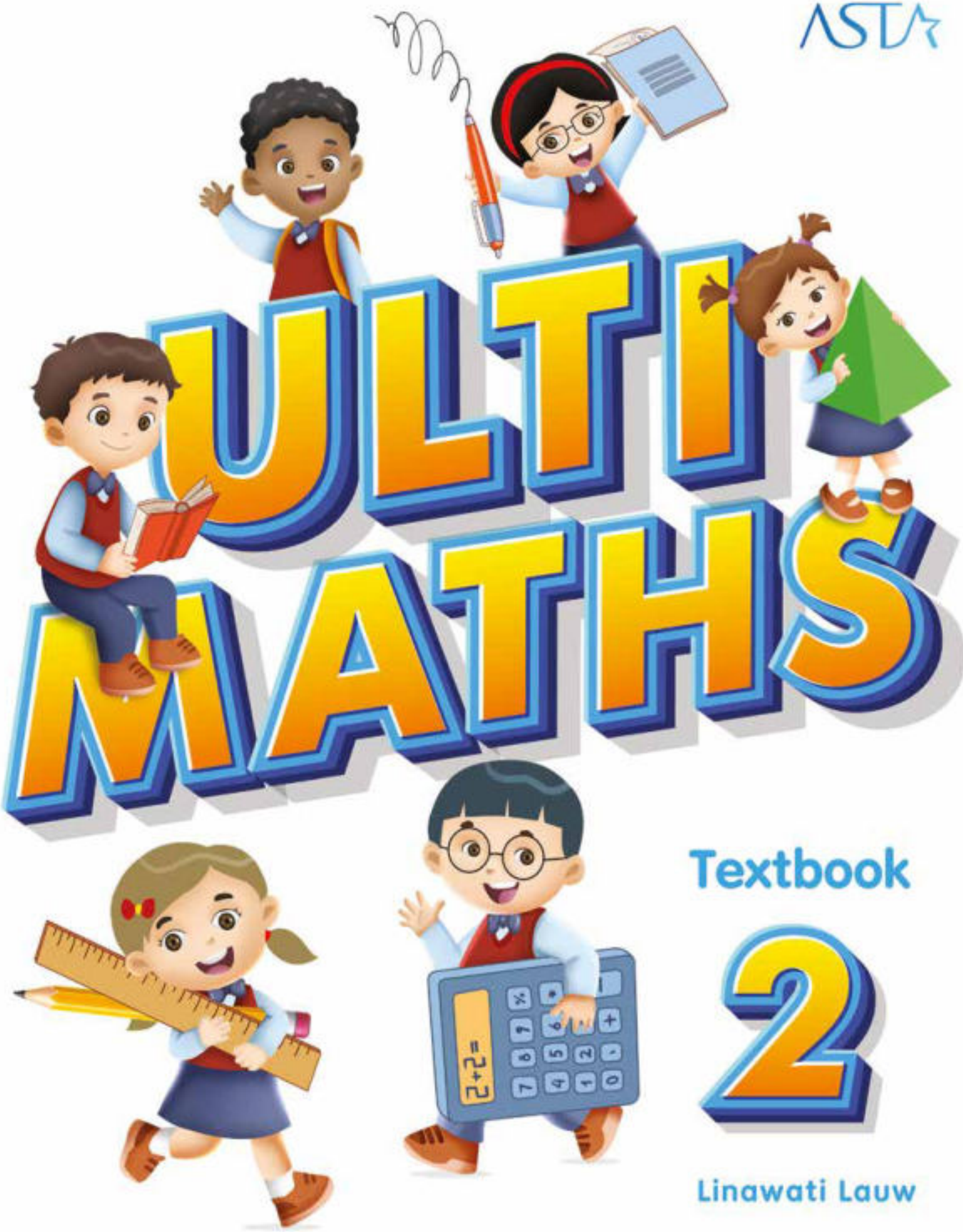
ASTA



ULTI MATHS

Textbook 2

Linawati Lauw

Ultimaths - Textbook 2

Published by:

PT ASTA ILMU SUKSES (member of Mentari Group)
RUKAN Sentra Niaga Puri Indah Block T1-14
West Jakarta 11610

: 0856 9785 6420

: @astailmusukses

: contact@astailmu.com

: www.astailmu.id

First published: January 2023

Preface

ULTI MATHS is a mathematics learning series for primary school students. The contents are systematically arranged according to the ability of the child, which can be applied in everyday life, and can be used as preparation for the next level.

ULTI MATHS uses an international standard of mathematical teaching and learning approaches, which have been proven to bring children success in learning mathematics. The Concrete-Pictorial-Abstract approach introduces new concepts with the use of appropriate manipulatives, before moving to pictorials and abstract representations. The development of topics across the levels in spiral progression approach helps learners acquire a new concept by building on previously learned concepts. The focus on Problem Solving by promoting the use of bar models, empowers students to develop visualization skills to better understand word problems before solving them.

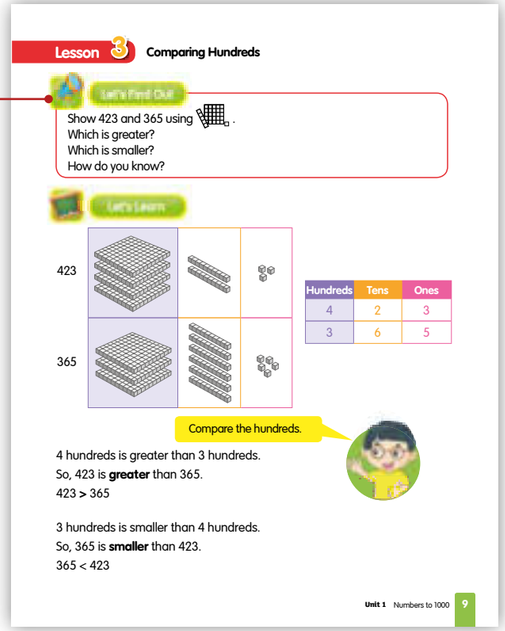
ULTI MATHS provides active, fun, and collaborative mathematics learning with lots of activities and games. These learning experiences will enable students to acquire and apply concepts and skills, develop critical thinking skills, and positive attitudes towards mathematics.

Using This Book

Ultimaths has some special features to help students learn and use this book.

Let's Find Out

To check students' prior knowledge.



Lesson 3 Comparing Hundreds

Let's Find Out

Show 423 and 365 using .
Which is greater?
Which is smaller?
How do you know?

Let's Learn

423

365

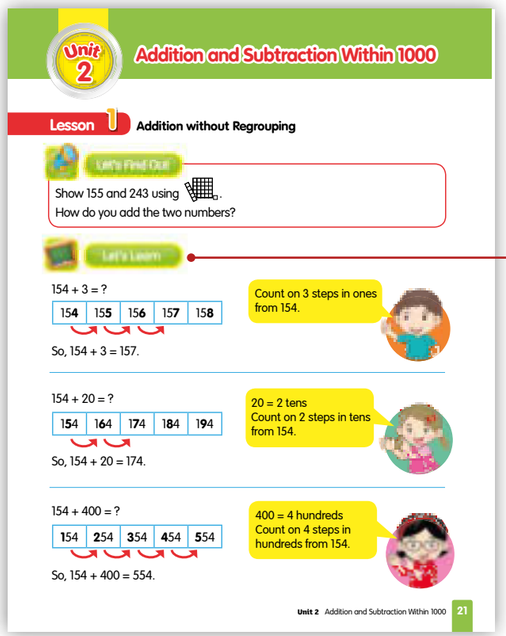
Hundreds	Tens	Ones
4	2	3
3	6	5

Compare the hundreds.

4 hundreds is greater than 3 hundreds.
So, 423 is **greater** than 365.
423 > 365

3 hundreds is smaller than 4 hundreds.
So, 365 is **smaller** than 423.
365 < 423

Unit 1 Numbers to 1000 9



Unit 2 Addition and Subtraction Within 1000

Lesson 1 Addition without Regrouping

Let's Find Out

Show 155 and 243 using .
How do you add the two numbers?

Let's Learn

154 + 3 = ?

154 155 156 157 158

So, 154 + 3 = 157.

Count on 3 steps in ones from 154.

154 + 20 = ?

154 164 174 184 194

So, 154 + 20 = 174.

20 = 2 tens
Count on 2 steps in tens from 154.

154 + 400 = ?

154 254 354 454 554

So, 154 + 400 = 554.

400 = 4 hundreds
Count on 4 steps in hundreds from 154.

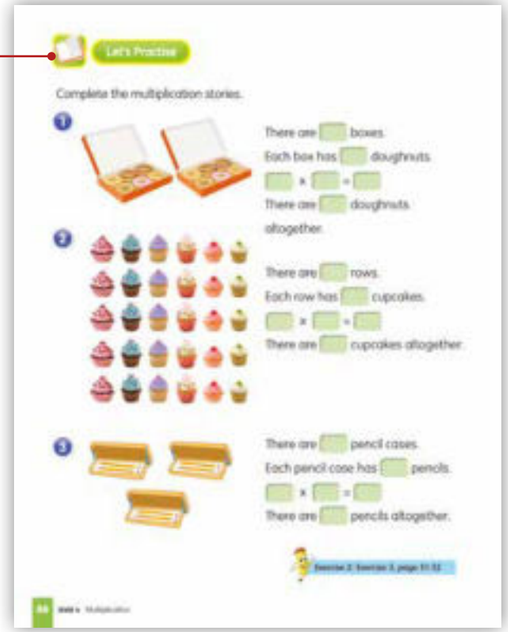
Unit 2 Addition and Subtraction Within 1000 21

Let's Learn

To introduce concepts, skills, or problem-solving strategies in an engaging way by using Concrete-Pictorial-Abstract approach.

Let's Practise

To practise the concepts learned in Let's Learn section.



Let's Practise

Complete the multiplication stories.

1 There are ☐ boxes.
Each box has ☐ doughnuts.
☐ × ☐ = ☐
There are ☐ doughnuts altogether.

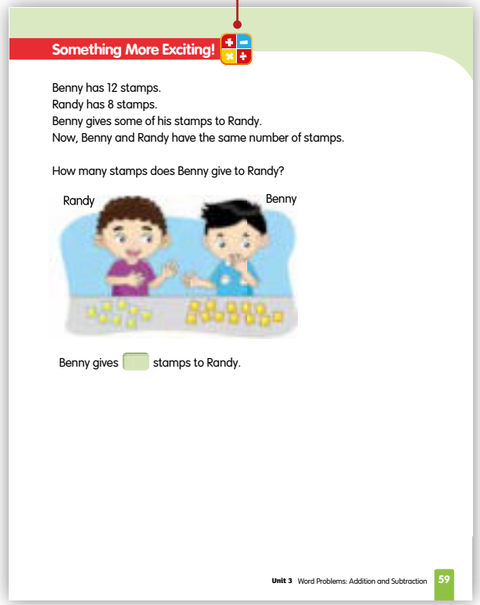
2 There are ☐ rows.
Each row has ☐ cupcakes.
☐ × ☐ = ☐
There are ☐ cupcakes altogether.

3 There are ☐ pencil cases.
Each pencil case has ☐ pencils.
☐ × ☐ = ☐
There are ☐ pencils altogether.

Exercise 2 Exercise 3, page 51-52

Something More Exciting!

More challenging practice to stimulate higher order thinking.



Something More Exciting!

Benny has 12 stamps.
Randy has 8 stamps.
Benny gives some of his stamps to Randy.
Now, Benny and Randy have the same number of stamps.

How many stamps does Benny give to Randy?

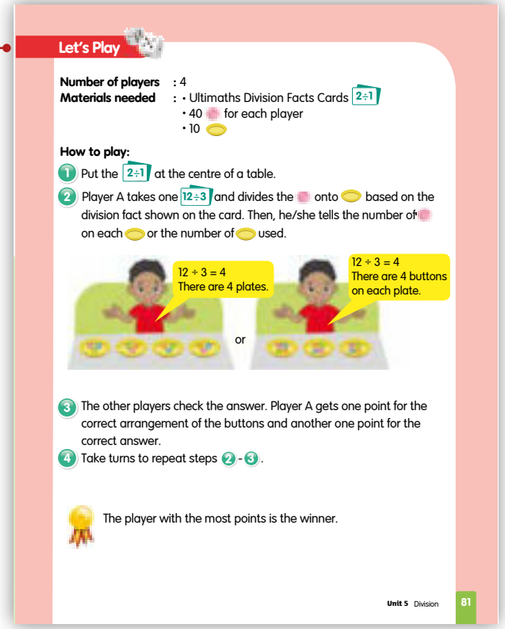
Randy Benny

Benny gives ☐ stamps to Randy.

Unit 3 Word Problems: Addition and Subtraction 59

Let's Play

Provide fun games to encourage collaboration and to deepen or extend understanding of concepts through the games.



Let's Play

Number of players : 4
Materials needed : • Ultimaths Division Facts Cards 2÷1
• 40 for each player
• 10

How to play:

1. Put the 2÷1 at the centre of a table.
2. Player A takes one 12÷3 and divides the onto based on the division fact shown on the card. Then, he/she tells the number of on each or the number of used.

12 ÷ 3 = 4
There are 4 plates.

or

12 ÷ 3 = 4
There are 4 buttons on each plate.

3. The other players check the answer. Player A gets one point for the correct arrangement of the buttons and another one point for the correct answer.
4. Take turns to repeat steps 2 - 3.

The player with the most points is the winner.

Unit 5 Division 81

Contents

Unit 1 Numbers to 1000

Lesson 1 Counting to 1000

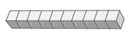
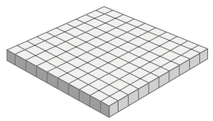
Let's Find Out

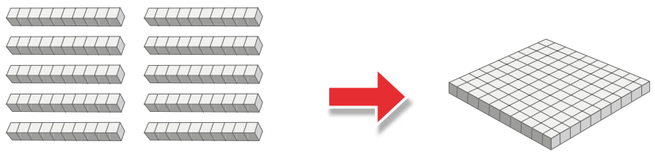
Take 200  .

Can you find faster way to count?

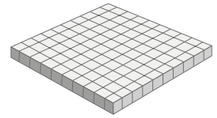
Let's Learn

First, arrange 10  to form  .

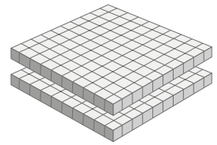
Then, arrange 10  to form  .



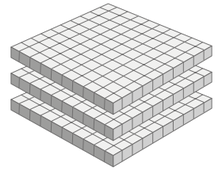
Let's count in hundreds.



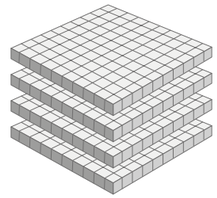
100
one hundred



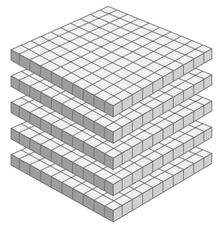
200
two hundred



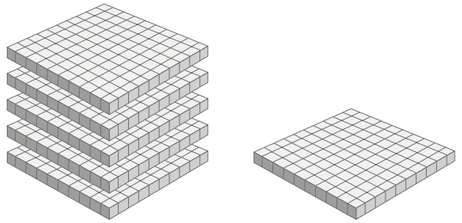
300
three hundred



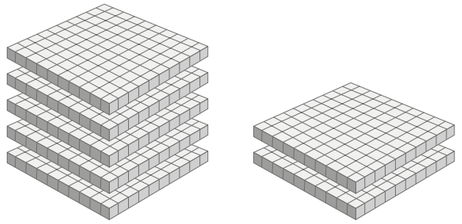
400
four hundred



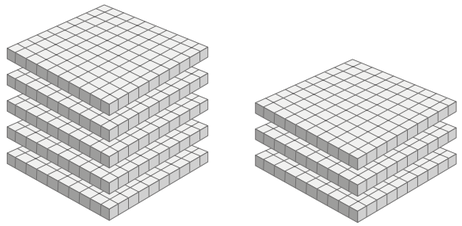
500
five hundred



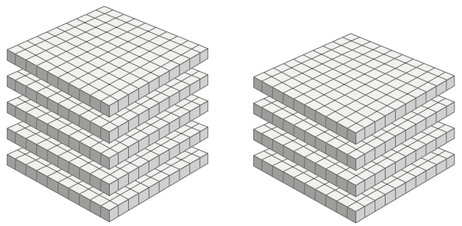
600
six hundred



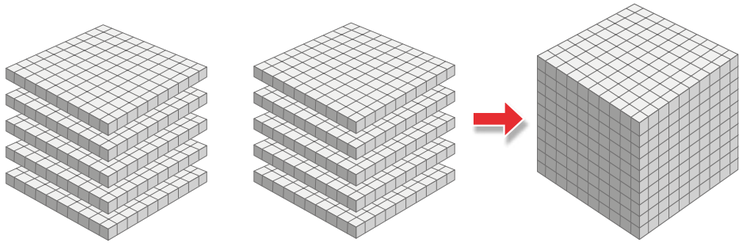
700
seven hundred



800
eight hundred

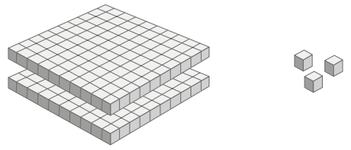


900
nine hundred



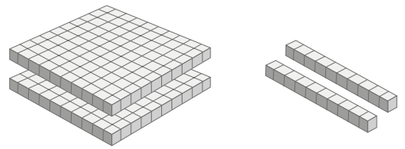
1000
one thousand

Let's count in hundreds, tens and ones.

a 

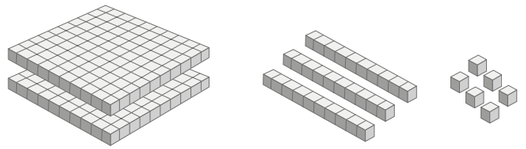
There are 203 .

100, ... 200, 201, 202, **203**
two hundred and three

b 

There are 220 .

100, ... 200, ... 210, ... **220**
two hundred and twenty

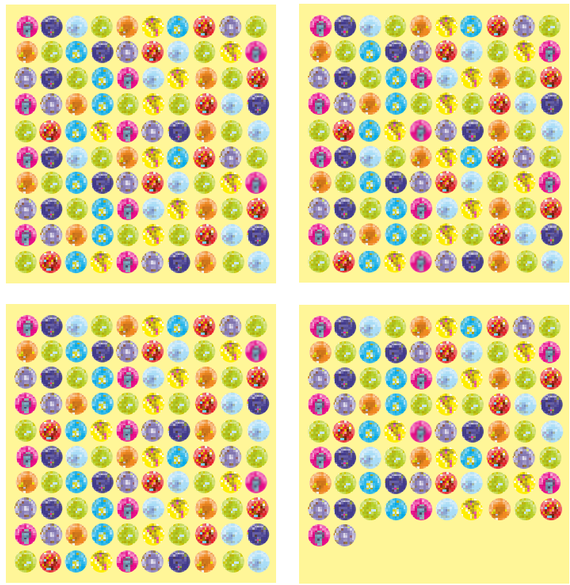
c 

There are 236 .

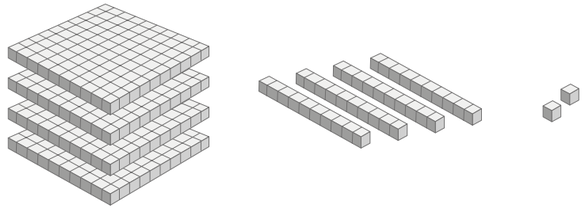
100, ... 200, ... 210, ... 220, ... 230,
231, 232, 233, 234, 235, **236**
two hundred and thirty-six

Let's Practise

1 Count and write the number.



2 Count in hundreds, tens and ones.



100, ... ☐ ,... ☐ , ... 400, ...

410, ... ☐ , ... ☐ , ... ☐

441, ☐

There are ☐ .

3 Write in words.

a 739 ☐

b 410 ☐

c 909 ☐

4 Write in numbers.

a five hundred and sixteen ☐

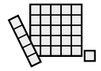
b eight hundred and four ☐

c six hundred and sixty ☐

Workbook: Exercise 1, page 2-4

Lesson 2 Place Value

Let's Find Out

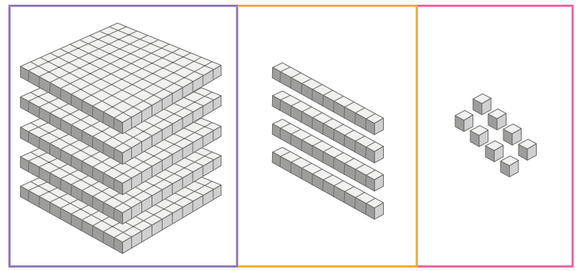
Show 548 using  .

How do you use 

to show 548?

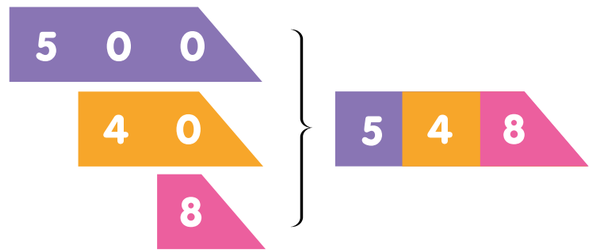
Let's Learn

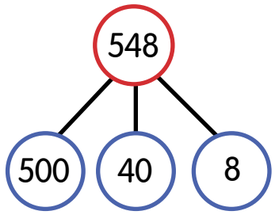
We can show 548 in different ways.



Hundreds	Tens	Ones
5	4	8

The digit 5 is in the hundreds place and its value is 500.
The digit 4 is in the tens place and its value is 40.
The digit 8 is in the ones place and its value is 8.

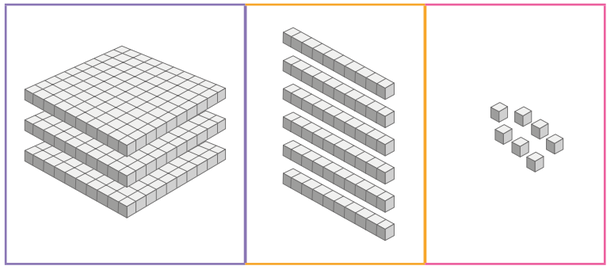




548 = 500 + 40 + 8

Let's Practise

1 Write the missing numbers.



Hundreds	Tens	Ones

The digit ____ is in the hundreds place and its value is ____.

The digit ____ is in the tens place and its value is ____.

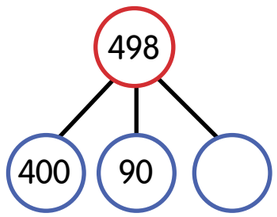
The digit ____ is in the ones place and its value is ____.

2 Show each number using the place value chart.

a 498

Hundreds	Tens	Ones

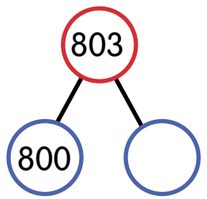
498 = ____ + ____ + ____



b 803

Hundreds	Tens	Ones

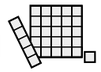
803 = ____ + ____ + ____



Workbook: Exercise 2, page 5-8

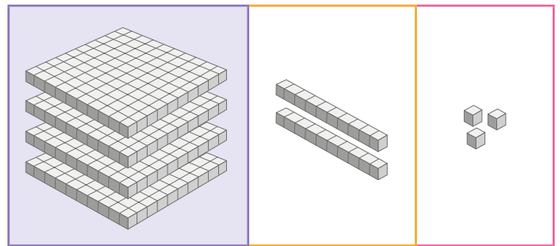
Lesson 3 Comparing Hundreds

Let's Find Out

Show 423 and 365 using  .
Which is greater?
Which is smaller?
How do you know?

Let's Learn

423



365

Hundreds	Tens	Ones
4	2	3
3	6	5

4 hundreds is greater than 3 hundreds.
So, 423 is **greater** than 365.
423 **>** 365

3 hundreds is smaller than 4 hundreds.
So, 365 is **smaller** than 423.
365 < 423

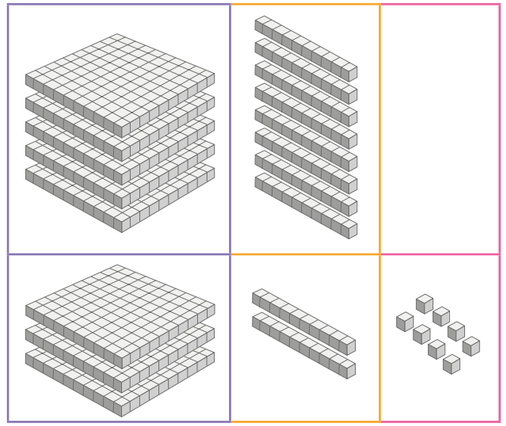
Let's Practise

1 Compare the numbers.

a 580 and 328

580

328



Hundreds	Tens	Ones
5	8	0
3	2	8

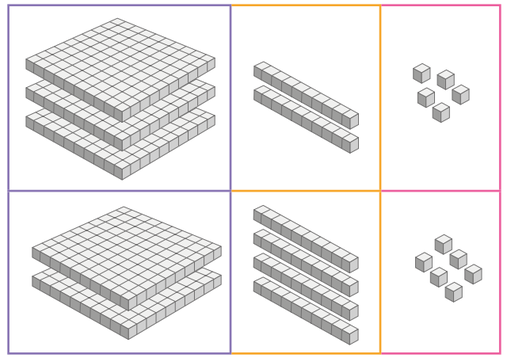
_____ is greater than _____.

_____ > _____

b 325 and 246

325

246



Hundreds	Tens	Ones
3	2	5
2	4	6

_____ is smaller than _____.

_____ < _____

Workbook: Exercise 3, page 9-10

Lesson 4 Comparing Numbers with Equal Number of Hundreds

Let's Find Out

Show 253 and 248 using | hundreds | tens | ones | | | | .

Which is greater?

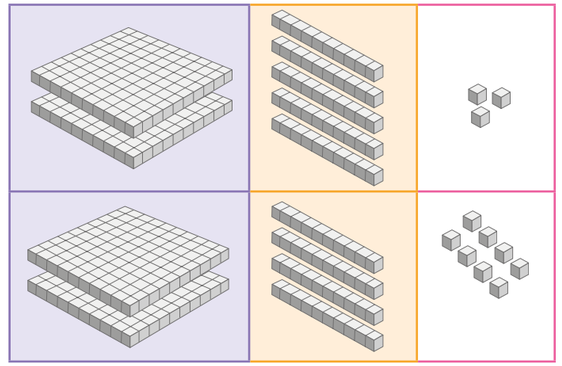
Which is smaller?

How do you know?

Let's Learn

253

248



Hundreds	Tens	Ones
2	5	3
2	4	8

First, compare the hundreds. They are same.

Next, compare the tens.

5 tens is greater than 4 tens.
So, 253 is **greater** than 248.
253 **>** 248

4 tens is smaller than 5 tens.
So, 248 is **smaller** than 253.
248 **<** 253

Let's Practise

1 Compare the numbers.
Fill in with < or >.

a 312 and 321

Hundreds	Tens	Ones
3	1	2
3	2	1

312 ☐ 321

b 753 and 781

Hundreds	Tens	Ones
7	5	3
7	8	1

753 ☐ 781

c 967 and 909

Hundreds	Tens	Ones
9	6	7
9	0	9

967 ☐ 909

Workbook: Exercise 4, page 11-13

Lesson 5 Comparing and Ordering Numbers

Let's Find Out

Show 357, 532 and 521 using 

.
Which is the smallest? Which is the greatest?
How do you know?

Let's Learn

Hundreds	Tens	Ones
3	5	7
5	3	2
5	2	1

Compare the hundreds.

3 hundreds is smaller than 5 hundreds.
So, 357 is the smallest.

Now, compare 532 and 521.
The hundreds are same, we compare the tens.

3 tens is greater than 2 tens.
So, 532 is the greatest.

Arrange the numbers in order, from the smallest to the greatest.

357 521 532

smallest greatest

Arrange the numbers in order, from the greatest to the smallest.

532 521 357

greatest smallest

Let's Practise

1 Compare and order the numbers.

a 125, 122, and 143.

Hundreds	Tens	Ones
1	2	5
1	2	2
1	4	3

[ ] is the smallest.

[ ] is the greatest.

Arrange the numbers in order, from the smallest to the greatest.

[ ], [ ], [ ]

smallest

b 679, 649, and 672

Hundreds	Tens	Ones
6	7	9
6	4	9
6	7	2

[ ] is the smallest.

[ ] is the greatest.

Arrange the numbers in order, from the greatest to the smallest.

[ ], [ ], [ ]

greatest

Workbook: Exercise 5, page 14-15

Lesson 6 Number Patterns (1)

Let's Find Out

What number comes after 138 in the number below?

135	136	137	138	?	140	141

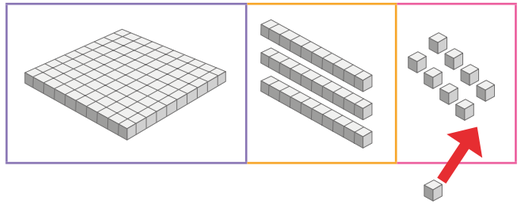
(Use  if needed.)

Let's Learn

1

135	136	137	138	?	140	141

1 more

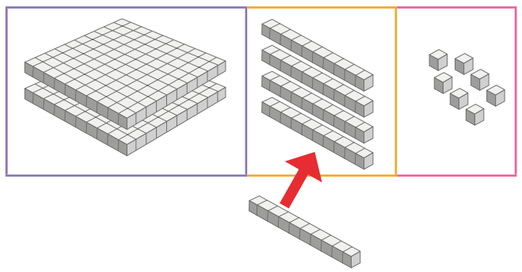


1 more than 13**8** is 13**9**.

2

217	227	237	247	?	267	277	287	297

10 more

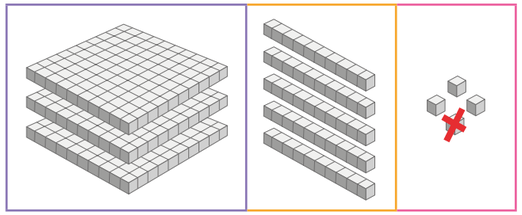


10 more than 24**7** is 25**7**.

3

357	356	355	354	?	352	351

1 less

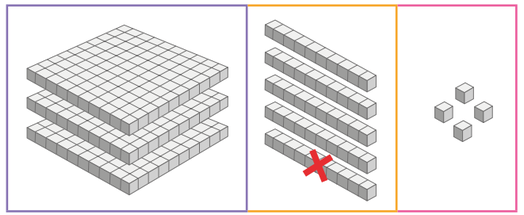


1 less than 35**4** is 35**3**.

4

384	374	364	354	?	334	324	314

10 less



10 less than 3**5**4 is 3**4**4.

Let's Practise

1 Write the missing numbers.

a) 195, 196, 197, ____, ____, 200, 201

b) 268, 269, 270, ____, ____, 273, 274

c) 416, 426, ____, ____, 456, 466, 476

d) 752, 751, ____, ____, 748, 747, 746

e) 559, 549, 539, ____, ____, 509, 499

f) 820, 810, ____, ____, 780, 770, 760

Workbook: Exercise 6, page 16

Lesson 7 Number Patterns (2)

Let's Find Out

Show 246 using  .

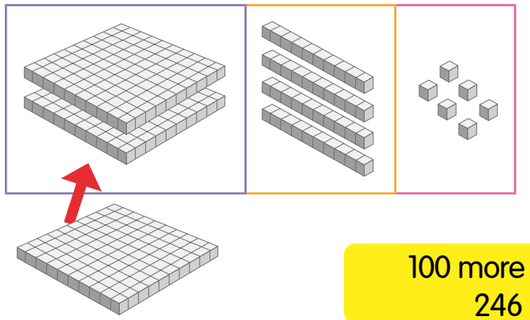
How do you show 100 more than 246?

How do you show 100 less than 246?

Let's Learn

Find a number that is 100 more than 246.

246

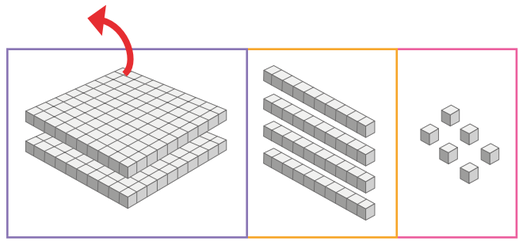


100 more than 246 equals
246 + 100 = 346

100 more than **2**46 is **3**46.

Find a number that is 100 less than 246.

246



100 less than 246 equals
246 – 100 = 146

100 less than **2**46 is **1**46.

Let's Practise

1 Write the missing numbers.

a. 100 more than 110 is ____.

b. 100 more than 209 is ____.

c. 100 more than 400 is ____.

d. 100 less than 890 is ____.

e. 100 less than 741 is ____.

f. 100 less than 998 is ____.

2 Write the missing numbers.

a. 470, 570, 670, 770, ____, ____

b. 345, 445, 545, 645, ____, ____

c. 706, 606, 506, 406, ____, ____

d. 998, 898, 798, 698, ____, ____

Exercise 2: Exercise 7, page 17

Something More Exciting!

What is the possible number in each ☐?

a. 5 8 3 > 5 ? 3

b. 3 4 6 < 3 ? 6

Answers

a.

b.

Let's Play

Players : 2

Materials needed : • One 10-sided die

• Ultimaths Place Value Cards 3 5 2

How to play:

1. Player A throws the die three times to get a 3-digit number.

2. Player B shows the number 3 5 2 and reads the number.

3 5 2

three hundred and fifty-two

3. Player A checks the answer. Player B gets 1 point if the answer is correct.
4. Take turns to repeat steps 1-3.

The first player to get 5 points is the winner.

Unit 2 Addition and Subtraction Within 1000

Lesson 1 Addition without Regrouping

Let's Find Out

Show 155 and 243 using .

How do you add the two numbers?

Let's Learn

154 + 3 = ?

15**4**	15**5**	15**6**	157	158

So, 154 + 3 = 157.

Count on 3 steps in ones from 154.

154 + 20 = ?

1**5**4	1**6**4	1**7**4	1**8**4	1**9**4

So, 154 + 20 = 174.

20 = 2 tens
Count on 2 steps in tens from 154.

154 + 400 = ?

154	**2**54	**3**54	**4**54	**5**54

So, 154 + 400 = 554.

400 = 4 hundreds
Count on 4 steps in hundreds from 154.