Practice Test Clusters FAQ—Explanatory Text

What are English Language Arts and Mathematics clusters?

- Clusters are test items designed to assess multiple standards within a specific English Language Arts (ELA) or Mathematics context. Cluster items have multiple parts, or interactions, that guide students through a task toward a solution to a complex problem. Each cluster includes a task statement that explains its focus.

How are clusters scored?

- The scoring criteria for each practice cluster are accessed using the score button, which is located in the upper-left corner of the screen. When users click the button, a pop-up displays the item's scoring assertions along with each assertion's corresponding academic standard. Scoring assertions indicate explicitly what the student did and did not do, and what inference about the student can be supported by this evidence. In the example below, a student is asked to analyze a student survey about the school lunch program. Assertion 1 describes the correct action ("The student entered 209 for the number of students surveyed") as well as the inference that can be made about student understanding ("providing evidence of the ability to summarize numerical data sets"). Further assertions continue to describe the appropriate student actions, along with the inferences supported by each action.

Score Result (type: string, valid: false, empty: true, selected: false)
The student entered 209 for the number of students surveyed, providing evidence of the ability to summarize numerical data sets in relation to their context by reporting the number of observations.
The student entered 10%, 24%, 3%, and 63%, or correct percentages based on the total number of responses he or she entered, providing evidence of the ability to calculate percentages.
The student entered percentages for each category that add up to 100 percent, providing evidence of the ability to attend to precision.
The student selected "extend the length of the lunch period" and "more variety in food choices" or selected the two options that had the highest percentage of responses based on the inputs in part D, providing evidence of the ability to make sense of problems and persevere in solving them.
The student entered 87% or a correct value based on the two previous selections and the table from part D, providing evidence of the ability to attend to precision.

- Students have multiple paths to earning points in each cluster.
- Partial credit is incorporated into cluster scoring, which may include scoring dependencies that enable more accurate measurements of the evidence a student provides. For example, when solving a mathematics problem, a student who calculates numbers incorrectly receives no credit for the calculation. Yet in a subsequent interaction, the student will receive credit for making a correct inference about that calculation even if the calculation itself was incorrect. In ELA clusters, a student who makes an incorrect inference can still receive partial credit if they logically support that incorrect inference with a relevant detail from the text.

How do clusters differ from stand-alone items?

ELA

- Rather than being a series of unrelated discrete questions, ELA item clusters focus on a particular aspect of a reading passage and scaffold the student toward a conclusion, interpretation, or explanation.
- Clusters offer multiple paths to a correct answer allowing students to interpret what they read in different ways as long as they can support their interpretation with accurate information from the text.

Mathematics

- Mathematics clusters use rich contexts to mirror real-world problem-solving processes through student engagement in tasks which are not limited to one content standard.
- Clusters provide a platform that allows generation of more scoring assertions per student interaction than typical stand-alone items produce.