## **Explanation of the CogAT Assessment**

The CogAT Assessment measures general cognitive abilities, focusing on reasoning and problem-solving in three different areas: Verbal, Quantitative, and Nonverbal (spatial). The development of these abilities begin at birth and continue through early adulthood and are influenced by experiences gained both in and out of school.

- I. Verbal The Verbal Battery measures flexibility, fluency, and adaptability in reasoning with verbal materials and in solving verbal problems. These reasoning abilities play an important role in reading comprehension, critical thinking, writing, and virtually all verbal learning tasks. It includes three types of questions: Picture Classification, Sentence Completion, and Picture Analogies:
  - A. <u>**Picture Classification:**</u> Students have to discover the conceptual link tying pictures together and then select the picture that belongs with the original set.
  - B. <u>Sentence Completion</u>: Each question of this type presents a sentence read aloud with one word omitted. Students select the picture that correctly completes the meaning conveyed in the sentence.
  - C. <u>**Picture Analogies:**</u> Students select from among three answer choices the one that correctly completes the analogy.
- **II. Quantitative -** The Quantitative Battery measures quantitative reasoning skills; flexibility and fluency in working with quantitative symbols and concepts; and the ability to organize, structure, and give meaning to an unordered set of numerals and mathematical symbols. These reasoning skills are significantly related to problem solving in mathematics and other disciplines. It includes three types of questions: Number Analogies, Number Puzzles, and Number Series:
  - A. <u>Number Analogies:</u> Students select from among three answer choices the one that correctly completes the analogy.
  - B. <u>Number Puzzles:</u> Students solve equations by selecting from four number choices.
  - C. <u>Number Series</u>: Students are presented a series of numbers represented by beads. Students must determine the rule underlying the progression in the series and then select the next number in the series by choosing the correct number of beads.
- **III. Nonverbal -** The Nonverbal Battery measures reasoning using geometric shapes, designs, and figures. To perform successfully, students must invent strategies for solving novel problems. They must be flexible in using these strategies and accurate in implementing them. All questions in the battery use figures, designs, or geometric shapes stimuli. It includes three types of questions: Figure Classification, Figure Matrices, and Paper Folding:
  - A. <u>Figure Classification</u>: Students have to discover the conceptual link or underlying characteristic that ties the figures presented together and select the figure that belongs with them in a similar fashion to the Picture Classifications.
  - B. **Figure Matrices:** Students select from among three answer choices the one that correctly completes the figural analogy in a similar fashion to the Verbal Analogies.
  - C. <u>**Paper Folding:**</u> Students are presented with a series of diagrams showing a square piece of paper being folded and holes being punched in the paper. Students have to select the figure that shows what the paper will look like when it is unfolded.

## For an explanation of CogAT scores, please visit: <u>www.cogat.com</u>