The **Cognitive Abilities Test (CogAT)** measures the level and pattern of cognitive development of a student compared to age mates and grade mates. The CogAT is a nationally standardized test that schools and educators use to identify **gifted and talented students**.

Published by Riverside Insights, the CogAT was originally developed in the 1950s and has since gone through many updates. The recent versions of the test are **Form 7** and **Form 8**. Form 7 and Form 8 are equivalent tests – sometimes schools can use both to firmly establish the place of a student. Form 8 is the latest version and is known to include non-native speakers in an effective manner but otherwise don't worry too much about the forms. To know more, read this.

Cognitive Abilities Test (CogAT) is essentially a reasoning and logic test for kids. Essentially, the test covers logical, reasoning and verbal ability across numericals, problem-solving, patterns, pictures, puzzles, sentence completion, verbal analogies and word classification. The actual structure of the exam for Grade 3 and Grade 4/5 is as follows:

Section	Sub-section	Grade 3 (Level 9)	Grade 4/5 (Level 10/11)	Total
VERBAL	Sentence Completion	20 questions	20 questions	
	Verbal Classification	20 questions	20 questions	
	Verbal Analogies	22 questions	24 questions	62-64 questions
NON-VERBAL	Figure Matrices	20 questions	22 questions	
	Paper Folding Visualization	16 questions	16 questions	
	Figure Classification	20 questions	22 questions	56- 60 questions
QUANT	Number Analogies	18 questions	18 questions	
	Number Series	18 questions	18 questions	
	Number Puzzles	16 questions	16 questions	52 questions
	Total:	**170 questions**	**176 questions**	

In our classes, we introduce each of the above sections in the below format.

1. Intuitive introduction to the section
2. Conceptual introduction to the section
3. Common patterns of problems
4. Example problems in class and homework
5. Practice Tests

The objective of this document is to provide an overview of the orientation at UnicMinds for kids preparing for this test.
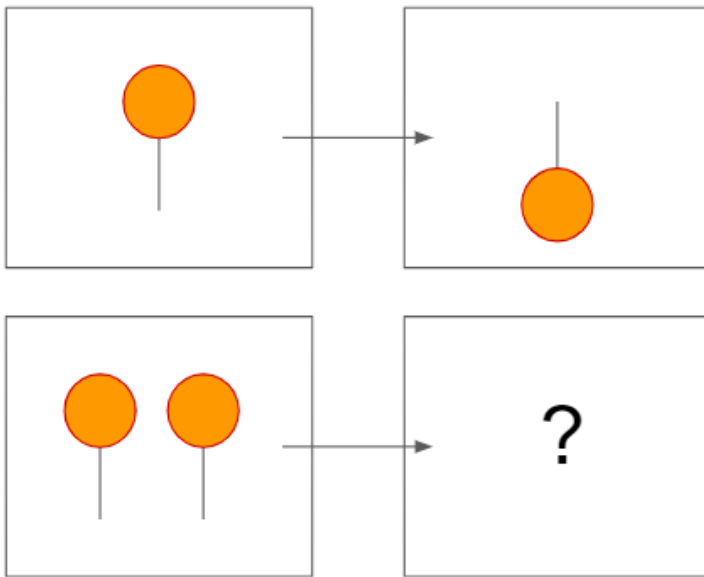
NON-VERBAL SECTION

In this section, we will first understand how to solve Figure Matrices and Figure Classification problems separately. Then, we move onto solving the Paper-Folding Visualization section.

Figure Matrices, Figure Classification & Paper Folding Visualization

Figure Matrices: This is a 2x2 matrix of pictures. The first two pictures have one pattern. And based on the same relationship you have to guess the fourth picture from the third picture.

Example Problem:

In the first picture, you see one lollipop kind of structure. In the second picture, the lollipop is inverted. So, the relationship between the first and second picture is: *the second picture is an inverse of the first picture.*

Based on this relationship, the third picture has two lollipops. So, *the fourth picture should be an inverse of the third picture.* So, the fourth picture should be as below.
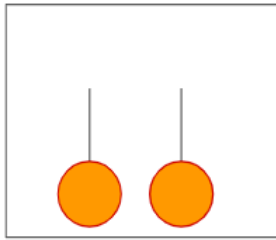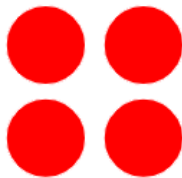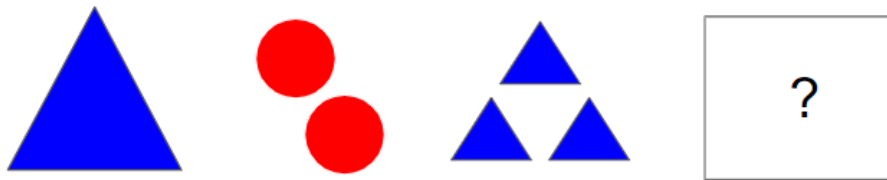
Figure Classification: In figure classification problems, there are three pictures in a sequence in this section and the student has to select the fourth picture from the options that fall in the same group or are related in the same way.
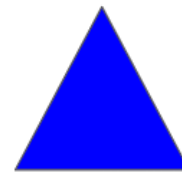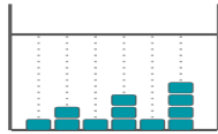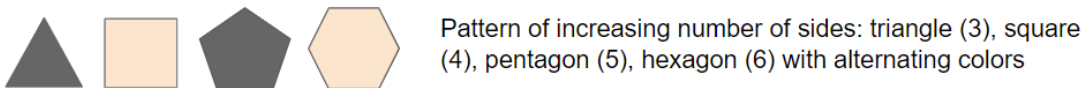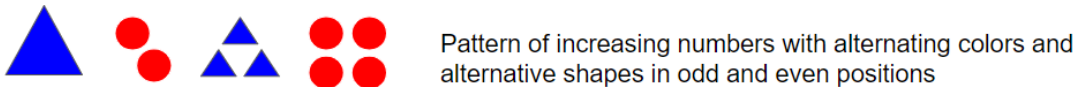
Example Problem:

| (A) | (B) | (C) | (D) |

Answer: A

Concept: When it comes to figure problems (matrices & classification), one should look at the figure to recognize patterns. Common patterns involve the below:
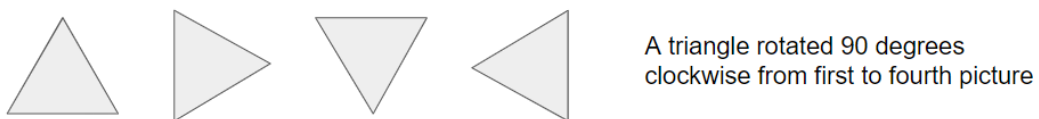
1. Colors
2. Number sequences (increasing numbers, decreasing numbers, multiple of 2, etc.)
3. Figures & Shapes
4. Odd and Even positioning patterns
5. Numbers on Abacus

So, whenever you see a question: ask - what sort of patterns are involved and what is the relationship between those changes?

Pattern of alternating colors…

Pattern of increasing numbers

Pattern of increasing numbers with alternating colors

Pattern of increasing numbers with alternating colors and alternative shapes in odd and even positions

Pattern of increasing number of sides: triangle (3), square (4), pentagon (5), hexagon (6) with alternating colors
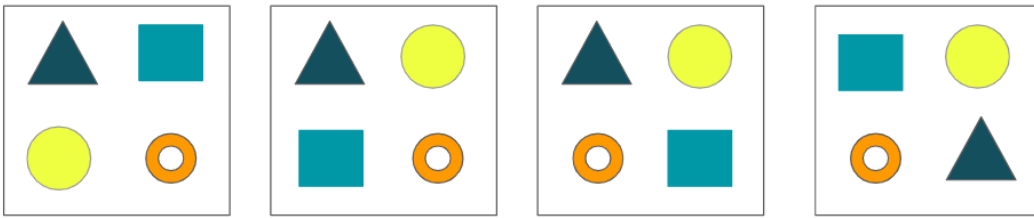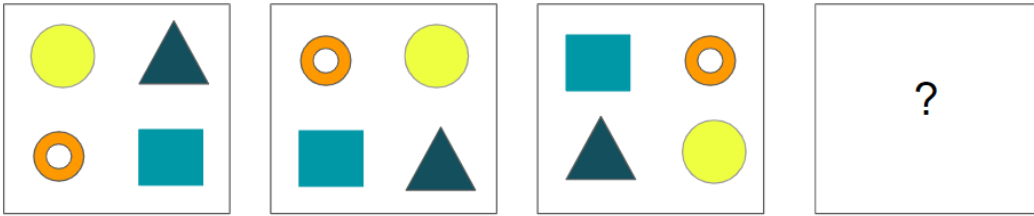
Pattern of even position numbers increasing by 1 and odd position numbers being always 1

Sometimes these pictures will even be rotated clockwise and anti-clockwise…

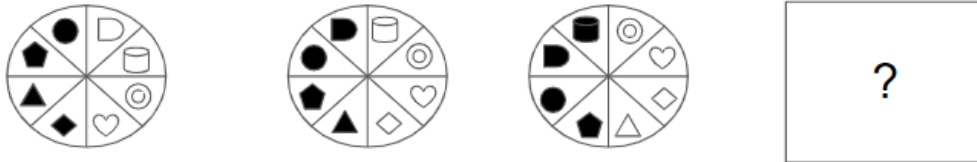An arrow rotated 90 degrees clockwise from first to fourth picture

A triangle rotated 90 degrees clockwise from first to fourth picture

Question 1:

(A)   (B)   (C)   (D)

Question 2:

A.   B.   C.   D.

Question 3:

How will it look when unfolded?

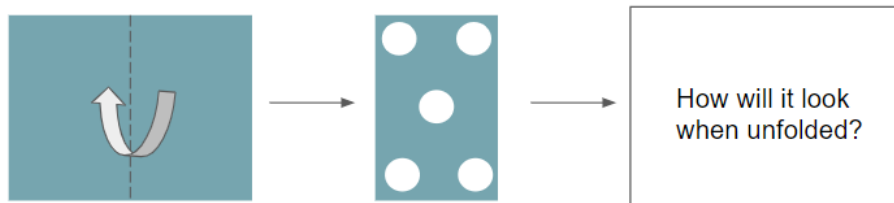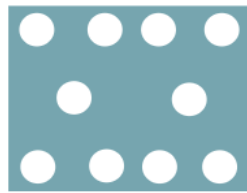|			
(A)	(B)	(C)	(D)

VERBAL SECTION

Verbal Analogies, Verbal Classification & Sentence Completion

Concept: Verbal analogy, like other analogies in this test, has two words which are related. Then the student has to choose the fourth word which is similarly related to the third word.

Question 1:

sunrise —> dawn : sunset —> ?

   A. evening B. dusk C. beach D. dark E. night

Question 2:

small —> dwarf : big —> ?

    A. huge   B. giant   C. little   D. big   E. height

Concept: Verbal classification questions provide the student with a set of three words that are related as a group and the student has to choose the fourth word from the options which belongs to the group in the same way.

Question 3:

brave, courageous, valiant,   ?

    A. Intelligent   B. heroic   C. rich   D. nice   E. best

Question 4:

allow, permit, let,   ?

    A. connect   B. consent   C. start   D. ask   E. start

Concept: In Sentence Completion, you'll be provided with a sentence and you should choose the word that fits the best in that sentence. So, first understand what **meaning** the sentence is trying to convey. Whenever you're reading the sentence, first try to fill the blank mentally while you're reading the sentence. And then look for options that are synonymous to your mental answer.

Question 5: Brian's pale skin is _____ to burn if he spends too much time in the sun.

    A. eminent   B. prone   C. low   D. all   E. daunted

Question 6: My friend Sam has a good _____ over Mandarin and Spanish.

    A. command   B. hold   C. understanding   D. likingness   E. authority

QUANT SECTION

Number Analogies, Number Series & Number Puzzles

Number Analogies Concept: The numbers provided in these sets of problems typically have a mathematical operation relationship between the first number and the second number. The second number is achieved by multiplying, dividing, adding or subtracting from the first number. Also, the second number could be achieved by a combination of operations like multiplying and then adding a constant 2 to it (or) multiplying and then subtracting a constant 2 from it.

Question 1:

[56 —> 52] , [9 —> 5],   [45 —> ?]

   A. 25   B. 41   C. 35   D. 49   E. 44

Question 2:

 [6 —> 42] , [9 —> 63],   [3 —> ?]

   B. 25   B. 41   C. 21   D. 99   E. 12

Number Series Concept: In this set of questions, you're provided with a sequence of numbers that follow a pattern. You are required to identify the relationship pattern between these numbers and then choose the best number that fits from the choices that should come next in the sequence.

Question 3:

    3 , 7 , 11 , 15 , ?

   A. 19   B. 20   C. 21   D. 16   E. 15

Question 4:

2 , 8 , 5 , 8 , 8 , 8 , 11 , 8 , ?

   A. 8   B. 16   C. 14   D. 18   E. 11

Number Puzzles Concept: Students will be required to choose the number from the given options that satisfy the equation provided.

Question 5:

? + 4 = 🍾

🍾 = 25

   A. 11   B. 21 C. 14   D. 15   E. 10

Question 6:

🍾 x 🍾 = 15 + 3 - ?

🍾 = 6

   A. 16   B. 18   C. 15   D. 36   E. 30