What is the structure of the test?

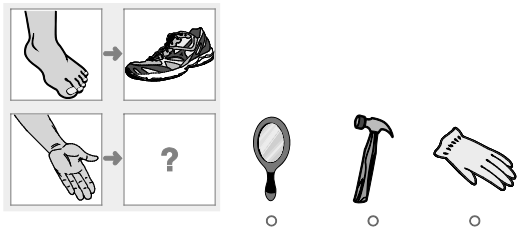
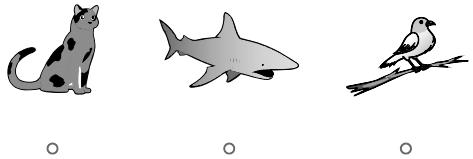
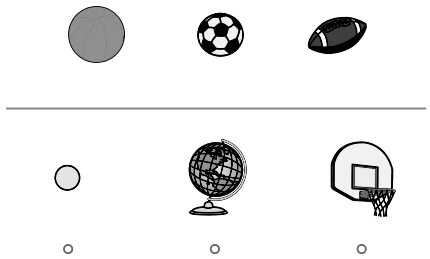
The ten levels of *CogAT* span kindergarten through grade 12. All levels have three batteries: Verbal, Quantitative, and Nonverbal. Each battery includes three distinct subtests relevant to its domain. The use of three different subtest formats in each battery increases both the fairness and the validity of scores.

All of the test questions are designed to show how well students use reasoning skills they have developed to solve problems they have **not** been directly taught.

For Levels 5/6, 7, and 8 (kindergarten through grade 2), with the exception of the optional Sentence Completion subtest, questions are entirely pictorial. No reading is required of students in any subtest.

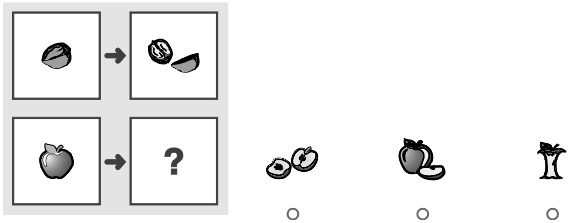
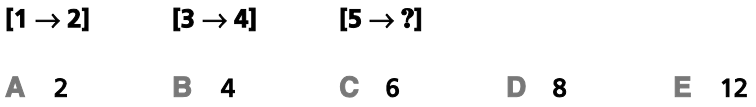
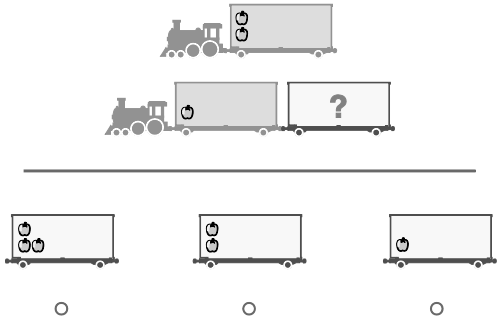
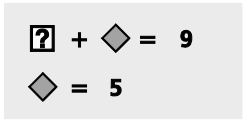
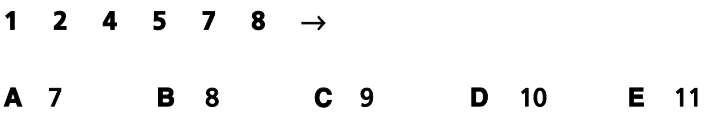
The table beginning on the following page shows examples of the nine different formats implemented at Levels 5/6–8 (column 1) and at Levels 9–17/18 (column 2). Exceptions to the formats are noted within the table.

Verbal Battery Subtest Items

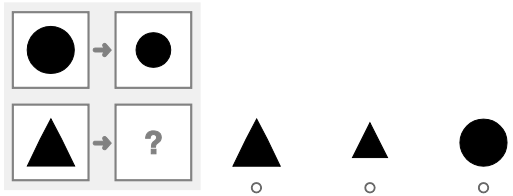
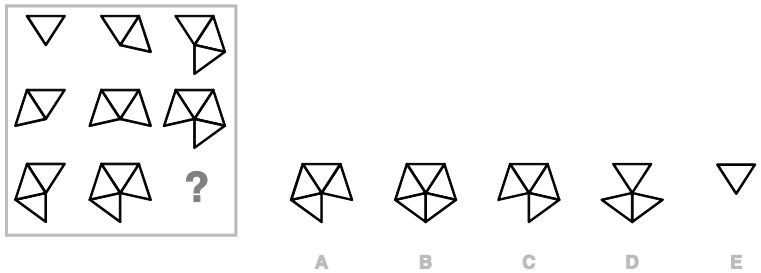
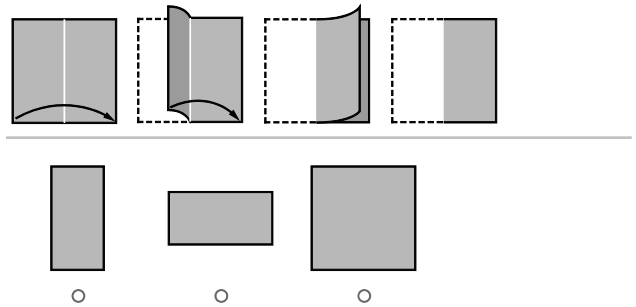
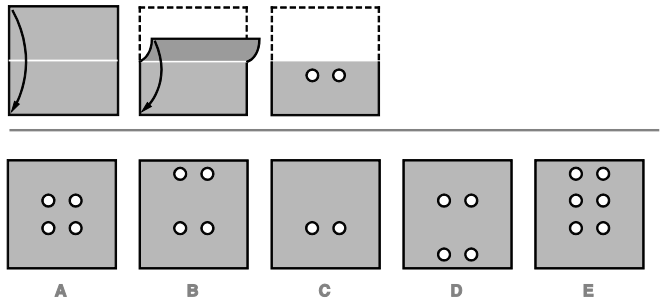
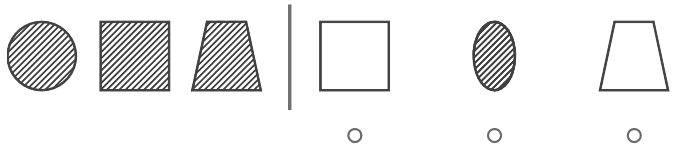
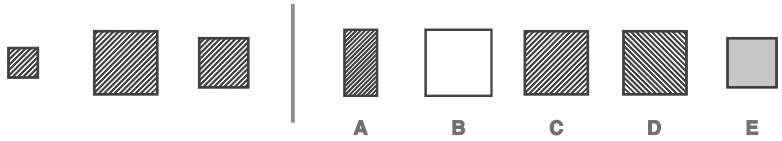
Subtest	Levels 5/6–8	Levels 9–17/18
Subtest 1: Picture/Verbal Analogies*	 Each question shows a 2 x 2 matrix with three pictures and one empty cell. Students examine the two pictures in the top row to determine how they are related. Then they apply this relationship to the picture in the bottom row and choose the answer that generates a second pair of pictures related to each other in the same way as the first pair.	**right → left : over →** **A** finished **B** out **C** above **D** around **E** under First students examine a pair of words and think of ways in which they are related. Then students apply this relationship to a third word to generate a new pair of words that goes together in the same way. Finally students select the best answer choice or, if none seems correct, they look for a different way in which the first two words are related.
Subtest 2: Sentence Completion	**"Which one swims in the ocean?"**  Students listen to a sentence or a question the teacher reads in English or Spanish and then select the picture that best completes the sentence or answers the question.	**The fastest runner _____ the race.** **A** loses **B** wins **C** watches **D** starts **E** makes Students read an incomplete sentence and then select the answer choice that best completes the sentence.
Subtest 3: Picture/Verbal Classification*	 Students first examine three pictures in the top row of each question and think of ways in which the pictures are alike. Then the students select the answer picture that belongs in the same group.	**apple orange pear** **A** fruit **B** carrot **C** pea **D** lemon **E** onion Students examine three words and think of ways in which they are alike. Then students select an answer choice that belongs in the same group.

*Picture Analogies, Picture Classification at Levels 5/6–8; Verbal Analogies, Verbal Classification at Levels 9–17/18

Quantitative Battery Subtest Items

Subtest	Levels 5/6–8	Levels 9–17/18
Subtest 4: Number Analogies	 Each question shows a 2 x 2 matrix and requires the same processes as the Picture Analogies subtest, but it uses quantitative concepts rather than verbal concepts.	**Level 9 includes some questions in which number pairs are arranged vertically.**  Students examine two pairs of numbers and figure out the rule both pairs follow. Then they apply the rule to a given number and choose an answer that generates a third pair of numbers that follow the same rule. Some questions in this subtest at Level 9 (grade 3) use a matrix format. All others use strings of number pairs.
Subtest 5: Number Puzzles	**Level 8 includes some questions that follow the Levels 9–17/18 format.**  Each question presents two trains. Students select the answer picture that makes the second train carry the same number of objects as the first train.	  Students are presented one or more equations in which at least one number is missing. If one element is missing, students must select the missing number. If two or three elements are missing, students must substitute numbers that are provided for the missing elements and then solve the equation.
Subtest 6: Number Series	 Each question shows several strings of beads. The beads make a pattern. Students must discover the pattern and then select the string of beads that comes next in the sequence.	**Level 9 includes some questions that use beads to show a pattern.**  Each question shows a series of numbers and requires the student to identify the pattern and then select the number that comes next in the sequence.

Nonverbal Battery Subtest Items

Subtest	Levels 5/6–8	Levels 9–17/18
Subtest 7: Figure Matrices	 Each question shows a 2 x 2 matrix and requires the same process as the Number Analogies and Picture Analogies subtests but uses spatial forms.	**Levels 9–11 and some questions at Level 12 follow the Levels 5/6–8 format.**  This subtest requires that students infer and then apply a simple rule. Students must determine the relationship among the first two elements, apply this relationship to the third element in the matrix, and then select the figure that completes the relationship.
Subtest 8: Paper Folding	 Students must imagine what happens to a piece of paper that is folded, usually cut in some way, and then unfolded. Then students select the answer choice that shows how the paper looks when it is opened.	 Students must imagine what happens to a piece of paper that is folded, has holes punched in it, and then unfolded. Then students select the answer choice that shows how the paper looks when it is opened.
Subtest 9: Figure Classification	 As on the Picture Classification subtest, students must infer how three objects or figures are similar and then select the picture that goes with the target set.	 Students must determine how three figures are similar and then select the answer choice that is most like the first three figures.