satisfy the list for a good model at that level.
- The quality of explanation rubrics are included for teachers who want to use the scoring to push students to do a better job explaining their ideas and want to use growth in rubric scores to do so. The better the job students do explaining their ideas, the easier it is for you to know what they understand.
- Some teachers have tried having students score their own responses. This works well with “the quality of explanation” and “the best models at this level” portions of the rubric and can help students do a better job expressing their ideas. It works less well with the causal rubrics because many of the higher-level explanations will not make sense to students working at lower levels.