UNICMINDS

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.

Essentially, it is a reasoning and logic test for kids covering 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 level 5-8 is as follows:

Section	Sub-section	Kindergarten	Grade 1	Grade 2	Total
VERBAL	Picture Classification	14	16	18	
	Sentence Completion	14	16	18	
	Picture Analogies	14	16	18	54
NON-VERBAL	Figure Matrices	14	16	18	
	Paper Folding Visualization	10	12	14	
	Figure Classification	14	16	18	50
QUANT	Number Analogies	14	16	18	
	Number Series	14	16	18	
	Number Puzzles	10	12	14	50
Total		**118**	**136**	**154**	

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

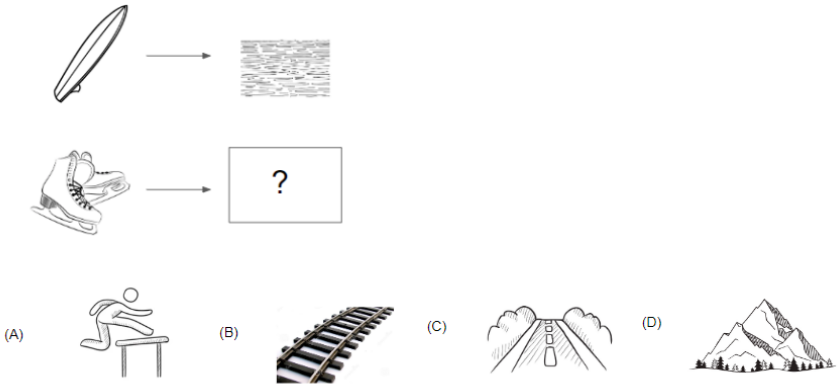
The objective of this document is to provide an overview of the orientation at UnicMinds for kids preparing for this test.

VERBAL SECTION

Picture Analogies, Picture Classification & Sentence Completion

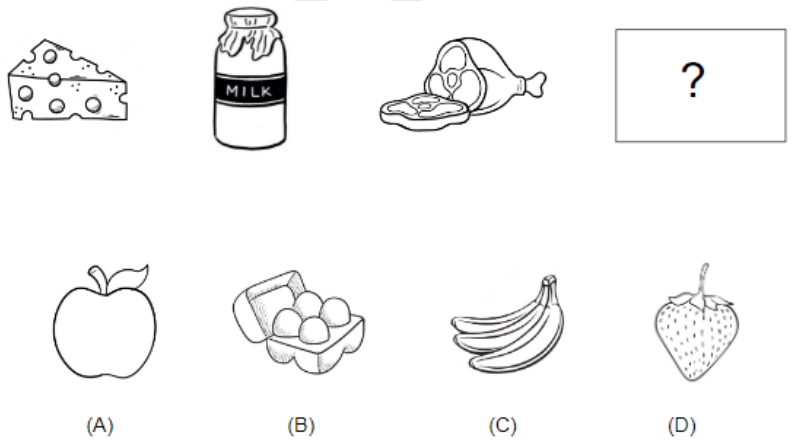
Concept: Picture analogy questions have a 2x2 matrix. The first two pictures are related in some way. Then the student has to choose the fourth picture from the options which is similarly related to the third picture.

Question 1:



Concept: Picture classification questions provide the student with a set of three pictures that are related as a group and the student has to choose the fourth picture from the options such that the picture chosen will belong to the set in the same way with some common characteristic.

Question 2:



Concept: In Sentence Completion, you'll be provided with a question. Children must choose a picture that best answers the question in a complete logical way. The teacher will read aloud the question and she may not repeat it a second time. To answer correctly, the student must be focused on the meaning of the question as a whole.

Question 1:

Which of the following would you most likely buy at a pharmacy?

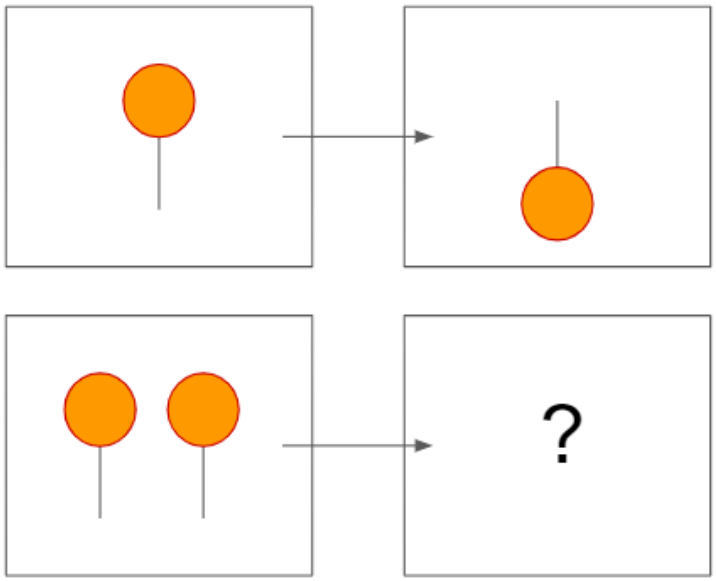
NON-VERBAL SECTION

In this section, we will first understand how to solve Figure Matrices and Figure Classification problems. 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.

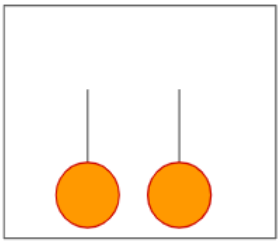
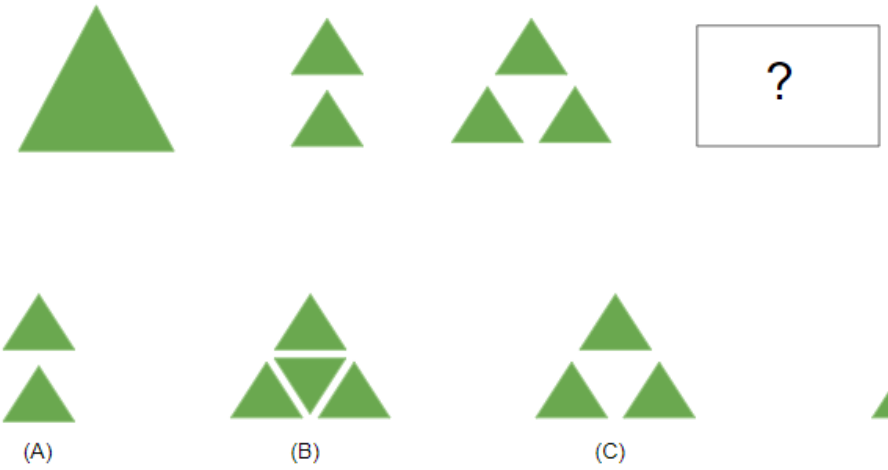


Figure Classification: In figure classification problems, there are three pictures in a sequence in this section and the student has to select the fourth picture from the options that fall in the same group or are related in the same way.

Example Problem:

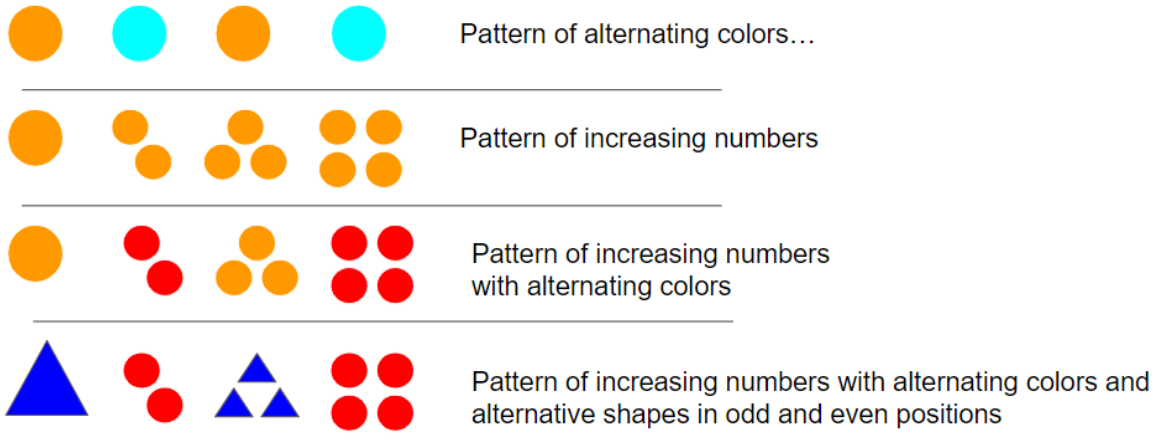


Answer: B

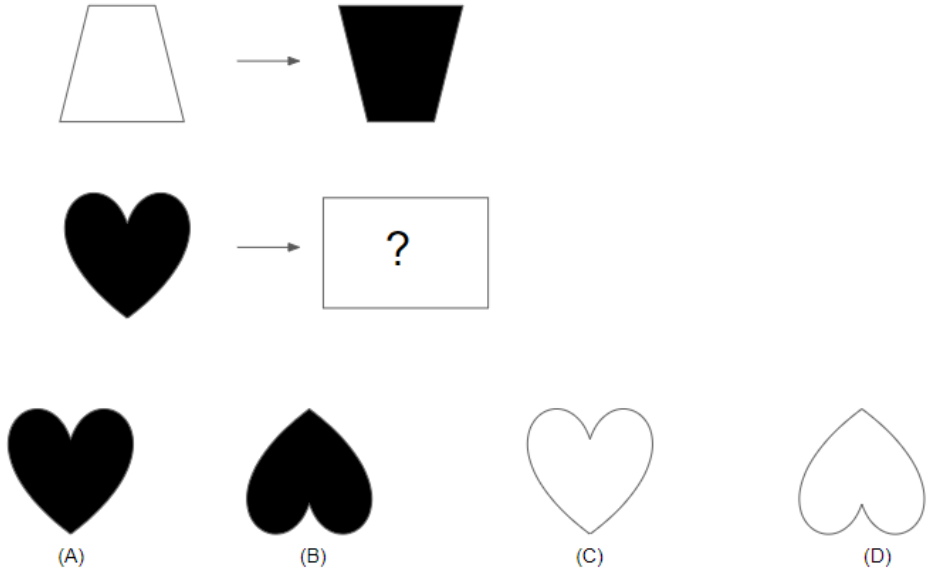
Concept: When it comes to figure problems (matrices & classification), one should look at the figure to recognize patterns. Common patterns involve the below:

1. Colors
2. Number sequences (increasing numbers, decreasing numbers, multiple of 2, etc.)
3. Figures & Shapes

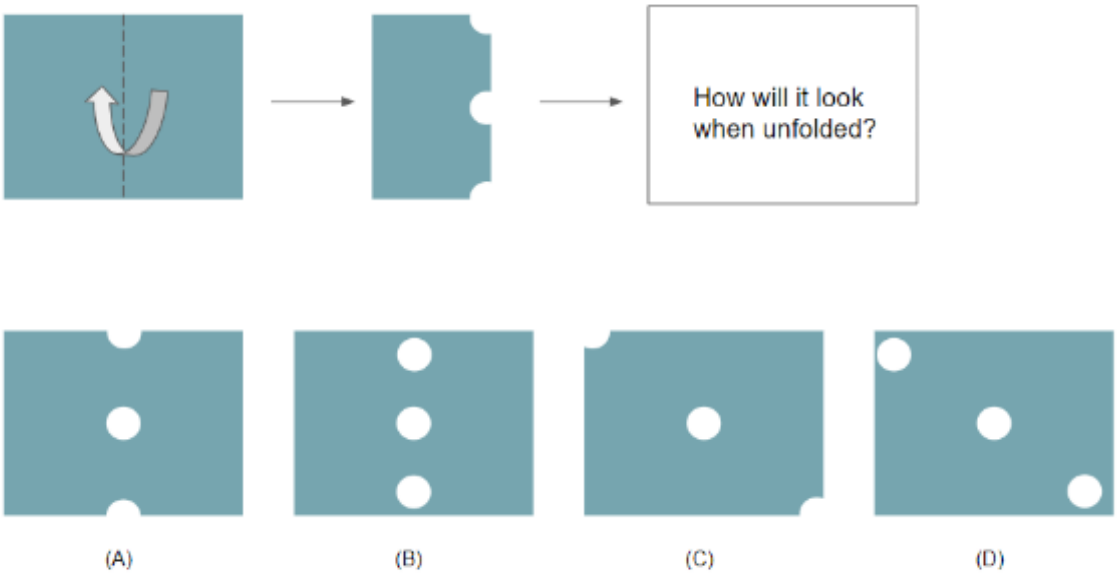
So, whenever you see a question: ask - what sort of patterns are involved and what is the relationship between those changes?



Question 1:



Question 2:

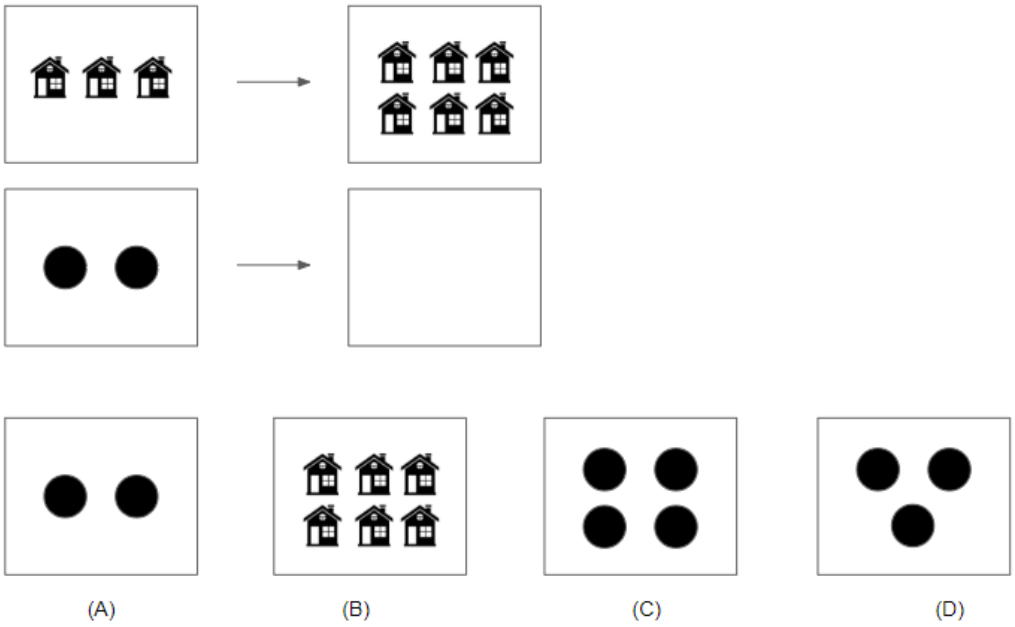


QUANT SECTION

Number Analogies, Number Series & Number Puzzles

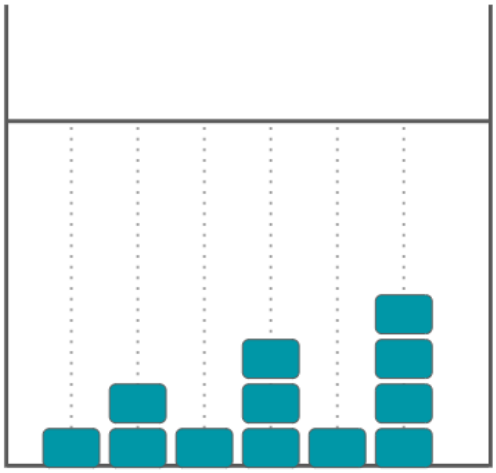
Number Analogies Concept: The pictures provided in these sets of problems typically have a mathematical operation relationship between the first picture and the second picture. The second picture is achieved by multiplying, dividing, adding or subtracting the number of objects from the first picture.

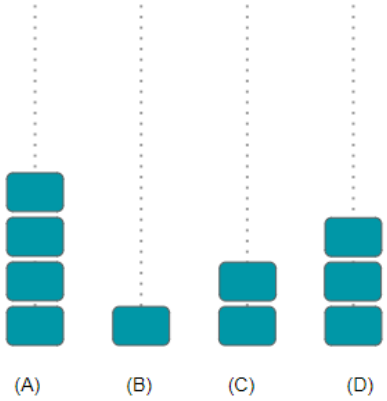
Question 1:



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

Question 2:





Number Puzzles Concept: Students will be required to solve basic mathematical problems which are in the form of an equation with an unknown variable.

Question 3:

? - 18 = 40

A. 22 B. 58 C. -22 D. -58 E.48

Question 4:

12 = 8 + 13 - ?

A. 12 B. 8 C. 9 D. 5 E.4