

REASONING WORKBOOK

4

For the preparation of National
& International Olympiads



- Chapter-wise practice exercises
- Previous year paper

Reasoning Olympiad

Exams Preparation Book

CRO | UCTO | iRAO

Grade 4



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CREST Reasoning Olympiad Workbook for Grade 4

Fourth Edition

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Disclaimer: The information in the Workbook is to give you the path to success but it does not guarantee 100% success as the strategy is completely dependent on its execution. And it is based on previous year papers of CRO exam.

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Contents

1. Patterns.....	5
2. Analogy and Classification	9
3. Geometrical Shapes and Solids	13
4. Embedded Figures.....	20
5. Mirror and Water Images.....	28
6. Direction Sense Test.....	37
7. Possible Combinations.....	43
8. Ranking Test.....	49
9. Alphabet Test and Logical Sequence of Words.....	54
10. Puzzle Test	59
11. Coding and Decoding.....	64
12. Previous Year Paper (2023-24).....	69
13. Answer Key.....	73

Preface

We are pleased to launch a thoroughly revised edition of this workbook. We welcome feedback from students, teachers, educators and parents. For improvements in the next edition, please send your suggestions at info@crestolympiads.com. Our team will make an effort to work on those suggestions. The status of the improvements can be checked at <https://www.crestolympiads.com/corrections-class4-356>

CREST Olympiads is one of the largest Olympiad Exams with students from more than 60 countries. The objective of these exams is to build a competitive spirit while evaluating students on conceptual understanding of the concepts.

We strive to provide a superior learning experience, and this workbook is designed to complement the school studies and prepare the students for various competitive exams including the CREST Olympiads. This workbook provides a crisp summary of the topics followed by the practice questions. These questions encourage the students to think analytically, to be creative and to come up with solutions of their own. There is a previous year's paper given at the end of this workbook for the students to attempt after completing the syllabus. This paper should be attempted in 1 hour to get an assessment of the student's preparation for the final exam.

Publishers

Patterns form an important part of logical reasoning. While solving these questions, the focus is generally on creating continuity between the given entities. The intelligence of the student is monitored in terms of how he/she relates one entity with another. It is based upon the repetition of any sequence or completing a missing part of the figure.

In such questions, the students need to focus on the logic which is followed in the given elements. Depending upon this logic, the student is required to predict the next or the missing term in the question.

Let us have a look at some pattern-based questions:

Example 1: C, E, I, O, ?

- | | |
|------|------|
| a. Y | b. W |
| c. X | d. U |

Solution 1: b

Try to figure out the logic in the given pattern.

We will observe that the place value of the alphabets is increasing by 2, 4, 6 respectively.

$$C (3) + 2 = E (5)$$

$$E (5) + 4 = I (9)$$

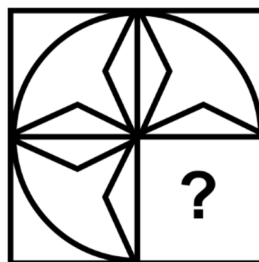
$$I (9) + 6 = O (15)$$

$$O (15) + 8 = \mathbf{W (23)}$$

Therefore, apply the same logic and try to predict the next term after O.

Hence, W is the correct answer.

Example 2: Choose the alternative which closely resembles the Missing Pattern in the given figure.



Solution 2: b

In the figure given above, we can just concentrate on completing the circle. This will save a lot of time and will help us to reach the correct answer quickly. For completing the circle, we need the quarter part of the circle located exactly in the right bottom. Only option b provides us with this figure. Therefore, option b is the correct answer.

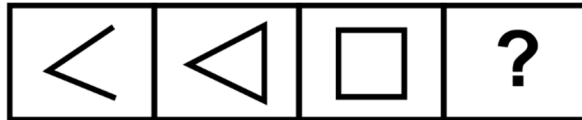
Practice Questions

1. Identify the next term of the given pattern:

11, 13, 17, 19, 23, ?

- a. 25
- b. 24
- c. 26
- d. 22

2. Identify the next term of the given pattern:



- a.
- b.
- c.
- d.

3. Identify the next term of the given pattern:

L, Q, U, X, ?

- a. W
- b. A
- c. Y
- d. Z

4. Identify the next term of the given pattern:

W, T, Q, N, ?

- a. I
- b. J
- c. M
- d. K

5. Identify the missing term of the given pattern:

19, 14, 17, ?, 15, 10

- a. 14
- b. 10
- c. 12
- d. 17

6. Identify the missing term of the given pattern:

bd_pbd_t_b_tp

- a. tpd
- b. ptd
- c. btd
- d. pdb

Patterns

7. Identify the missing term of the given pattern:

J, H, E, U, ?, J, H, E, U, N, J, H, E, U, N

- a. J
- b. N
- c. E
- d. U

8. Identify the next term of the given pattern:

R, s, P, q, N, o, L, ?

- a. M
- b. k
- c. m
- d. K

9. Identify the missing term of the given pattern:

D, p, P, T, s, ?, p, P, T, s, D, p, P, T, s

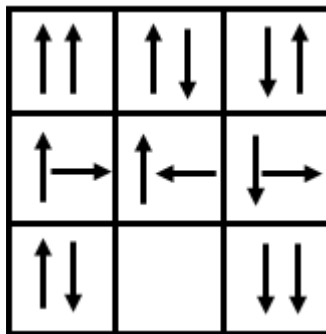
- a. D
- b. P
- c. p
- d. s

10. Identify the next term of the given pattern:

108, 99, 90, 81, 72, ?

- a. 70
- b. 63
- c. 66
- d. 59

11. Identify the missing term of the given pattern:



- a. 
- b. 
- c. 
- d. 

12. Identify the missing part of the pattern:

97, 98, 49, ?, 25, 26, 13

- a. 44
- b. 27
- c. 52
- d. 50

13. Identify the next term of the given pattern:

11, 33, 30, 90, 87, 261, ?

- a. 258
- b. 222
- c. 240
- d. 250

14. Identify the missing term of the given series:

RTG, QSF, PRE, ?, NPC

- a. QER
- b. REC
- c. OQD
- d. QND

15. Identify the next term of the given pattern:

77, 72, 70, 65, 63, ?

- a. 58
- b. 55
- c. 50
- d. 51

16. Identify the missing terms in the given pattern:

6	4	5
3	2	1
8	5	?

- a. 4
- b. 6
- c. 7
- d. 5

17. Identify the missing terms in the given pattern:

1, 6, 9, 14, 17, ?

- a. 20
- b. 21
- c. 22
- d. 23

18. Identify the missing term of the given pattern:

5, 8, 1, 2, 9, 5, ?, 1, 2, 9, 5, 8, 1, 2, 9

- a. 2
- b. 8
- c. 9
- d. 5

19. Identify the next term of the given pattern:

5, 7, 11, 13, 17, 19, ?

- a. 21
- b. 20
- c. 22
- d. 23

20. Identify the next term of the given pattern:

EY, GW, IU, KS, ?

- a. MQ
- b. NO
- c. NP
- d. MP

In the dictionary, analogy means a comparison between two things that shows a way in which they are similar.

Sometimes the things being compared are quite similar, but in some cases, they could be very different. Nevertheless, an analogy explains one thing in terms of another to highlight the ways in which they are alike.

In logical reasoning as well, students have to do the same thing. One example will be given to the students and they will have to identify the logic or the relationship between the two given entities. Following that we can apply the same relationship or logic to the given question.

It will be better understood with the help of few examples.

Example 1: In the following question, select the related word from the given alternatives:

Cricket : 11 players :: Soccer?

- a. 10 players
- b. 11 players
- c. 12 players
- d. 8 players

Solution 1: b

First, try to understand the relation between cricket and 11 players.
The logic is – In Cricket we have 11 players in each team.

Similarly, in Soccer we have 11 players in each team. Hence, option b is correct.
Based on similar lines, when we are relating one element with another, we can also classify them in one group. This means that using the same logic, we can solve classification questions as well.

Classification questions are also known as Odd One Out questions. A set of elements is given out of which one is different and others are the same depending upon one property.

Example 2: In the following question, select the odd word from the given alternatives:

- a. Student
- b. Pencil
- c. Book
- d. Sharpener

Solution 2: a

All except “Student” are stationery items, while “Student” is a person.

Hence, “Student” is the correct answer.

Practice Questions

1. $63 : 21 :: 96 : ?$

- a. 36
- b. 32
- c. 28
- d. 27

2. 'Dress' is related to 'Body' in the same way as 'Bangles' is related to:

- a. Glass
- b. Lady
- c. Wrist
- d. Beauty

3. Choose the word which is different from the rest:

- a. Hen
- b. Frog
- c. Swan
- d. Crocodile

4. Find the odd one out:



5. $BEG : ADF :: PSV : ?$

- a. ROU
- b. ORU
- c. LQU
- d. LOQ

6. $18 : 54 :: 24 : ?$

- a. 96
- b. 72
- c. 79
- d. 82

7. Find the odd one out:

- a. Cap
- b. Hat
- c. Gloves
- d. Helmet

8. Find the odd one out:

- a. Blanket
- b. Chair
- c. Sofa
- d. Bean bag

9. $16 : 112 :: 17 : ?$

- a. 119
- b. 100
- c. 139
- d. 170

10. Continue : Stop :: Real : ?

- a. Good
- b. Virtue
- c. Fake
- d. Authentic

11. Find the odd one out:

- a. Kiwi
- b. Eagle
- c. Emu
- d. Ostrich

12. Find the odd one out:

- a. Acquire
- b. Lose
- c. Obtain
- d. Receive

13. $22 : 14 :: 36 : ?$

- a. 22
- b. 20
- c. 28
- d. 40

14. Find the odd one out:

- a. Principal
- b. Teacher
- c. School
- d. Student

15. Mass : Gram :: Length : ?

- a. Kilogram
- b. Litre
- c. Celsius
- d. Metre

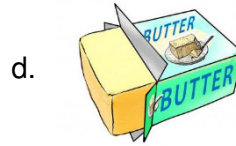
16. Positive : Negative :: Major : ?

- a. Minor
- b. Huge
- c. Enormous
- d. Large

17. Find the odd one out:

- a. Collect
- b. Compile
- c. Gather
- d. Scatter

18. Find the odd one out:



19. Find the odd one out:

- a Tea
- c Noodles

- b Coffee
- d Milk

20. Find the odd one out:

- a. Medicine
- c. Physician

- b. Chemist
- d. Doctor

CREST International Spell Bee (Summer & Winter)

For Grades 1-8



Exam Highlights

- Online proctored Spell Bee exam
- Focus on evaluating spellings, meanings and pronunciation.
- Exam Pattern: MCQ type questions + Audio Round (Students need to hear the question & write the spelling of the word asked)
- Get to attempt 2 Free Practice Tests



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