ALLEN

Intelli Brain®

Experiential Experimental Edutaining

LOGICAL REASONING

SAMPLE BOOK

7 GRADE

LOGICAL REASONING

I'm the

Intelli Kid

....

and

I'm becoming the

Best Version

of myself with

ALLEN Intelli Brain ®

Experiential Experimental Edutaining

INDEX

ALLEN IntelliBrain®

Experiential Experimental Edutaining
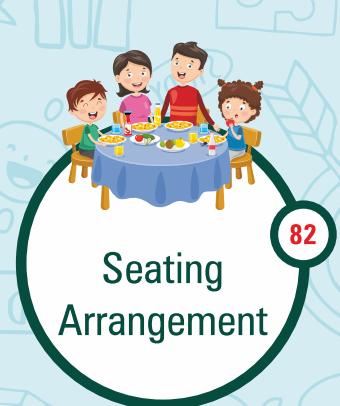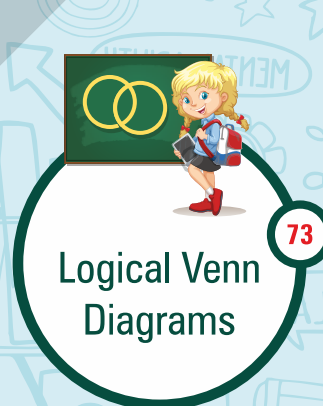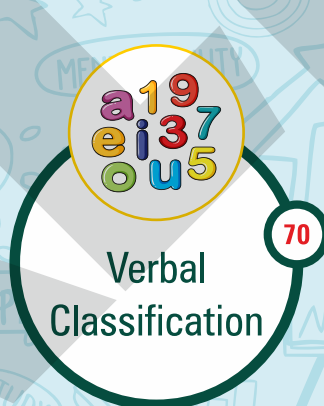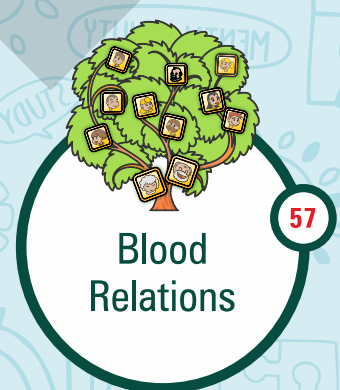
I AM PROGRESSING

(Tick mark the columns after achieving the Learning Milestones)
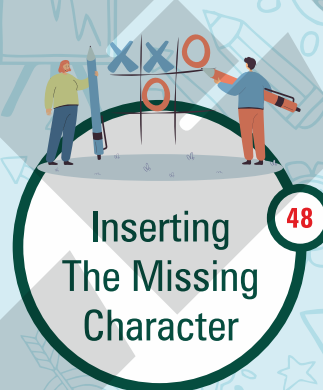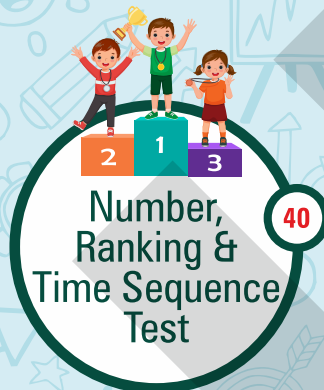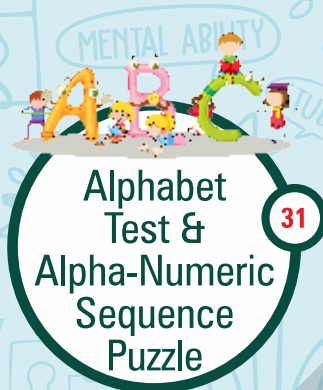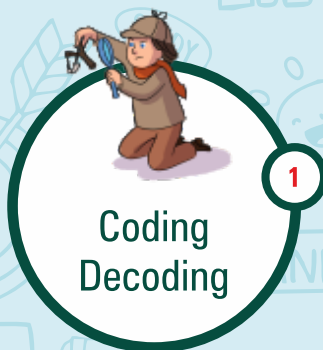
TOPIC	1st Learning	Exercise Solving	1st Revision	2nd Revision
Coding Decoding				
Direction Sense Test				
Mathematical Operations				
Verbal Series				
Alphabet Test & Alpha-Numeric Sequence Puzzle				
Number, Ranking & Time Sequence Test				
Inserting The Missing Character				
Blood Relations				
Verbal Analogy				
Verbal Classification				
Logical Venn Diagrams				
Seating Arrangement				

LOGICAL REASONING

SAMPLE THEORY

Coding is a way to encrypt a message in a secret form following a certain rule, whereas Decoding is a process to decrypt the coded message.

Example:

CODE	DECODE
EREHW ERA UOY ?	**WHERE ARE YOU ?**
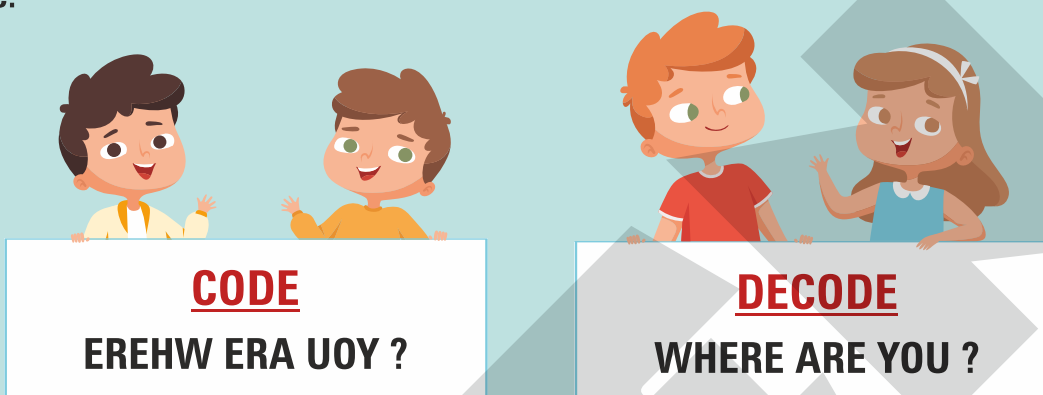
TYPES OF CODING DECODING

Type 1: Number/Symbol Coding

In this type of coding, either letters of the English alphabet or Numbers are assigned symbols or other letters or numbers to code them. Also, in this type of coding, we deal with two different problems, as shown below.

Direct Coding

In this case, either numbers/symbols are assigned to letters or letters/symbols are assigned to the numbers directly to form a code. We analyse the code as done in the following example.

Example: If AGREE is coded as !%@$$ and TEMPER is coded as /$*#$@, then what will be the code for PAMPER ?

(1) %$*!!@   (2) #!*#$@   (3) /!*/$@   (4) #!*#$#

Solution: (2) #!*#$@

On noting down the respective codes for each letter of the given words, we get:

Position of Letters in English Alphabet Series

In this case, the code for a word is formed by using the position number of its letters in the English Alphabet series and then using mathematical operations (addition, subtraction, multiplication or division) on the position numbers.

Alphabet	A	B	C	D	E	F	G	H	I	J	K	L	M
Position of letters	1	2	3	4	5	6	7	8	9	10	11	12	13
Reverse Position of letters	26	25	24	23	22	21	20	19	18	17	16	15	14
Alphabet	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Position of letters	14	15	16	17	18	19	20	21	22	23	24	25	26
Reverse Position of letters	13	12	11	10	9	8	7	6	5	4	3	2	1

Example: In a certain code language, CAFE is coded as 15, then how is RESTAURANT coded in that code language?

(1) 130   (2) 127   (3) 125   (4) 137

Solution: (4) 137

On adding the position number of each letter of the given word we get:

$$CAFE = C + A + F + E$$

$$CAFE = 3 + 1 + 6 + 5 = 15$$

As we can see, the code for the given word CAFE is 15, i.e. the sum of the position number of each letter of the given word in the English Alphabet series.

Similarly, on applying the same code rule for the word RESTAURANT we get:

$$RESTAURANT = R + E + S + T + A + U + R + A + N + T$$

$$RESTAURANT = 18 + 5 + 19 + 20 + 1 + 21 + 18 + 1 + 14 + 20 = 137$$

Therefore, the code for the word RESTAURANT is 137.

ALLEN IntelliBrain
Experiential Experimental Edutaining

LOGICAL REASONING

Directions: Solve the following multiple choice questions by choosing the most appropriate option.

1. In a certain code language, WEST is coded as QYMN, then in the same code language, EAST will be coded as _____.
   (1) KGYZ
   (2) YUMN
   (3) ZVNO
   (4) YVMO

2. If NEST is coded as PGUV, then in the same way, what should be the code for JUNGLE ?
   (1) KVOHMF
   (2) LUPGLG
   (3) LTPFND
   (4) LWPING

3. If HUMAN is coded as KRPXQ, then PEOPLE will be coded as _____.
   (1) SBRMOB
   (2) SHRSOH
   (3) SCRNOC
   (4) MHLSMF

4. In a certain code language, SPRING is written as UNTGPE. How is WINTER written in that code language ?
   (1) XJOUFS
   (2) YHTFRC
   (3) YGPRGP
   (4) UKLVCT

5. If DMHBHCDL is the code for MEDICINE, then find the code for PRECAUTIONS.
   (1) TOPJUVBDFSQ
   (2) RMNHSTZBDQO
   (3) SNOITPRECAU
   (4) QSFDBVUJPMT

6. If 'Red' is called 'Brown', 'Brown' is called 'Orange', 'Orange' is called 'Green' and 'Green' is called 'White', then which colour is present at the bottom of the Indian Flag ?
   (1) Orange
   (2) Green
   (3) White
   (4) Brown

7. If 'Kitten' is called 'Calf', 'Calf' is called 'Fawn', 'Fawn' is called 'Duckling' and 'Duckling' is called 'Foal', then baby Deer's are called as _____.
   (1) Fawn
   (2) Kitten
   (3) Duckling
   (4) Calf

8. If 'Baseball' is called 'Golf', 'Golf' is called 'Hockey', 'Hockey' is called 'Wrestling' and 'Wrestling' is called 'Basketball', then belt and jacket style belongs to which sport ?
   (1) Golf
   (2) Wrestling
   (3) Baseball
   (4) Basketball

9. If 'Oxygen' is called 'Carbon Dioxide', 'Carbon Dioxide' is called 'Nitrogen' and 'Nitrogen' is called 'Hydrogen', then which gas is present in the maximum amount in the atmosphere ?
   (1) Oxygen
   (2) Hydrogen
   (3) Carbon Dioxide
   (4) Nitrogen

10. If EUROPE is coded as UERPOE, then MUMBAI will be coded as _____.
   (1) UMMBAI
   (2) MUMIAB
   (3) UMMABI
   (4) IABMUM

11. If 'HOME' is coded as '2319', 'MINT' is coded as '7919' and 'JOY' is coded as '935', then what will be the code for 'MONEY' ?
(1) 72175   (2) 73195   (3) 31427   (4) 73851

12. In a certain code language, 'ENTER' is written as '@#%@#' and 'INCOME' is written as '#^$@', then 'MENTOR' will be written as _____.
(1) @#%&#   (2) #@^%   (3) @#%&#   (4) @#%&#

13. If FOREST = 83, then in the same code language FIELD = ?
(1) 36   (2) 63   (3) 18   (4) 12

14. In a certain code language, 'BUDGET' is written as '123456' and 'DEAL' is written as '3579', then how 'GADGET' is written in that code language ?
(1) 743456   (2) 124737   (3) 473456   (4) 524578

15. If KITE = 15 and CAT = 6, then in the same code language RAT = ?
(1) 39   (2) 13   (3) 36   (4) 12

16. What will be the code for SWEETS, if VEGETABLES = 30 and SPICE = 15 ?
(1) 6   (2) 18   (3) 24   (4) 81

17. If PAIN = 4 and PEACE = 3, then the code for PRAY is _____.
(1) 1   (2) 10   (3) 4   (4) 5

18. If 'Science' means 'Mathematics', 'Mathematics' means 'English', 'English' means 'Hindi' and 'Hindi' means 'Sanskrit', then Srinivasa Ramanujan is famous for _____.
(1) English   (2) Mathematics   (3) Science   (4) Hindi

19. If 'Monitor' means 'Mouse', 'Mouse' means 'Notepad', 'Notepad' means 'Keyboard' and 'Keyboard' means 'CPU', then what do we use for typing ?
(1) Mouse   (2) Notepad   (3) CPU   (4) Keyboard

20. If 'Uncle' means 'Father', 'Father' means 'Aunt', 'Aunt' means 'Nephew' and 'Nephew' means 'Grand Father', then the only daughter of Arun's father's father is Arun's _____.
(1) Aunt   (2) Grand Father   (3) Father   (4) Uncle

21. If 'Square' means 'Cuboid', 'Cuboid' means 'Pyramid' and 'Pyramid' means 'Prism', then the shape of a mountain is considered as _____.
(1) Cuboid   (2) Prism   (3) Square   (4) Pyramid

22. Identify the correct code for DREAM, if DEMAND is coded as '* ÷ * #%' and DRAFT is coded as '* ~ #%.
(1) ~*$# ''   (2) *~$# ''   (3) *~$ ''   (4) *~÷# ''