### CogAT Parent Presentation



Excellence for All

# Why did my child take the Cognitive Abilities Test?

- Cedar Rapids Schools administer the CogAT Screener to ALL 2<sup>nd</sup> and 5<sup>th</sup> grade students throughout the District.
- Looking at Achievement vs. Ability
- Assessments of achievement attempt to measure what has been learned
- Assessments of ability attempt to measure potential for learning
- Identify under-represented populations of students

### How was the test administered?

- All testing was done on the computer
- All students with an SAS score of 112 or higher after the CogAT Screener were given the full battery.
- The top 30% of under-represented populations were given the full battery after the CogAT Screener data was in.
- All data was building normed, meaning the top 30% of students came from each elementary building.
- The full battery was then split between two additional testing sessions.

### What does CogAT measure?

- •CogAT measures learned reasoning and problem-solving skills in three different areas: verbal, quantitative, and nonverbal.
- •Reasoning skills develop gradually throughout a person's lifetime, and at different rates for different individuals. Cognitive abilities can be fluid and develop over time.
- *CogAT* does not measure such factors as effort, attention, motivation, and work habits, which contribute to school achievement as well.

## How do the three batteries of CogAT differ?

- The **Verbal Battery** measures a child's ability to remember and transform sequences of English words or pictures, to understand them, and to make inferences and judgments about them.
- The Quantitative Battery tests the child's understanding of basic quantitative concepts and relationships that are essential for learning mathematics. Tasks measure both the understanding of relational concepts and the student's ability to discover relationships and to figure out a rule or principle that explains them.
- The **Nonverbal Battery** measures reasoning using pictures and geometric shapes. The Nonverbal Battery is not only spatial, but rather a measure of creativity and flexibility in thinking skills using visual models.

### Sample Verbal Battery Questions

#### Intermediate Level

Directions: Find the word that makes the best sense in the sentence and mark the correct апзият оп усыт апзият document.

Sentence Completion

On the way home from school, Lashanda jumped in the that the rain had left.

J rivers

R puddles L flowers

M holes

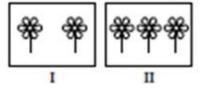
N lakes

## Sample Quantitative Battery Questions

Intermediate Level

Directions: Figure out the value of I and II. Then decide if I is greater than II, less than II, or equal to II.

#### Quantitative Relations



- A I has more flowers than II.
- B I has fewer flowers than II.
- C I has the same number of flowers as II.

## Sample Non-Verbal Battery Questions

#### Intermediate Level

Directions: The first figure is changed into the second figure. The third figure is changed in the same way to make one of the answer choices. Choose the answer choice that goes with the third figure.

#### Figure Analogies













### What do the results tell me?

- Look at the level and pattern of scores for each individual
- Note each individual's strongest area of cognitive development
- Identify uneven patterns of cognitive abilities. A difference of 2 or more in stanines represents significant differences in scores. (A difference of 24 points or more in SAS)
- Dominant symbol system

### Glossary of Scoring Terms

- Standard Age Score (SAS) is a normalized standard score, with a mean (average) of 100. Standard Age Scores of 89-111 are all within the average range.
  - A student with a SAS of 100 on the Verbal Battery has the rate and level of development of verbal reasoning skills that are typical for his age group.
  - A student with a SAS of 125 on the Verbal Battery has a faster rate and higher level of development of verbal reasoning skills than the typical student in his age group
- Percentile Rank indicates the percentage of students in the same age or group whose scores fall below the score obtained by a particular student
- Stanine is a normalized standard score scale consisting of nine broad levels (1-9). Stanines are broad groupings of percentile ranks.



#### PROFILE NARRATIVE FOR

Cognitive Abilities Test™ (CogAT®)

Student: Class: Building: System: Student ID: Form/Level: Test Date: Norms: Order No.: Page:

Abilities	National	Age Scores	National Age Percentile Ranks		
Abiillies	Stanine	Percentile Rank	Low 1 25 50 75	High 99	
Verbal	9	99			
Quantitative	7	77			
Nonverbal	8	93		•	
COMPOSITE	9	97			
			1	. )	

Ability Profile 8E (V+): The number in the profile is the age stanine for the middle score on the three batteries. The score on the Verbal Battery is significantly higher than the scores on the Quantitative and Nonverbal Batteries. For more information, visit www.cogat.com.

Abilities	Raw Scores			Grade Scores	
	Number of Items	Number Att.	Number Correct	National National Percentile Stanine Rank	
Verbal	65	65	64	9 99	
Quantitative	60	52	46	6 68	
Nonverbal	65	65	58	8 89	
COMPOSITE				8 95	

#### Scores for

was given the Cognitive Abilities Test in March 2009. At the time of testing, she was in third grade at in Cedar Rapids Schools.

Different students bring different patterns and levels of abilities to learning tasks. She was given the Cognitive Abilities Test to help find out about her reasoning abilities. was tested in all three areas: verbal, quantitative, and nonverbal abilities.

national percentile rank of 99 on verbal reasoning ability means that, compared with other students her age nationally, scored higher than 99 percent. national percentile rank is 77 in quantitative ability and 93 in nonverbal ability.

composite score is derived from results from the three batteries. composite national percentile rank of 97 is a general statement of her reasoning ability.

Abilities	National	Age Scores	National Age Percentile Ranks		
redilloo	Stanine	Percentile Rank	Low High 1 25 50 75 99		
Verbal	9	99			
Quantitative	7	77			
Nonverbal	8	93			
COMPOSITE	9	97			

Ability Profile 8E (V+): The number in the profile is the age stanine for the middle score on the three batteries. The score on the Verbal Battery is significantly higher than the scores on the Quantitative and Nonverbal Batteries. For more information, visit www.cogat.com.

	Raw Scores			Grade Scores	
Abilities	Number of Items	Number Att.	Number Correct	National National Percentile Stanine Rank	
Verbal	65	65	64	9 99	
Quantitative	60	52	46	6 68	
Nonverbal	65	65	58	8 89	
COMPOSITE				8 95	
		, "			

#### Scores for

was given the Cognitive Abilities Test in March 2009. At the time of testing, she was in third grade at in Cedar Rapids Schools.

Different students bring different patterns and levels of abilities to learning tasks. She was given the Cognitive Abilities Test to help find out about her reasoning abilities. was tested in all three areas: verbal, quantitative, and nonverbal abilities.

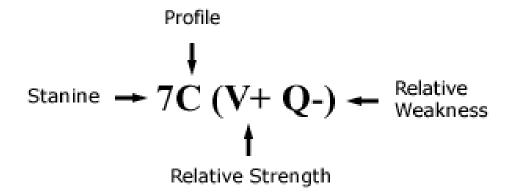
national percentile rank of 99 on verbal reasoning ability means that, compared with other students her age nationally, scored higher than 99 percent. national percentile rank is 77 in quantitative ability and 93 in nonverbal ability.

composite score is derived from results from the three batteries. composite national percentile rank of 97 is a general statement of her reasoning ability.

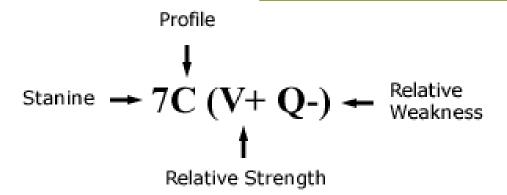
Profile

Stanine 
$$\rightarrow$$
 7C (V+ Q-)  $\leftarrow$  Relative Weakness

Relative Strength

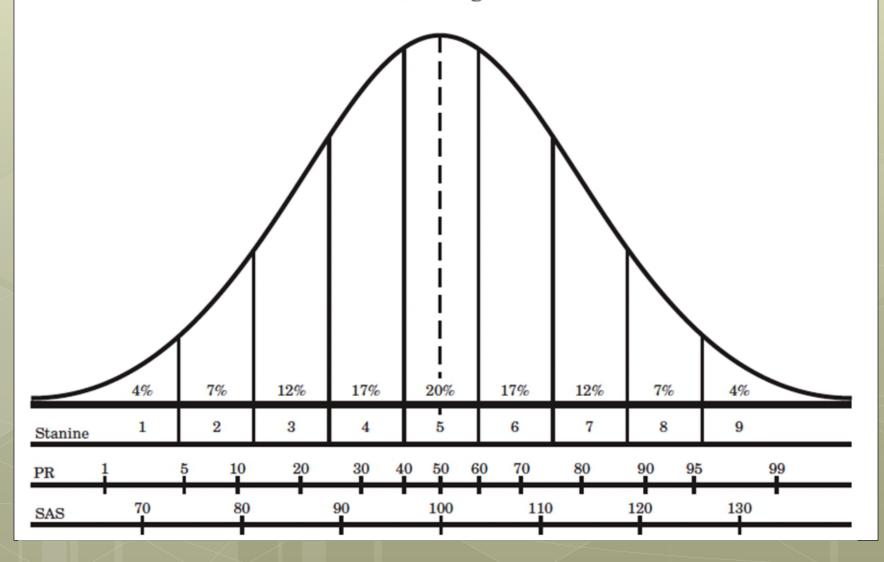


- Stanine –the middle age stanine the student obtained on the three batteries of *CogAT* 
  - 6, 4, 5 = 5
  - 2, 7, 3 = 3



- Profile Letter the general form of the score pattern
  - A All scores are roughly the sAme level
  - B One score is aBove or Below the other two a relative strength or relative weakness one score differs by at least 10 points
  - C Two scores Contrast a relative strength AND a relative weakness
  - E There are Extreme score differences at least two scores differ by 24 or more points on the SAS scale
- The symbols in parentheses tell which scores are exceptional

Figure 1-1: Relationship of Stanines, Percentile Ranks, and Standard Age Scores



# Interpreting Percentile Ranks and Standard Age Scores

Standard Age Percentile

Score

Very High 128-150 96th-99th

Above Average 112-127 77th-95th

Average 89-111 24th-76th

Below Average 73-88 5th-23rd

## Cognitive Abilities Test Websites

**Cognitive Abilities Test - Home** 

www.cogat.com

Online Interpretation System

https://www.hmhco.com/cogat/cogatprofile