

Overview of CogAT for Parents

What is the *Cognitive Abilities Test*[™] (CogAT[®])?

Cognitive ability refers to a student’s readiness to learn in different situations and environments and demonstrate creative problem-solving skills. Unlike a traditional achievement test, which measures how well a student has mastered the curriculum, the *Cognitive Abilities Test (CogAT)* shows us how well a child can reason abstractly and identify patterns and relationships in the world around them.

The *CogAT* measures reasoning in three areas, also called batteries, that are based on the most important ways students and teachers communicate in the classroom: **Verbal**, **Nonverbal**, and **Quantitative**.

Figure 1 shows the types of items that can be found in each battery of the *CogAT*. *Figure 2* shows a sample item from each subtest (second grade level).

Figure 1
Types of Reasoning Assessed

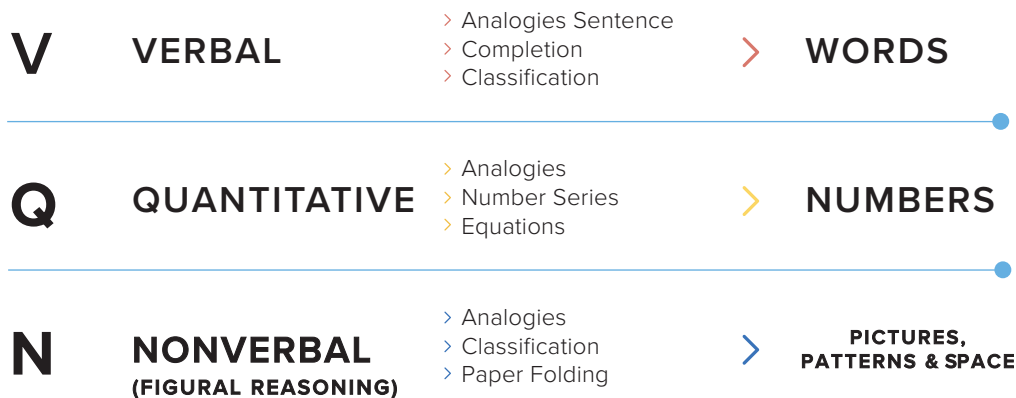



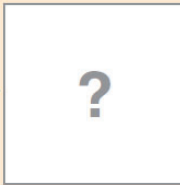





Figure 2

Verbal – Picture Analogies








 man	→	 house
 bird	→	


 tree


 birdbath


 birdhouse

Verbal – Picture Classification

 referee	 candy cane	 zebra	
 <input type="radio"/> barber's pole	 <input type="radio"/> pants	 <input type="radio"/> cheetah	 <input type="radio"/> game of checkers

Verbal – Sentence Completion (not pictured)

Please note – printed picture descriptions do not appear on the test

Figure 2 Continued

Quantitative – Number Analogies

A 2x2 grid of boxes. The top-left box contains one yellow star and is labeled "star". An arrow points to the top-right box, which contains two yellow stars and is labeled "stars". The bottom-left box contains one green bug and is labeled "bug". An arrow points to the bottom-right box, which contains a question mark. To the right of the grid are three options: "one bug" with one green bug, "two bugs" with two green bugs, and "three bugs" with three green bugs. Each option has a small pink circle below it.

Quantitative – Number Puzzles

$$\boxed{4} = \boxed{2} + \boxed{?}$$

2



3



4



6



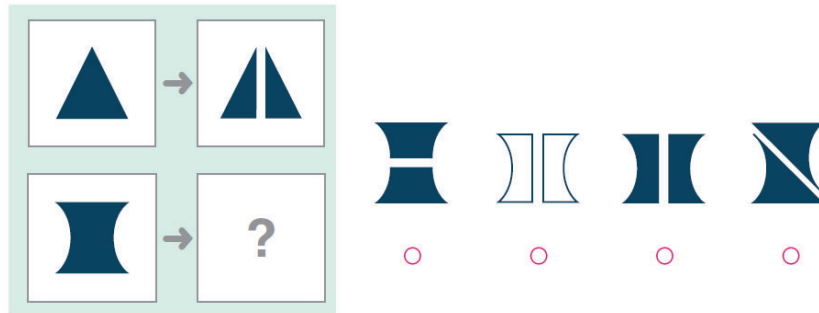
Quantitative – Number Series

A diagram showing a rectangular frame with six vertical strings of beads. The first string has 4 beads, the second has 3, the third has 2, the fourth has 3, the fifth has 4, and the sixth has 3. Below the frame is the label "strings of beads". To the right are three options: "two beads" with two blue beads on a string, "three beads" with three blue beads on a string, and "four beads" with four blue beads on a string. Each option has a small pink circle below it.

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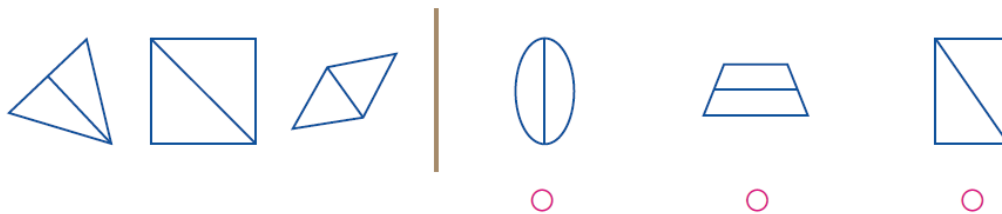
Figure 2 Continued

Nonverbal – Figure Matrices



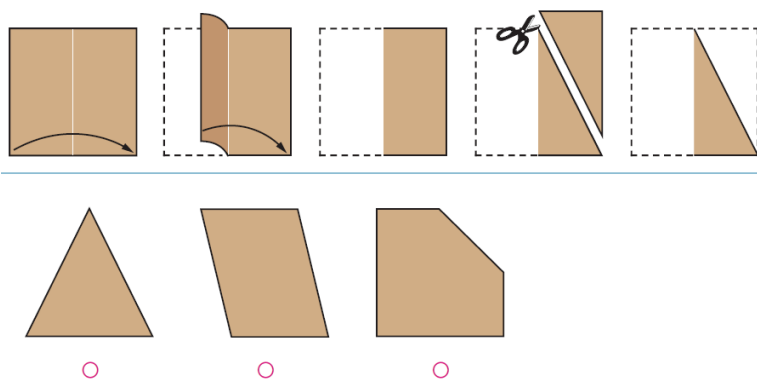
A pair of related pictures of shapes followed by a second shape and four solutions, one of which has the same relationship to the second shape as the first pair.

Nonverbal – Number Series



Three figures that are related in a certain way, followed by three solutions, one of which is related to the original group of three.

Nonverbal – Paper Folding



A series of images depicting a piece of paper being folded and cut. There are three solutions, one of which correctly depicts what the original piece of paper will look like after being unfolded.

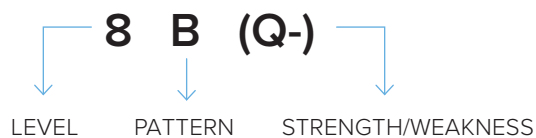
Please note – printed picture descriptions do not appear on the test



After taking the full *CogAT*, each student receives an *Ability Profile*—a simple code that summarizes that student’s cognitive abilities. This document will assist you in interpreting the *Ability Profile*, understanding what ability data is, and how it can be used.

Interpreting the *Ability Profile*

Every student who completes the minimum number of items on the full *CogAT* receives an *Ability Profile* code like this one:



This *Ability Profile* can help teachers adapt to meet student needs, assist parents in supporting their children at home, and provide students with a better understanding of their own learning. The following sections explain how to interpret each part of the profile.

Level

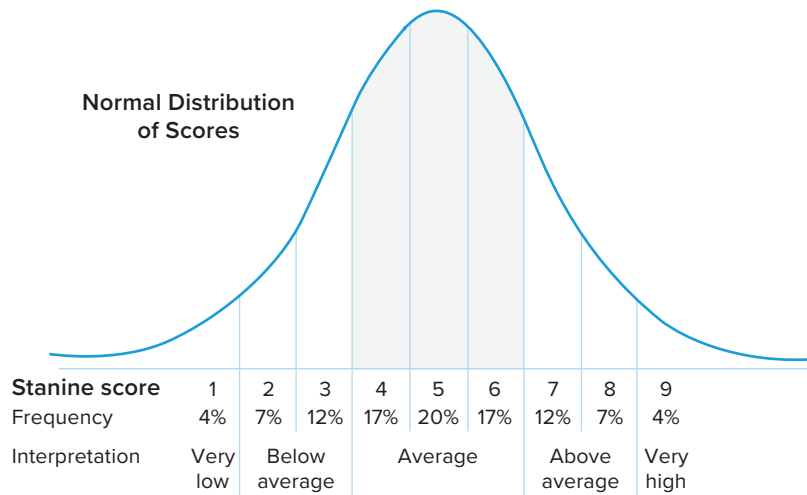
Each *CogAT Ability Profile* begins with a number that represents the student’s *median* age stanine. This indicates the student’s overall level of reasoning ability relative to other students their age. Stanine is short for “standard nine.” The name comes from the fact that stanine scores range from a low of 1 to a high of 9.

Interpreting Stanine Level

Level	Indication
1, 2, 3	below average
4, 5, 6	average
7, 8	above average
9	very high

The test uses a nationwide sampling of test results (called “national norms”) to calculate scores. Students are grouped by age in one-month intervals from 4 years 11 months through 18+ years of age. If your child achieved an average stanine score (4-6), the test indicated that they performed at about the same level as other students their age who took the test. If a child achieves a stanine score that is above average (7-9), they performed better than other students who took the test. A below average stanine (1-3) means that the child had a lower performance than other students their age who took the test. See Figure 3 for a visual representation:

Figure 3
Median Stanine by Reasoning Ability Level



(bell curve depicting the distribution of CogAT student stanine scores)

Pattern

The median stanine is followed by a letter that indicates the *pattern* of your child’s scores. The pattern shows whether the three battery scores are relatively equal or some scores are significantly higher or lower than other scores. The pattern is classified as either an A, B, C, or E profile.

Pattern	Description	Approximate percentage of students with this profile
A	The student’s Verbal, Quantitative, and Nonverbal Battery scores are roughly at the sAme level	44%
B	Two of the scores are roughly the same. The third score is a relative strength or weakness, significantly aBove or Below the other two.	33%
C	Two scores Contrast. The student shows a relative strength and a relative weakness.	12%
E	An E profile indicates Extreme score differences. At least two scores differ by 24 or more points on the standard age score (SAS) scale.	10%

Relative strengths and weaknesses

Depending on the student's *Ability Profile*, there may be one or two additional letters after the pattern that indicate any relative strengths and/or weaknesses evident in their battery scores. Keep in mind that these are only in relation to that child's other skills—not those of other students.

Not all profiles contain these additional letters. For those that do, here is how to interpret these letters:

- V, Q, or N followed by a plus sign (+) indicates a relative strength on the Verbal, Quantitative, or Nonverbal Battery, respectively.
- V, Q, or N followed by a minus sign (–) indicates a relative weakness on the Verbal, Quantitative, or Nonverbal Battery, respectively.

Sample score interpretations

An *Ability Profile* of 4B (V+) means that the student's median stanine is 4 (average) and that the student's score on the Verbal Battery was significantly higher than (aBove) the student's scores on the two other batteries. Here are some additional examples of profiles and their interpretation:

Profile	Interpretation
9A	Very high scores on all three batteries
8B (Q-)	Generally high scores but a relative weakness on the Quantitative Battery
2B (N+)	Generally below average scores, but a relative strength on the Nonverbal Battery
5C (V+N-)	Generally average scores with a relative strength on the Verbal Battery and a relative weakness on the Nonverbal Battery
8E (V-)	Generally high scores but an extreme relative weakness on the Verbal Battery

How can ability data be used?

The *Ability Profile* is a unique and powerful tool that provides educators, students, and parents with information about a student's potential.

Using the information from the profile, teachers can adapt instruction based on best practices for each ability level and group students with others who will complement and enhance their learning. Teachers can also use targeted strategies to build upon specific strengths and assist students in shoring up their weaknesses to encourage academic growth. For example, a student with a relative strength in verbal reasoning will benefit from talking or writing about what they are learning, and a student with a strength in nonverbal reasoning will benefit from using models and manipulatives to learn new concepts. A student with a relative weakness in verbal reasoning may benefit from having instructions written on the board for reference as opposed to being expected to recall verbal directions. A student with a relative weakness in quantitative reasoning will likely benefit from using drawings and/or words to explain math problems.

As parents, we can also use this information to support our children in their learning and reasoning skills at home. We encourage you to see our *Additional Resources* below to use the *Ability Profile* data to the fullest.

An important note about test scores

Your child is a unique human being, with numerous immeasurable personal qualities and characteristics that will shape their contribution to the world. It is important to understand that the *CogAT*, though very useful in finding the potential in our students, is just one assessment, and results can vary depending on a variety of external factors. While these scores are an invaluable illustration of a student's academic abilities, they are not the only measurement of your child's abilities and skills. Multiple types of assessments, data points, and observations are used by your child's school to determine their needs. We hope that the *Ability Profile* serves as one valuable tool for you and your child's teacher to support your child as they learn and grow into their full potential.

Additional resources

[Getting to Know CogAT for Parents \(video\)](#)

<https://vimeo.com/515933045>

[CogAT.com](#)

[How to Support Your Learner at Home](#)

https://info.riversideinsights.com/hubfs/CogAT%20in%20the%20Classroom%20resources/CogAT_How%20to%20support%20your%20learner%20at%20home.pdf

[How to Conference with Your Child's Teacher](#)

<https://info.riversideinsights.com/hubfs/CogAT%20in%20the%20Classroom%20Resources/How%20to%20conference%20with%20your%20child%E2%80%99s%20teacher.pdf>

[How to Talk with Your Child about Their Learning](#)

<https://info.riversideinsights.com/hubfs/CogAT%20in%20the%20Classroom%20Resources/How%20to%20Talk%20with%20Your%20Child%20about%20Their%20Learning.pdf>