## mathelantics WORKBOOK



For the preparation of National \& International Olympiads


- Chapter-wise practice exercises
- Previous year paper

CREST Mathematics Olympiad (CMO)

# Mathematics Olympiad <br> Exams Preparation Book 

## CMO | IMO | UMO | iOM | UIMO | HMO

## Grade 2


\#CRESTInnovator

## CREST Mathematics Olympiad Workbook for Grade 2

## Second Edition

Copyright © 2022 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：B4－1110B，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：978－81－957365－1－5

## Social Media Accounts <br> －ローロ－

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／buy－workbook for buying books online．


## Also Available On amazon Flipkart

## Contents

1. Number Sense ..... 5
2. Computation Operations ..... 12
3. Length ..... 18
4. Capacity ..... 26
5. Weight ..... 33
6. Time ..... 41
7. Temperature ..... 48
8. Money. ..... 56
9. Geometric Shapes and Solids ..... 63
10. Pattern ..... 70
11. Pictograph ..... 77
12. Previous Year Paper (2021-22) ..... 83
13. Answer Key ..... 91

## 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.

CREST Olympiads is one of the largest Olympiad Exams with students from more than 25 countries. The objective of these exams is to build 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's a previous year 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.

## Chapter

## Number Sense

## Number

The knowledge of numbers is a must for all the students to solve the questions related to mathematics. So far, the students were very comfortable with the numbers till 100. In this workbook, the students will be introduced to the three-digit numbers and its operations.

The smallest three-digit number is 100 .
The biggest three-digit number is 999 .
Let us see how to write the three-digit numbers in words.
According to their values, the digits are placed from right to left at one's place, ten's place and hundred's place.

For example, let us take 384:


We can write it in the expanded form as:
$300+80+4$
We know that:
$300=$ Three hundred (3 hundreds)
80 = Eighty (8 tens)
4 = Four (4 ones)
When added together it is written as:
384 = Three hundred and eighty-four.

## Odd Number

The numbers which are not completely divisible by 2 are called odd numbers. They always leave a remainder.

For example: 1, 3, 5, 7, 9, 11, 13, etc.

## Even Number

The numbers which are completely divisible by 2 are called even numbers. They never leave a remainder. The remainder is always zero.

For example: $2,4,6,8,10$, etc.
Let us solve some examples to understand the topic better.
Example 1: If one girl can carry 4 shopping bags, how many girls can carry 24 shopping bags?

a.

b.

c.

d.


## Solution 1: b

It is given that 1 girl can carry 4 bags.
We have 24 bags.
Therefore, the number of girls needed to carry 24 bags $=24 \div 4=6$
Hence, option b is the correct answer.
Example 2: I am a three-digit number. I have 4 in my one's place. The number present in my hundred's place is 2 more than the number present in my one's place. I have a zero in my ten's place. Identify me.
a. 804
b. 640
c. 404
d. 604

Solution 2: d
In a three-digit number we have three place values:

One's place, Ten's place and Hundred's place
It is given that:
One's place $=4$
Ten's place $=0$
So, the number should be: _04
The number present in my hundreds place is 2 more than the number present in my ones place.
$2+4=6$
Hundred's place $=6$
So, the number $=604$
Hence, option d is the correct answer.

## Practice Questions

1. How many bunches of 5 mangoes can be formed from the bunch of mangoes given below?

a. 3
b. 2
c. 4
d. 5
2. I am an odd number. I lie between 54 and 72 . The sum of my digits is 7 . Who am I?
a. 52
b. 43
c. 61
d. 70
3. How many groups of 4 juices can be formed from the juices given below?

a. 4
b. 6
c. 8
d. 3
4. Which of the following is an odd number?
a. 6 tens +2 ones
b. 4 tens +3 ones
c. 7 tens
d. 9 tens +4 ones
5. If 27 fruits are added to the basket which has 33 fruits in it already, which number will come in the one's place of the total number of fruits?
a. 4
b. 1
c. 2
d. 0
6. Which of the following options is the biggest number?
a. 4 hundreds +3 tens +5 ones
b. 4 hundreds +5 tens +3 ones
c. 4 hundreds +3 tens +2 ones
d. 4 hundreds +5 tens +5 ones
7. Ice-creams are distributed in groups of 3 . How many such groups can be formed from the given number of ice-creams?

a. 6
b. 8
c. 4
d. 3
8. How many total flower vases are present in the figure given below?

a. 20
b. 10
c. 15
d. 24
9. A snake gives 27 eggs which are grouped together in baskets, such that each basket has 3 eggs in it. How many such baskets will be needed to accumulate all the eggs?

a. 9
b. 8
c. 7
d. 10
10. Jeff collected some flowers given below. He can make a garland using 5 flowers. How many garlands can be made using the flowers he collected?

a. 5
b. 3
c. 4
d. 6
11. Which number comes immediately before 194 ?
a. One hundred eighty-three
b. One hundred ninety-five
c. One hundred ninety-three
d. One hundred ninety-two
12. Mark's age was half the number of balloons given below. What was the approximate age of Mark?

a. 5
b. 10
c. 20
d. 15
13. I am a three-digit number. I have 7 in my one's place. The number present in my hundred's place is 4 less than the number present in my one's place. I have a 5 in my ten's place. Identify me.
a. 457
b. 347
c. 257
d. 357
14. How will we represent the number in words which will be greater than 167 and less than 169?
a. One hundred sixty-eight
b. One hundred sixty-seven
c. One hundred sixty-nine
d. One hundred fifty-eight
15. Count the number of pink balloons in the image given below.

a. 3 tens +7 ones
b. 3 tens +6 ones
c. 4 tens +6 ones
d. 4 tens +7 ones
16. Which number comes 4 places after four hundred fifty-six?
a. Four hundred sixty-two
b. Four hundred fifty-two
c. Four hundred fifty
d. Four hundred sixty
17. When twenty-nine mangoes are added to the mangoes given below, the total number of mangoes become $\qquad$ _.

a. 53
b. 52
c. 54
d. 59
18. Which of the following options is the correct representation of 761 in terms of hundreds, tens and ones?
a. 7 hundreds +6 tens +1 ones
b. 7 hundreds +5 tens +1 ones
c. 6 hundreds +7 tens +1 ones
d. 7 hundreds +5 tens +3 ones
19. Jerry bought a few cans of cold drinks, which he distributed between his friends equally. Find the number of cans each friend gets if Jerry has 4 friends.

a. 4
b. 8
c. 6
d. 10
20. I am a two-digit number. The sum of the digits present at my ones place and ten's place is 7 and I am an odd number. I lie between 30 and 50 . Who am I?
a. 34
b. 52
c. 61
d. 43

