

MATHEMATICS WORKBOOK

1

For the preparation of National
& International Olympiads



- Chapter-wise practice exercises
- Previous year paper

Mathematics Olympiad

Exams Preparation Book

CMO | IMO | UMO | iOM | UIMO | HMO

Grade 1



#CRESTInnovator

www.crestolympiads.com

CREST Mathematics Olympiad Workbook for Grade 1

Fourth Edition

Copyright © 2024 Loyalty Square Analytic Solutions Private Limited (hence, referred to as CREST Olympiads). Printed with the permission of CREST Olympiads. No part of this publication may be reproduced, transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the copyright holder. Ownership of a Workbook does not give the possessor the Workbook copyright.

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 CMO exam.

Published & Distributed by: Loyalty Square Analytic Solutions Private Limited
Corporate Office: B2 -234, Spaze IT Park, Sector-49, Gurgaon, Haryana-122018, India

Website: <https://www.crestolympiads.com>

Email: info@crestolympiads.com

Contact Number: +91-9818-294-134

ISBN Number: 978-81-957365-0-8

Social Media Accounts



Facebook: <https://www.facebook.com/crestolympiads>

Instagram: <https://www.instagram.com/crestolympiads>

LinkedIn: <https://www.linkedin.com/company/crestolympiads>

Youtube: <https://www.youtube.com/c/CRESTOlympiads>

Twitter: <https://twitter.com/crestolympiads>

Visit **www.crestolympiads.com/olympiad-books** for buying books online.



Also Available On

amazon

Flipkart



Contents

1. Number Sense	5
2. Addition	15
3. Subtraction	21
4. Length	27
5. Weight	34
6. Time	40
7. Money	47
8. Geometric Shapes and Solids	53
9. Pattern	61
10. Previous Year Paper (2023-24)	66
11. Answer Key	70

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-class1-354>

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.

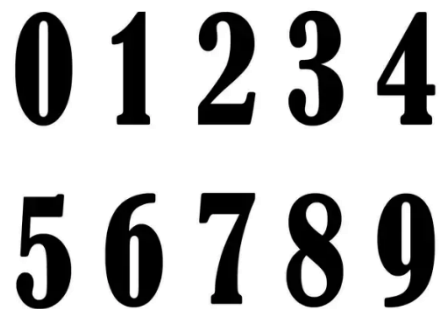
Publishers

Number

A number is an arithmetic value used for representing the quantity and used in making calculations.



We use digits to represent the numbers. It is a symbol ranging from 0 to 9.



Every day the students come across the activity of counting. Counting can be done only if the student has some idea about the numbers. Numbers are also represented in terms of words.

Let us recognize few numbers

How many apple/s is/are shown below?



Answer: 1

How many boys are shown below?



Answer: 2

Number Sense

How many coins are shown below?



Answer: 3

How many candles are shown below?



Answer: 4

How many stars are shown below?



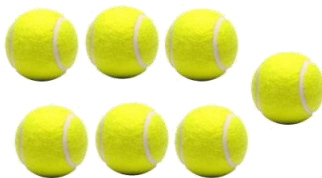
Answer: 5

How many dots are shown below?



Answer: 6

How many balls are shown below?



Answer: 7

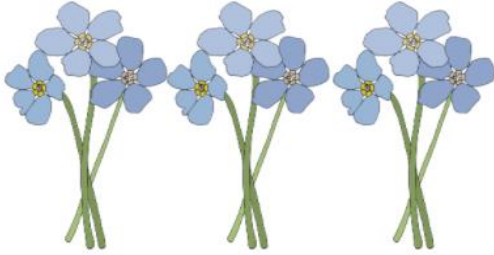
How many trees are shown below?



Number Sense

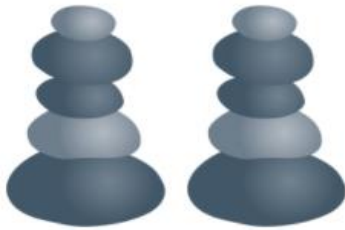
Answer: 8

How many flowers are shown below?



Answer: 9

How many stones are shown below?



Answer: 10

One-digit Number

These digits when used alone result in single digit or one-digit numbers.
Starting from 0 and going up to 9.

Two-digit Number

When the digits are used in a combination, they form two digits or bigger numbers.
The smallest two-digit number is 10.
The greatest two-digit number is 99.

Forth Counting

Adding one to the number helps us to obtain the next number.
For example: The number which comes just after 11 is $(11 + 1) = 12$.

Back Counting

Subtracting one from the number helps us to obtain the previous number.
For example: The number which comes just before 11 is $(11 - 1) = 10$.

Place Value

It can be defined as the value represented by a digit in a number on the basis of its position in the number.

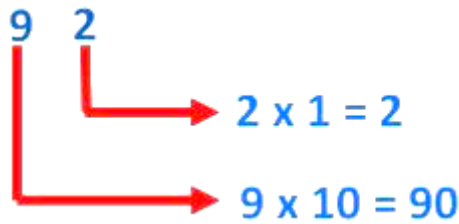
In a two-digit number, the place value of the ten-place digit is 10 times of the digit.

Number Sense

For example: 92

It can also be written as $90 + 2$

$9 \times 10 + 2$



The number at the ten's place is multiplied with 10 and added to the number at the unit's place.

In words, we write it as Ninety-two.

548 can be represented in the form of hundreds, tens and ones.

Hundreds (H)	Tens (T)	Ones (O)
5	4	8

Place value of 5 = $5 \times 100 = 500$

Place value of 4 = $4 \times 10 = 40$

Place value of 8 = $8 \times 1 = 8$

The smallest three-digit number = 100

The greatest three-digit number = 999

All the numbers from 1 till 100 in words are as follows:

1	One	11	Eleven	21	Twenty-one	31	Thirty-one	41	Forty-one
2	Two	12	Twelve	22	Twenty-two	32	Thirty-two	42	Forty-two
3	Three	13	Thirteen	23	Twenty-three	33	Thirty-three	43	Forty-three
4	Four	14	Fourteen	24	Twenty-four	34	Thirty-four	44	Forty-four
5	Five	15	Fifteen	25	Twenty-five	35	Thirty-five	45	Forty-five
6	Six	16	Sixteen	26	Twenty-six	36	Thirty-six	46	Forty-six

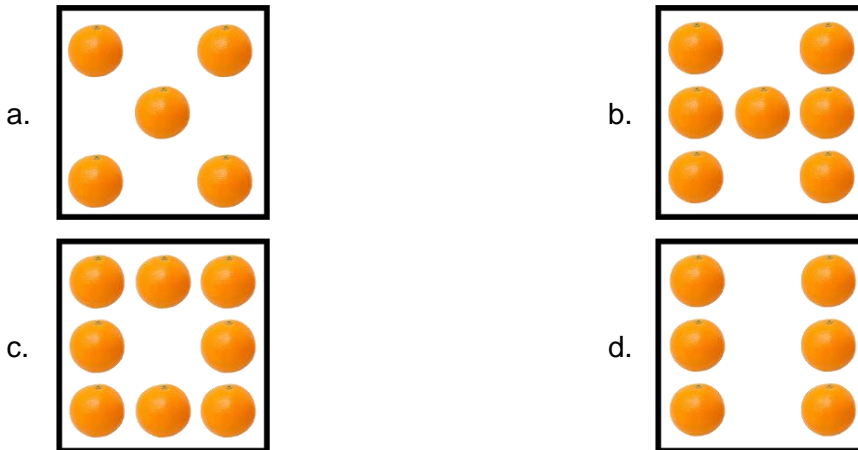
7	Seven	17	Seventeen	27	Twenty-seven	37	Thirty-seven	47	Forty-seven
8	Eight	18	Eighteen	28	Twenty-Eight	38	Thirty-eight	48	Forty-eight
9	Nine	19	Nineteen	29	Twenty-Nine	39	Thirty-nine	49	Forty-nine
10	Ten	20	Twenty	30	Thirty	40	Forty	50	Fifty

51	Fifty-one	61	Sixty-one	71	Seventy-one	81	Eighty-one	91	Ninety-one
52	Fifty-two	62	Sixty-two	72	Seventy-two	82	Eighty-two	92	Ninety-two
53	Fifty-three	63	Sixty-three	73	Seventy-three	83	Eighty-three	93	Ninety-three
54	Fifty-four	64	Sixty-four	74	Seventy-four	84	Eighty-four	94	Ninety-four
55	Fifty-five	65	Sixty-five	75	Seventy-five	85	Eighty-five	95	Ninety-five
56	Fifty-six	66	Sixty-six	76	Seventy-six	86	Eighty-six	96	Ninety-six
57	Fifty-seven	67	Sixty-seven	77	Seventy-seven	87	Eighty-seven	97	Ninety-seven
58	Fifty-eight	68	Sixty-eight	78	Seventy-Eight	88	Eighty-eight	98	Ninety-eight
59	Fifty-nine	69	Sixty-nine	79	Seventy-Nine	89	Eighty-nine	99	Ninety-nine
60	Sixty	70	Seventy	80	Eighty	90	Ninety	100	One-Hundred

Number Sense

Let us solve some examples related to the topic.

Example 1: Which option contains seven oranges?



Solution: Correct option is b

Option a has 5 oranges in it.

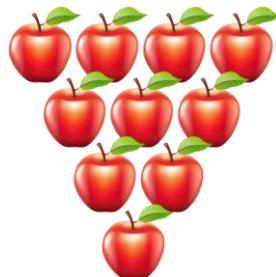
Option b has 7 oranges in it.

Option c has 8 oranges in it.

Option d has 6 oranges in it.

Hence, option b is correct.

Example 2: What is the maximum number of groups of 3 apples that can be formed from the apples given below?



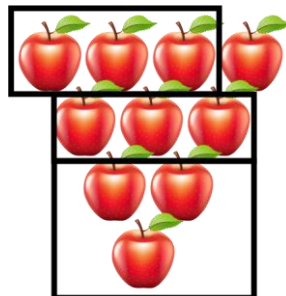
- a. 2
c. 3

- b. 4
d. 5

Solution: Correct option is c

We can form a maximum of three groups of three apples each.

Since there are 10 apples, one apple will be left and not included in any group.



Hence, option c is the correct answer.

Practice Questions

1. How many buckets are present in the image below?



- a. 1 ten
b. 1 tens + 5 ones
c. 1 tens + 2 ones
d. 2 tens + 1 ones

2. Match the following:

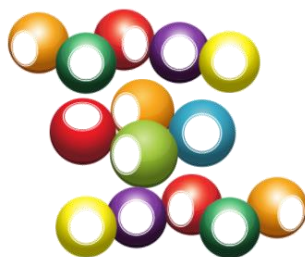
a.		1.	Six
b.		2.	Three
c.		3.	Eight

- a. $a - 2$, $b - 1$, $c - 3$
b. $a - 2$, $b - 3$, $c - 1$
c. $a - 3$, $b - 2$, $c - 1$
d. $a - 3$, $b - 1$, $c - 2$

3. Which number comes just before 97?

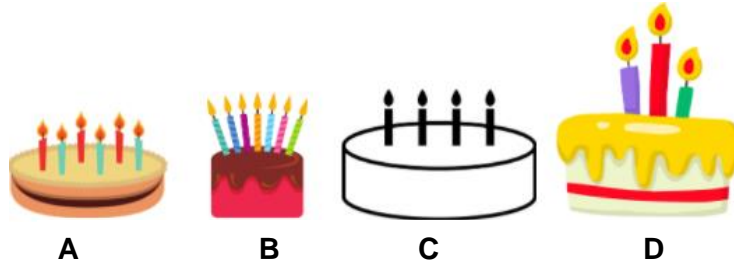
- a. Ninety-eight
b. Ninety-nine
c. Ninety-five
d. Ninety-six

4. How many balls are present in the figure given below?



- a. Forty
b. Fourteen
c. Fifteen
d. Thirteen

5. The number of candles on the cake denotes the age of the four friends, A, B, C and D. Who is the eldest of the four?



- a. A
c. C
- b. B
d. D

6. How will we represent 87 in words?

- a. Eighty-seven
c. Eighteen-seven
- b. Eight-seven
d. Eight-seventeen

7. How many pairs of eyes are present in the figure given below?

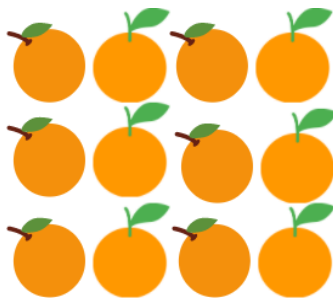


- a. 12
c. 6
- b. 3
d. 8

8. Which number comes just after Forty-Six?

- a. 41
c. 45
- b. 47
d. 44

9. How many oranges will be left out of the given oranges below if we form a group of 4 oranges?



- a. Zero
c. Two
- b. One
d. Three

10. Which of the following options is the correct representation of 49 in terms of tens and ones?

- a. 4 tens + 90 ones
c. 4 tens + 9 ones
- b. 40 tens + 9 ones
d. 40 tens + 90 ones

11. How many toffees are present in the image given below?



- a. 1 tens + 8 ones
- b. 10 tens + 8 ones
- c. 1 tens + 80 ones
- d. 18 tens

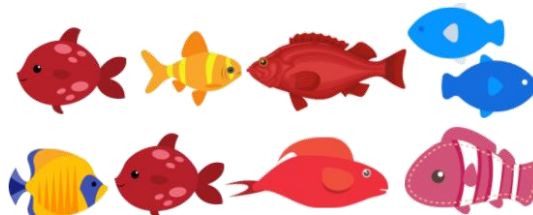
12. Which number comes just after Fifty-Nine?

- a. 6 tens + 1 ones
- b. 5 tens + 8 ones
- c. 6 tens
- d. 6 tens + 10 ones

13. Which of the following options represents Seventy-two in number?

- a. 17
- b. 77
- c. 79
- d. 72

14. How many fishes are present in the image given below?



- a. Nine
- b. Six
- c. One
- d. Seven

15. How many frogs will be left out of the given frogs below if we keep 5 frogs in each group?






- a. Zero
- b. One
- c. Two
- d. Three

16. Which two numbers come just before 81?

- a. Seventy-eight and Seventy-nine
- b. Seventy-nine and Eighty
- c. Eighty and Eighty-two
- d. Eighty-two and Eighty-three

17. Match the following:

a.		1.	Six
b.		2.	Eight
c.		3.	Four

a. $a - 1$, $b - 2$, $c - 3$

b. $a - 2$, $b - 3$, $c - 1$

c. $a - 3$, $b - 2$, $c - 1$

d. $a - 1$, $b - 3$, $c - 2$

18. Which of the following options represents Ninety-six in number?

a. 94

b. 93

c. 96

d. 90

19. How can we represent 77 in words?

a. Seventeen-seven

b. Seventy-seventeen

c. Seven-seven

d. Seventy-seven

20. Which of the following options is the correct representation of 86 in terms of tens and ones?

a. 8 tens + 60 ones

b. 80 tens + 6 ones

c. 8 tens + 6 ones

d. 80 tens + 60 ones

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



#CRESTInnovator

www.crestolympiads.com/registration

+91-98182-94134