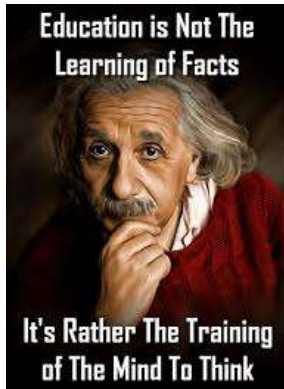


## Reasoning Workshop

October 10th 2017



Windlesham School Trust Limited. Registered company no. 1172432 (England & Wales). Registered charity no. 269264. Registered office: 190 Dyke Road, Brighton, East Sussex, BN1 5AA

## Why do we teach Reasoning at Windlesham?

- Reasoning exercises develop the ability to understand and reason using words, shapes and numbers
- They challenge us to apply skills, rather than learned knowledge...Critical Thinking, Logic, Powers of Deduction, and Problem Solving, Systematic Analysis...



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## Verbal Reasoning = Thinking with words and letters

- Solving word problems
- Following instructions to find a solution
- Spotting letter sequences
- Finding hidden words
- Cracking codes



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## How can we improve our Verbal Reasoning?

- **\*Read!!**
- Word games and quizzes, crosswords, word searches, Scrabble, Boggle...
- Reading questions and following instructions exactly
- Synonyms, Antonyms, Plurals, Spelling, Maths
- General Knowledge



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## Non- Verbal Reasoning = Thinking with pictures, diagrams and shapes

- **Work out sequences of shapes**
- **Identify similarities and differences between shapes**
- **Crack codes which use shapes, patterns and numbers**
- **Based on mathematical concepts such as symmetry, rotation, reflection, size and direction**



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## How can we improve our Non-Verbal Reasoning?

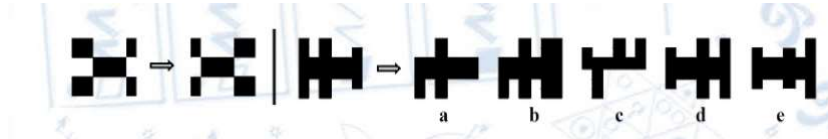
- **Mathematical knowledge**
- **Spot the difference, Sudoku, Monopoly...**
- **Spatial awareness: Construction toys and jigsaw games**
- **Maths in the environment**



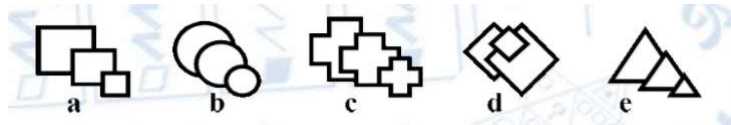
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## Non Verbal Reasoning

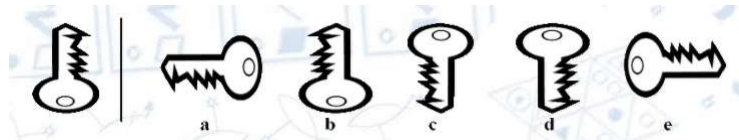
Like Shapes



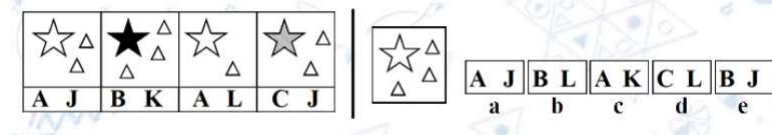
Odd one out



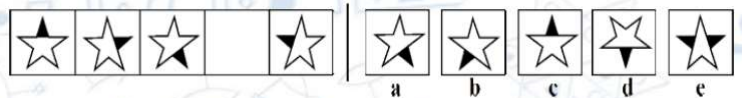
Rotations



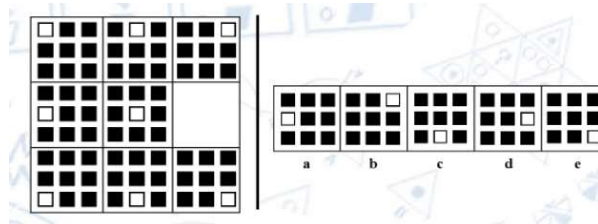
Code Breaker



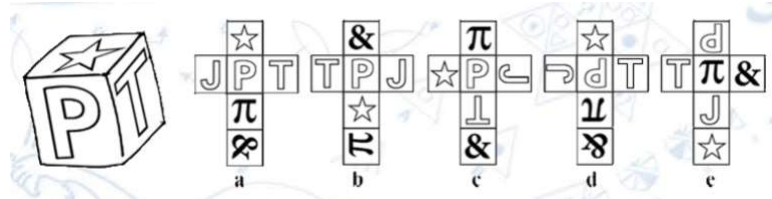
Missing Sequence



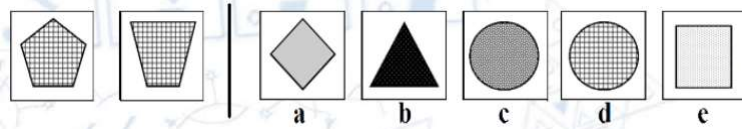
Missing Square



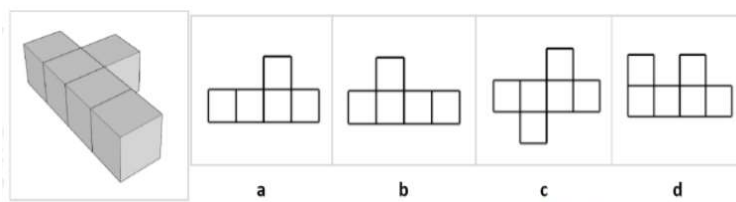
Nets



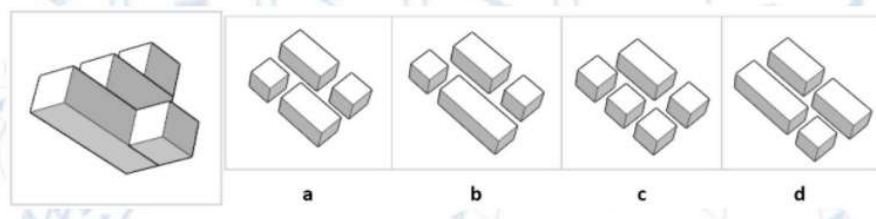
Most like



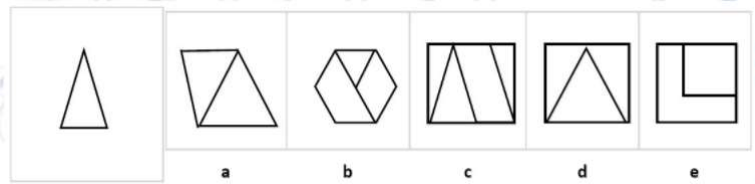
3D shapes top down 2D views



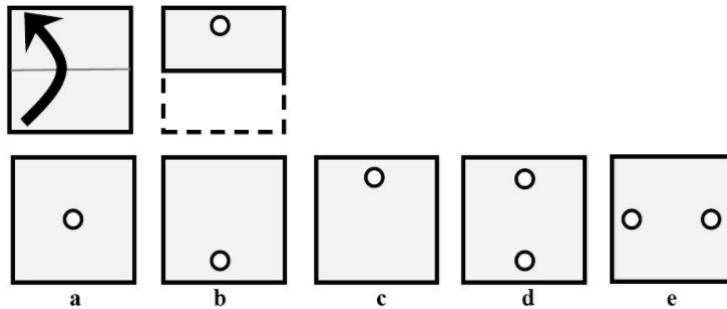
3D Shapes building block



## Figure Recognition



## Figure Analysis



## Verbal Reasoning

Insert a letter

BA( )ON CU( )EN

Find the odd words

**Pig Eel Cow Horse Goldfish**

Alphabet code

**A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**

Look at this example:

The code for PLUM is QMVN. What is the code for DATE?

Synonyms

**(Apple Plate Mustard) (Grass Dish Chair)**

Find the hidden word in a sentence

**These apples taste perfect**

Find the word **The entire school ATDED morning assembly.**

Calculating with letters

**A = 1, B = 2, C = 3, D = 4, E = 5, F = 6**

**A + B + C = [ ]**

Opposite meaning

**(Wish Dream Love)**

**(Pure Solve Hate)**

Rearrange to make two new words

**STOOP FLAT**

Number relationship

**2 [12] 6    5 [20] 4    3 [ ] 9**

Complete alphabet series

**A B C D E F G H I J K L M N O P Q R S T U V W X Y Z**

**Look at this example: Find the next letter in the series - A C E G I K**

Complete the sentence

**Shoe is to (head, arm, foot) as glove is to (leg, arm, hand).**

Complete word pairs

**(SHOUT, SHOT) (SOLDER, SOLE) (FLUTED, \_\_\_\_\_)**



Form new word

(dream bike car) (grass room pet)

Create word

stone (hone) hears steam ( ) solve

Similar meaning

(cover, screen) (colour, hue)  
grime, shine, place, shade, wealth

Letter relationship

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Look at this example:

CG is to ED as BW is to ( )

Comprehension

Three children, Susan, George and Ryan all left school at 15:15 and walked home. Susan arrived home first. George arrived home 5 minutes later at 15:30. It took Ryan 10 minutes longer than Susan to walk home. What time did Ryan get home?



### A Few Specific Strategies

- Read question twice!
- If working in timed conditions, work out time for each question first
- Skip difficult questions, do not exceed set time available
- Use process of elimination wherever possible
- Draw sketches/diagrams/tables/pictures where necessary
- Underline key words
- Use the alphabet
- Look for the most obvious connection

 A banner with a blue and yellow background. On the right side, there are three small photographs: a child wearing a yellow swim cap, a man and a child looking at something together, and two children standing together.
 

Preparing children for life

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