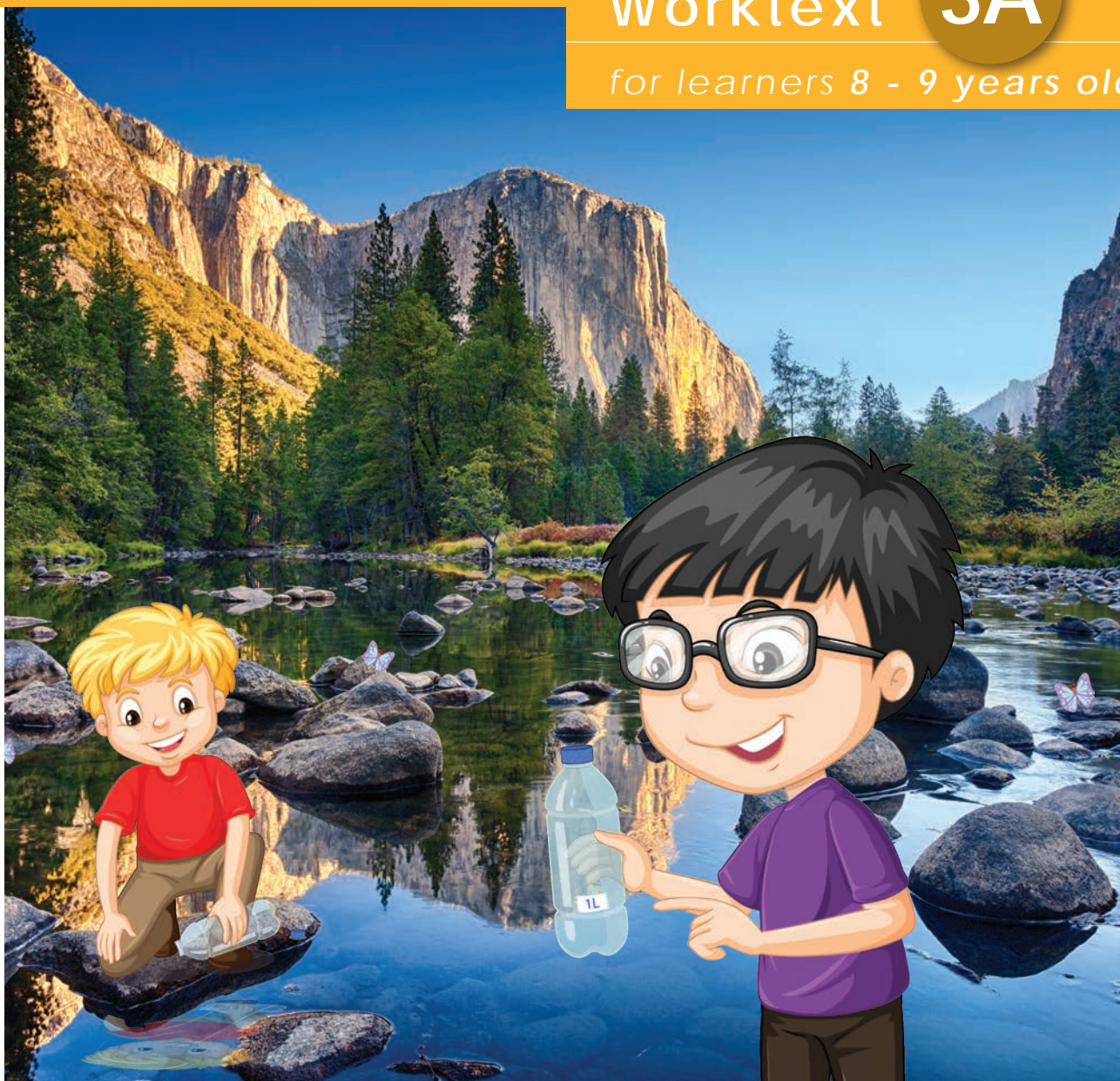




Let's Do MATHEMATICS

Worktext **3A**

for learners 8 - 9 years old



Let's Do Mathematics

Let's Do Mathematics is a series covering levels K-6 and is fully aligned to the United States Common Core State Standards (USCCSS). Each level consists of two books (Book A and Book B) and combines textbook-style presentation of concepts as well as workbook practice.

Central to the USCCSS is the promotion of problem-solving skills and reasoning. Let's Do Mathematics achieves this by teaching and presenting concepts through a problem-solving based pedagogy and using the concrete-pictorial-abstract (CPA) approach. Learners acquire knowledge and understanding of concepts through a guided progression beginning with concrete examples and experiences which then flow into pictorial representations and finally mastery at the abstract and symbolic level. This approach ensures that learners develop a fundamental understanding of concepts rather than answering questions by learned procedures and algorithms.

Key features of the series include:

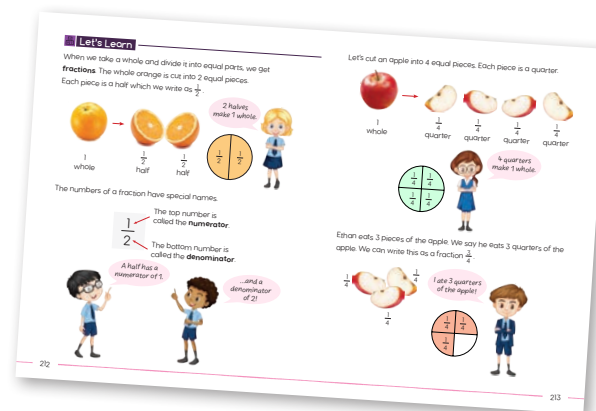
Anchor Task

Open-ended activities serve as the starting point for understanding new concepts. Learners engage in activities and discussions to form concrete experiences before the concept is formalized.



Let's Learn

Concepts are presented in a clear and colorful manner. Worked problems provide learners with guided step-by-step progression through examples. Series mascots provide guidance through helpful comments and observations when new concepts are introduced.



Let's Practice

Learners demonstrate their understanding of concepts through a range of exercises and problems to be completed in a classroom environment. Questions provide a varying degree of guidance and scaffolding as learners progress to mastery of the concepts.

At Home

Further practice designed to be completed without the guidance of a teacher. Exercises and problems in this section follow on from those completed under Let's Practice.

Hands On

Learners are encouraged to 'learn by doing' through the use of group activities and the use of mathematical manipulatives.

Solve It!

Activities that require learners to apply logical reasoning and problem-solving. Problems are often posed which do not have a routine strategy for solving them. Learners are encouraged to think creatively and apply a range of problem-solving heuristics.

Looking Back

Consolidated practice where learners demonstrate their understanding on a range of concepts taught within a unit.

Let's Practice

1. A truck driver has to drive 1205 km to deliver his load. He stops for a rest 476 km from his destination. How far has he travelled?

476 km
1205 km

The truck driver has travelled _____ km.

2. At the school athletics carnival, the red team scored 4,679 points. The blue team scored 3,858 points. How many more points did the red team score than the blue team?

4679
3858

_____ more points than the blue team.

3. A mother elephant and her baby have a combined mass of 4,670 kg. The baby has a mass of 482 kg. How much heavier is the mother?

Step 1
Find the mass of the mother.

4670
482

The mother has a mass of _____ kg.

Step 2
Subtract to find the difference in masses.

4670
482

The mother is _____ kg heavier than her baby.

At Home

1. Count the number of different creatures in the garden. Record your data on the next page.

2. Represent your data in the bar graph below.

Number of Creatures

16
14
12
10
8
6
4
2
0

Hands On

- Tell your friends the time you do an activity.
- One friend shows the time using their arms.
- The other friend shows the time on a clock.
- Switch roles.

Solve It!

Riley spent her summer vacation in Europe. Complete the division equations and match the letters to find the first city she visited.

A $6 \div 2 =$

N $8 \div 2 =$

S $14 \div 2 =$

A $6 \div 3 =$

H $6 \div 1 =$

S $15 \div 3 =$

2 3 1 5 4 7

Looking Back

1. Find the area of each figure in square units.

(a) Area = _____ square units.

(b) Area = _____ square units.

(c) Area = _____ square units.

(d) Area = _____ square units.

2. Find the area of the rectangles.

(a) 12 cm, 4 cm. Area = _____

(b) 10 cm, 5 cm. Area = _____

3. Find the perimeter of the figure.

Perimeter = _____

4. Find the area and perimeter of each figure.

Area = _____ Perimeter = _____

Area = _____ Perimeter = _____



Contents

1	Numbers to 10,000	2
	Counting to 10,000	4
	Numbers to 10,000	12
	Place Value	20
	Comparing and Ordering Numbers	32
	Number Patterns	43
	Odd and Even Numbers	52
	Rounding Numbers	56
2	Addition	66
	Addition Without Regrouping	66
	Addition With Regrouping	77
	Mental Addition Within 100	86
	Word Problems	94
3	Subtraction	106
	Subtracting 10s, 100s and 1,000s	107
	Subtraction Without Regrouping	119
	Subtraction With Regrouping	128
	Word Problems	136



4 Multiplication **146**

Repeated Addition	146
Repeated Addition Word Problems	160
Multiplying by 2	168
Multiplying by 3	177
Multiplying by 4	186
Multiplying by 5	197
Multiplying by 10	206
Multiplying by 6	218
Multiplying by 7	226
Multiplying by 8	234
Multiplying by 9	242
Multiplying by 6, 7, 8 and 9	253
Multiplication Word Problems	260

5 Division (1) **272**

Sharing Equally	272
Grouping Equally	282
Dividing by 2	289
Dividing by 3	294
Dividing by 4	299
Dividing by 5	304
Dividing by 10	309

1

Numbers to 10,000



Anchor Task

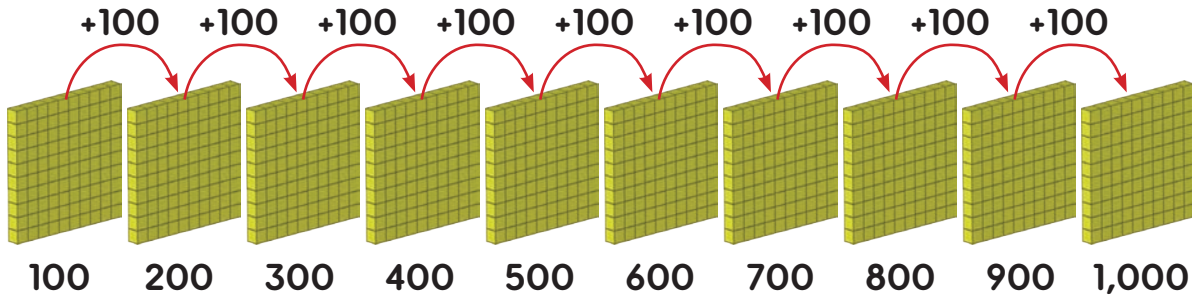




Counting to 10,000

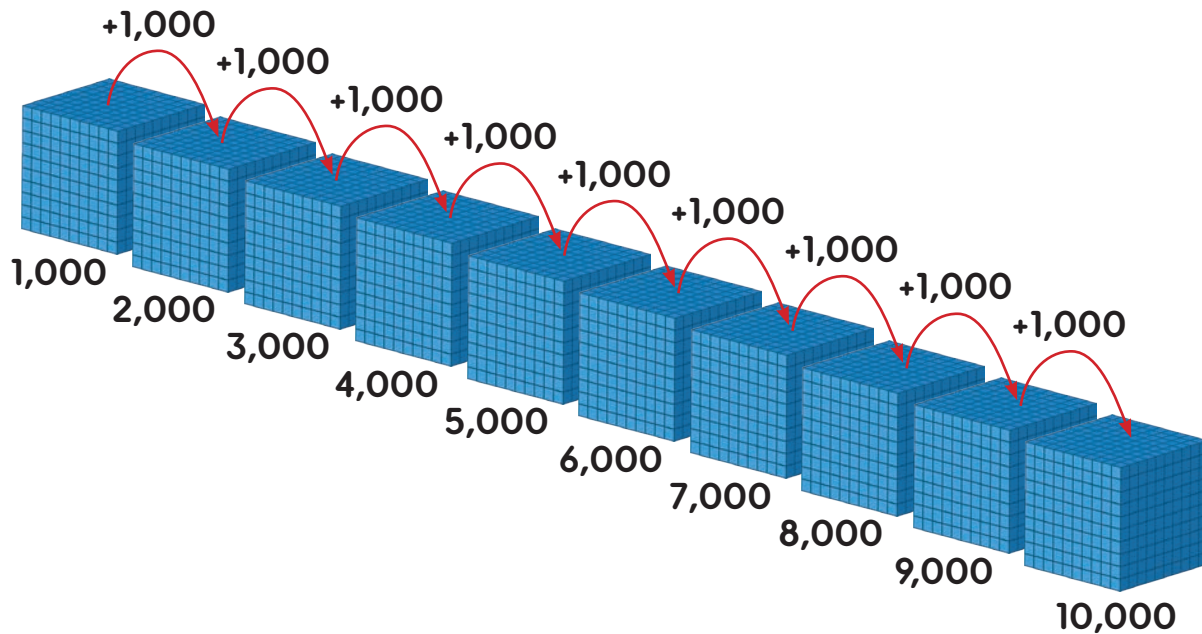
Let's Learn

Count on in hundreds from 100.



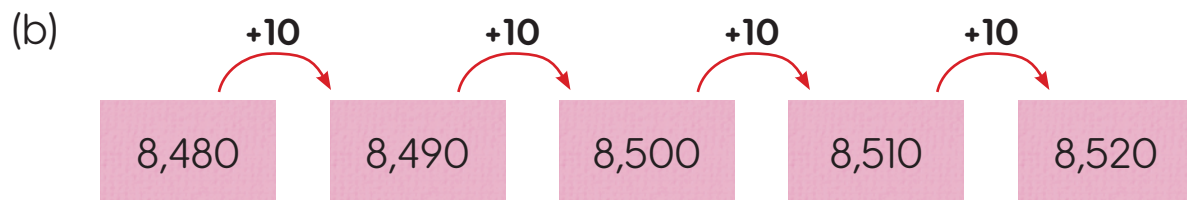
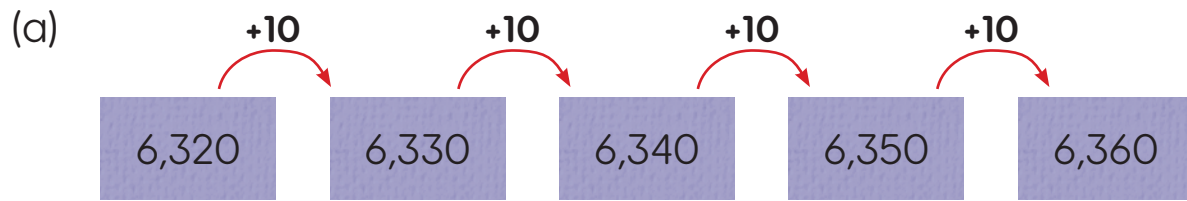
100 more than 900 is 1,000. We read 1,000 as **one thousand**.

Count on in thousands from 1,000.

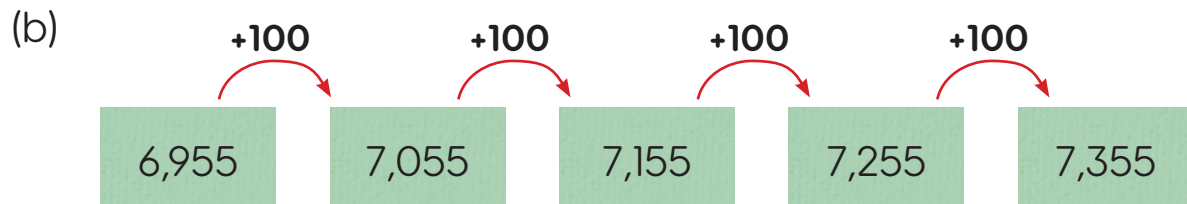
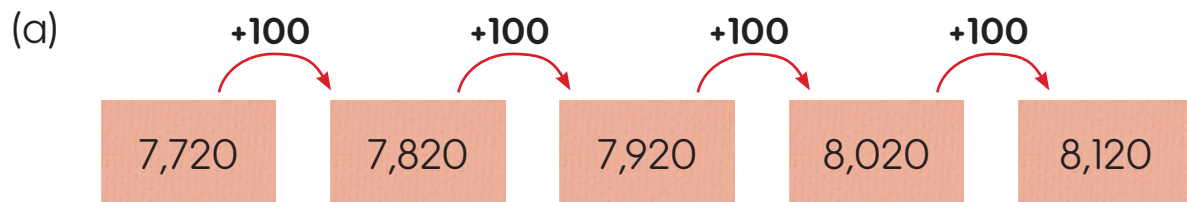


1,000 more than 9,000 is 10,000.
We read 10,000 as **ten thousand**.

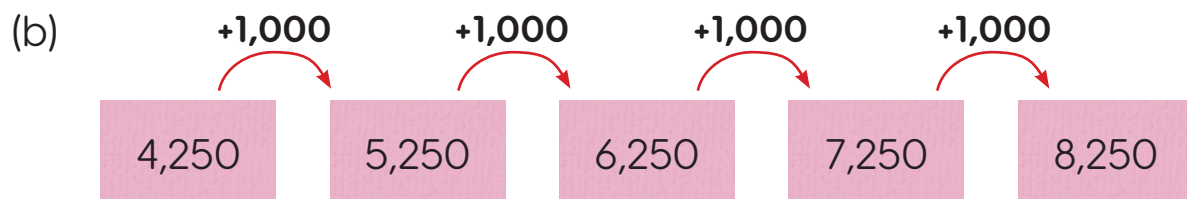
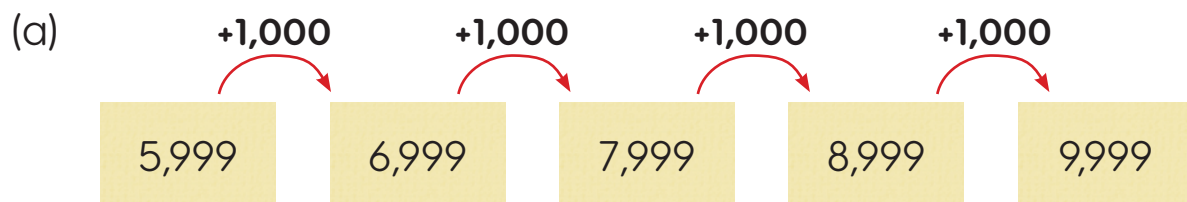
Count on in tens.



Count on in hundreds.



Count on in thousands.



Let's Practice

1. Count the jelly beans.

(a)

210

(b)

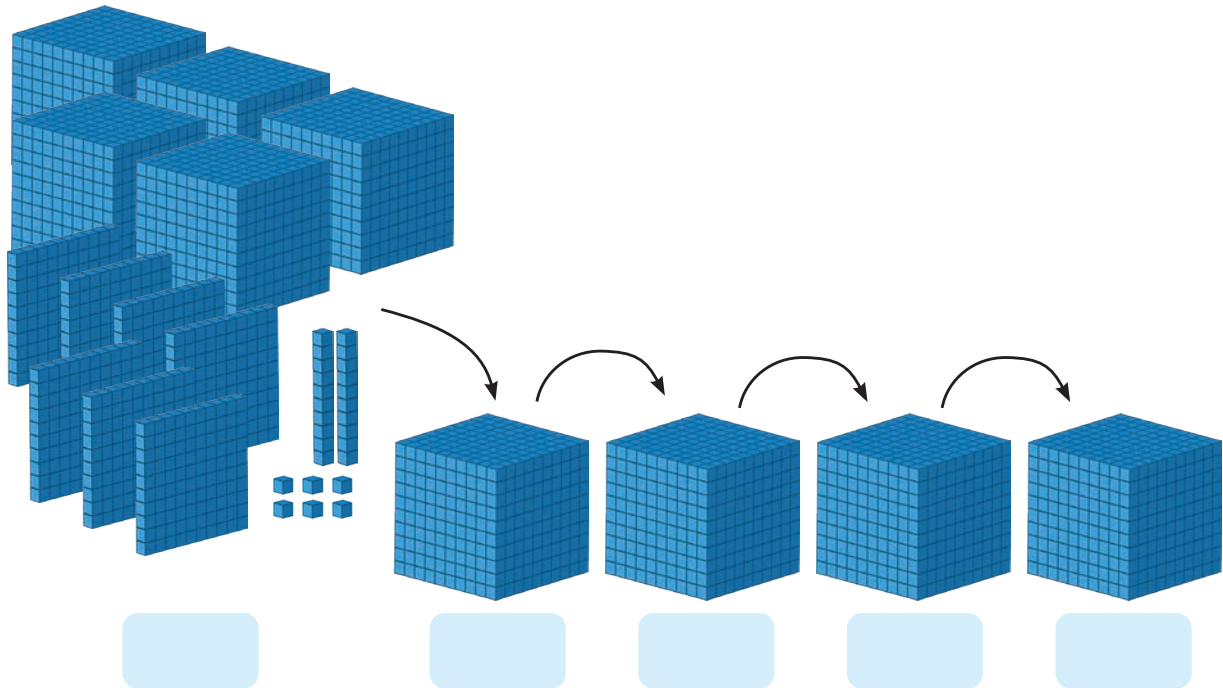
60

(c)

400



2. Count the blocks.



3. Count on in 10s.

(a) **425**, , , , ,

(b) **170**, , , , ,

(c) **680**, , , , ,

(d) **8,365**, , , , ,

(e) **7,050**, , , , ,

(f) **4,980**, , , , ,



4. Count on in 100s.

(a) **1,200**, , , , ,

(b) **3,150**, , , , ,

(c) **4,700**, , , , ,

(d) **6,363**, , , , ,

(e) **7,790**, , , , ,

5. Count on in 1,000s.

(a) **260**, , , , ,

(b) **1,400**, , , , ,

(c) **3,210**, , , , ,

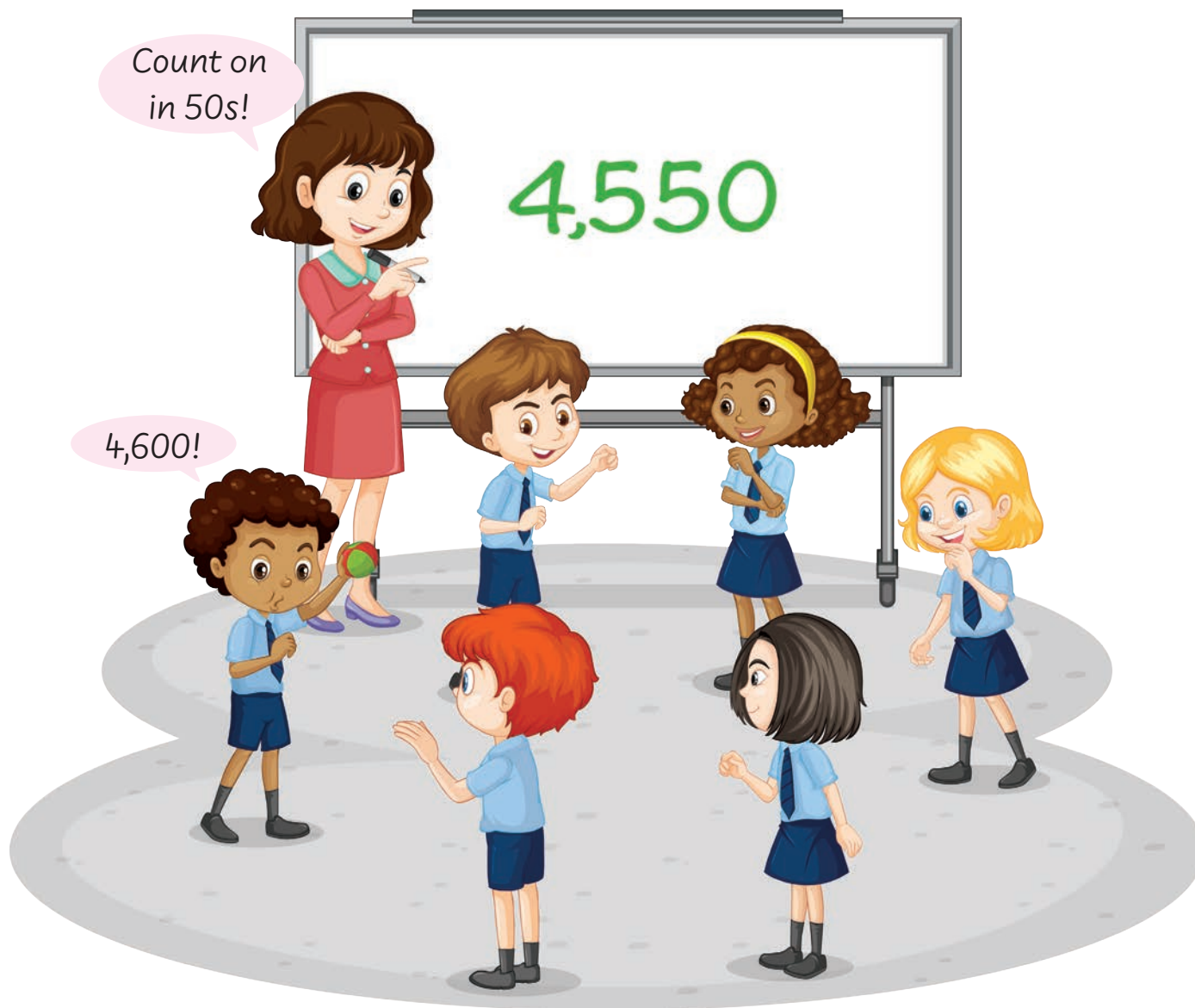
(d) **4,980**, , , , ,

(e) **5,000**, , , , ,

Hands On

Form circles of 4 to 6 students. Each group receives a bean bag or ball. Your teacher will write a number on the whiteboard and say a count-on number.

The student with the bean bag counts on from the number on the whiteboard and throws the bean bag to the next person in the group. They continue counting on and then pass the bean bag along. Continue until the teacher says 'Stop!'





At Home

1. Count the lollipops.

(a)

1,000

100

10

100

100

100

□

□

□

(b)

100

100

10

10

10

10

1,000

1,000

□

□

□

□

□

□

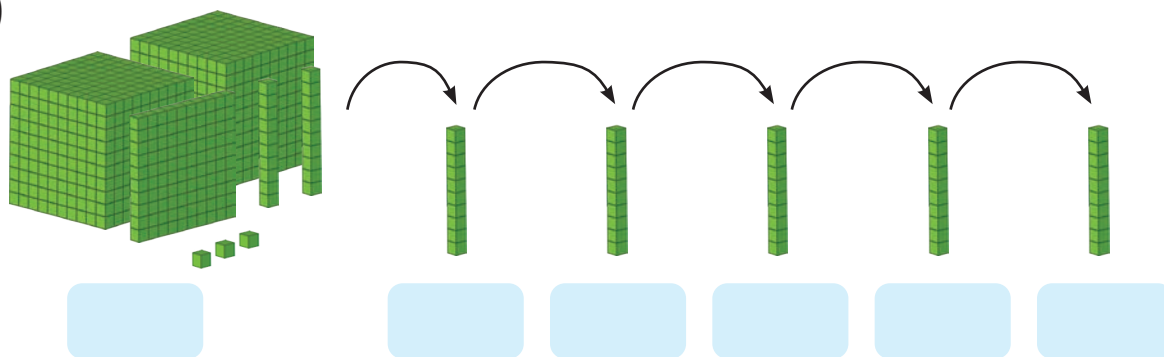
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□

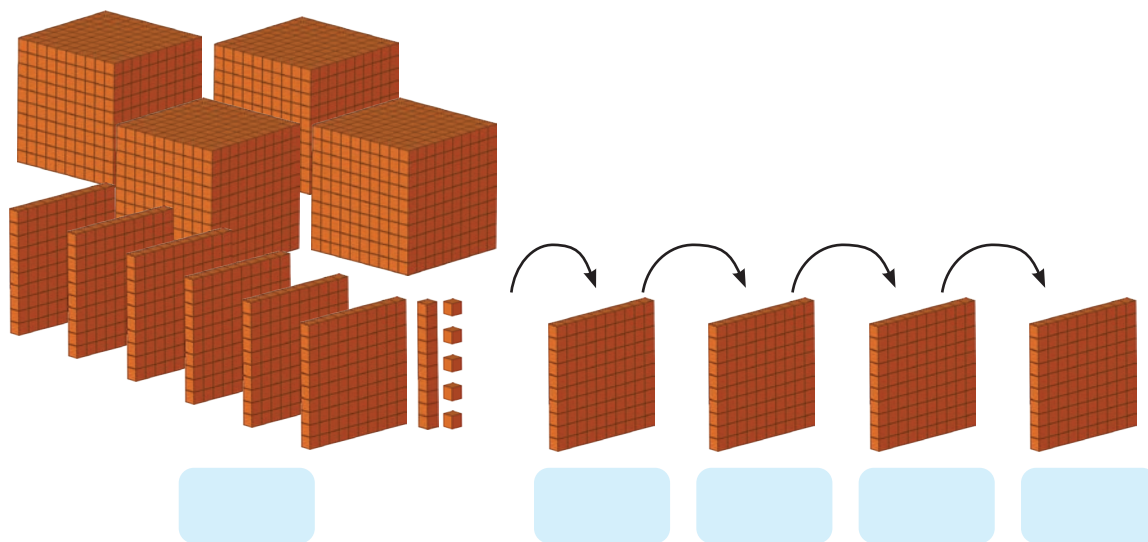


2. Count the blocks.

(a)



(b)



3. Count on in 1000s.

(a) **30**, , , , ,

(b) **1,700**, , , , ,

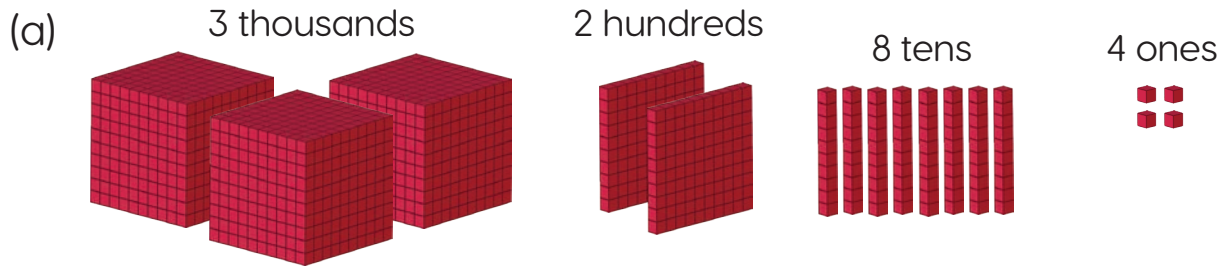
(c) **2,803**, , , , ,

(d) **4,150**, , , , ,

Numbers to 10,000

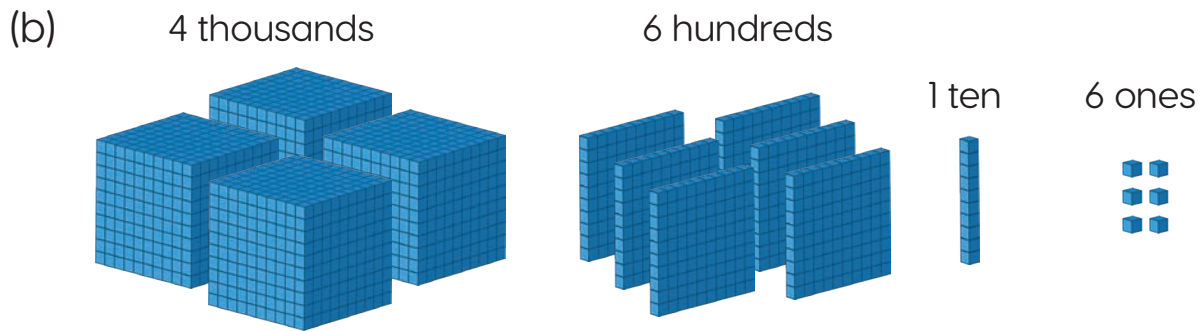
Let's Learn

Find the number represented by the blocks.



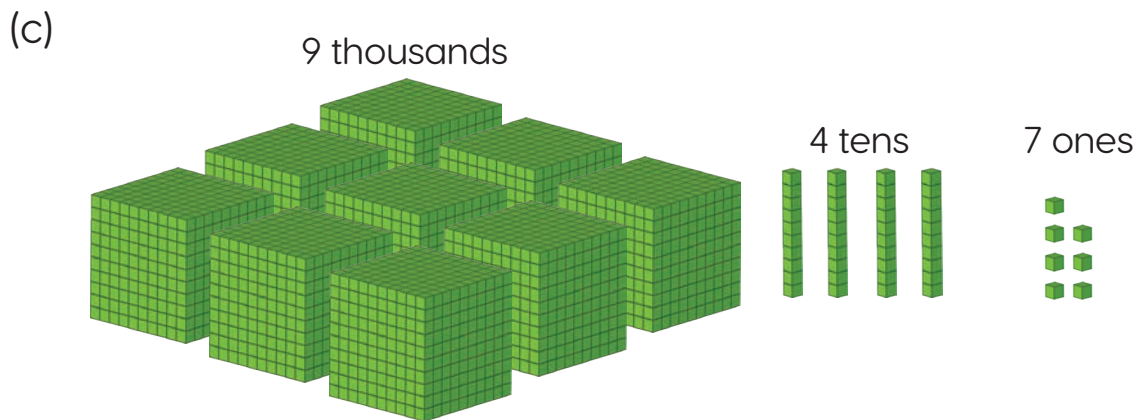
We say: Three thousand, two hundred eighty-four.

We write: 3,284.



We say: Four thousand, six hundred sixteen.

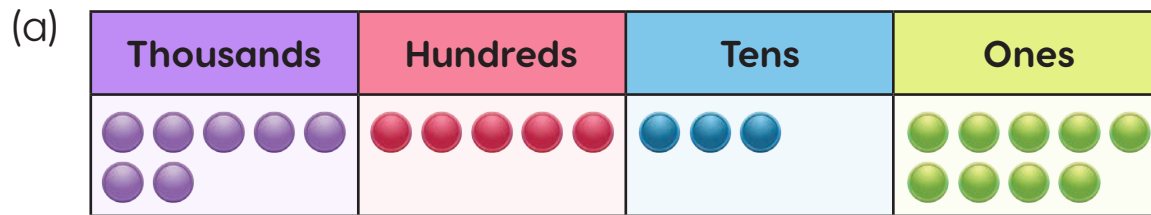
We write: 4,616.



We say: Nine thousand, forty-seven.

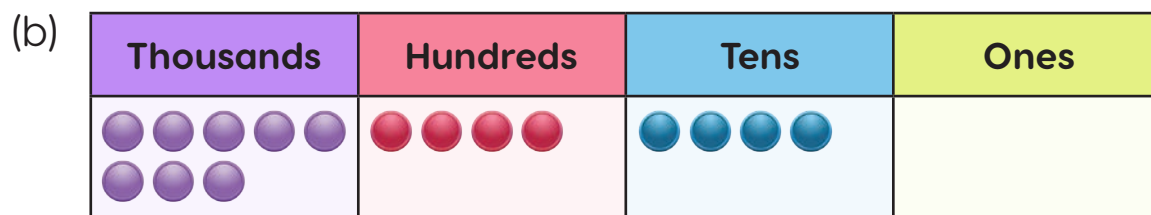
We write: 9,047.

Find the number represented in the place value chart.



We say: Seven thousand, five hundred thirty-nine.

We write: 7,539.



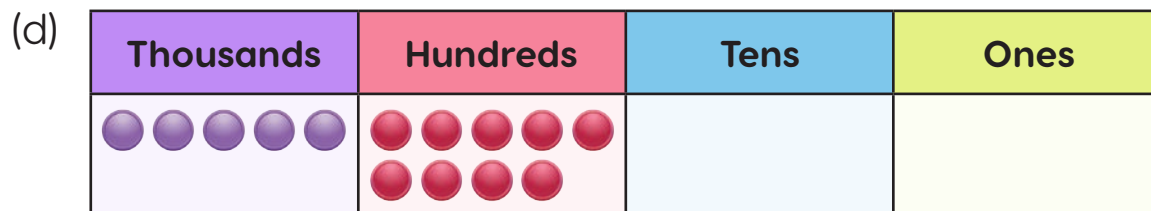
We say: Eight thousand, four hundred forty.

We write: 8,440.



We say: Six thousand, nine.

We write: 6,009.

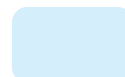
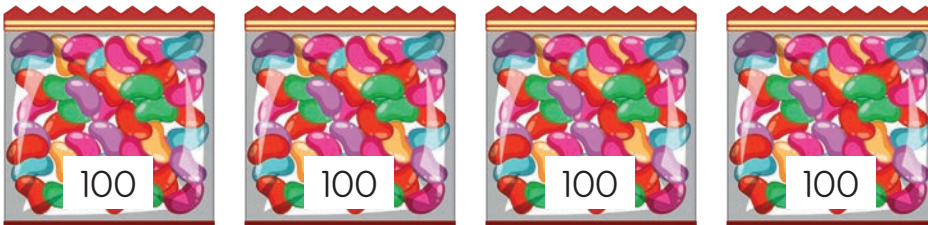
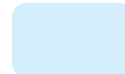
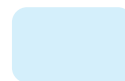


We say: Five thousand, nine hundred.

We write: 5,900.

Let's Practice

1. How many jelly beans are there?





2. Match.



four thousand, six hundred twenty



7,201



five thousand, sixty



8,700



seven thousand, two hundred one



5,060



eight hundred seventy-three



4,620







eight thousand, seven hundred






873

3. Write as numerals and words.




(a)

Thousands	Hundreds	Tens	Ones
			

(b)

Thousands	Hundreds	Tens	Ones
			

(c)

Thousands	Hundreds	Tens	Ones
			



At Home

1. How many lollipops are there?

(a)

1,000 1,000 100 100 100

10 10 10 10 10 10

(b)

1,000 1,000 1,000 1,000




1,000 1,000 1,000 1,000

100 100 100 100 100



100 100 100 100

2. Write as numerals and words.




(a)

Thousands	Hundreds	Tens	Ones
			

(b)

Thousands	Hundreds	Tens	Ones
			

(c)

Thousands	Hundreds	Tens	Ones
			

3. Write the number in words.

(a) 1,216

(b) 4,830

(c) 9,504

(d) 2,007

(e) 10,000

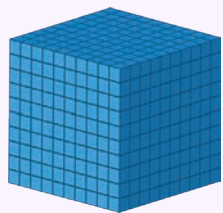
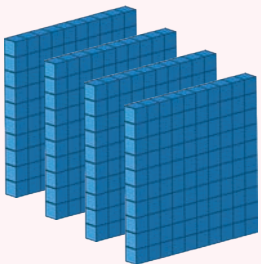
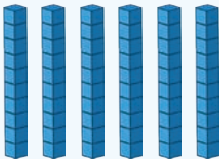

Place Value



Let's Learn

Find the value of each digit in the numbers shown.

(a)

Thousands	Hundreds	Tens	Ones
			
1	4	6	3

The digit in the Thousands place is 1. It represents 1,000.

The digit in the Hundreds place is 4. It represents 400.

The digit in the Tens place is 6. It represents 60.

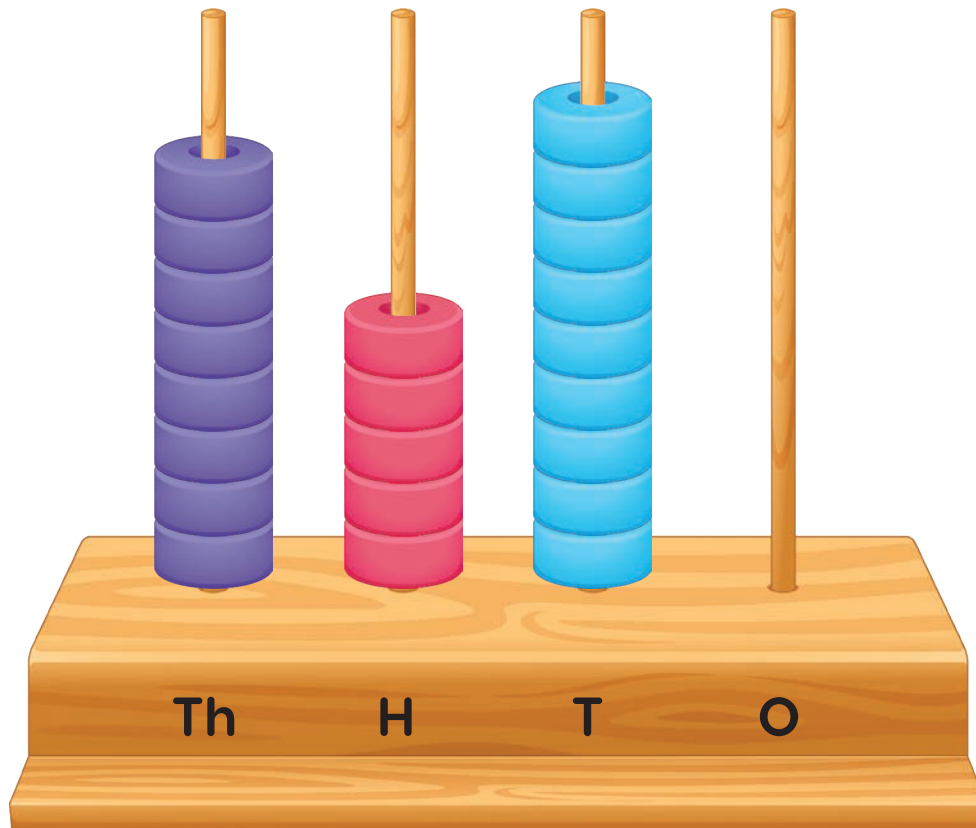
The digit in the Ones place is 3. It represents 3.

$$1,000 + 400 + 60 + 3 = 1,463$$



*1 is the smallest digit,
but it represents the
greatest value.*

(b)



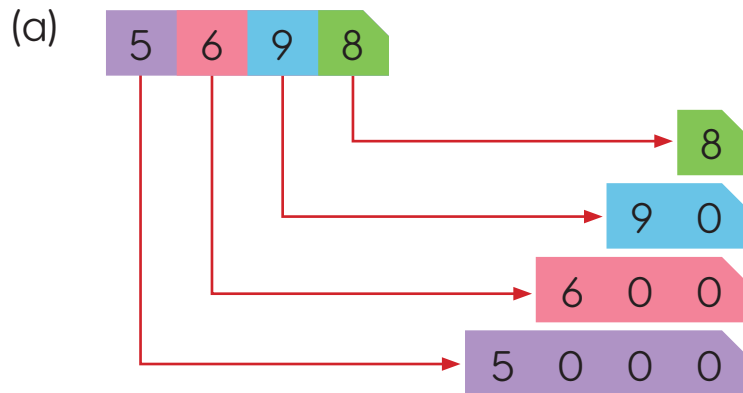
The digit in the Thousands place is 8. It represents 8,000.
The digit in the Hundreds place is 5. It represents 500.
The digit in the Tens place is 9. It represents 90.

$$8,000 + 500 + 90 = 8,590$$

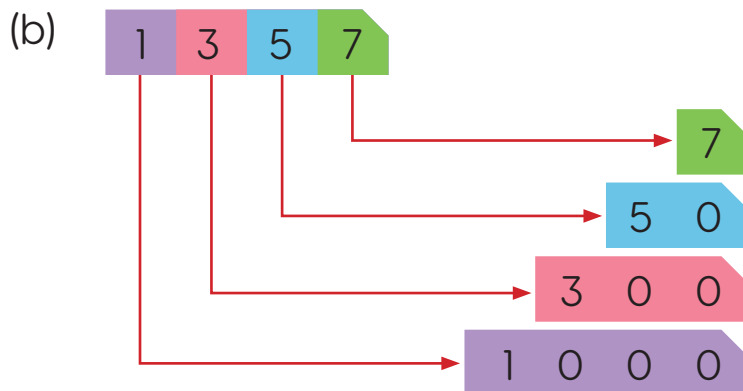


How does the number change if we add another bead to the Tens place?

Let's find the value of each digit in the number.



The value of the digit 5 is 5,000.
The value of the digit 6 is 600.
The value of the digit 9 is 90.
The value of the digit 8 is 8.
 $5,000 + 600 + 90 + 8 = 5,698$

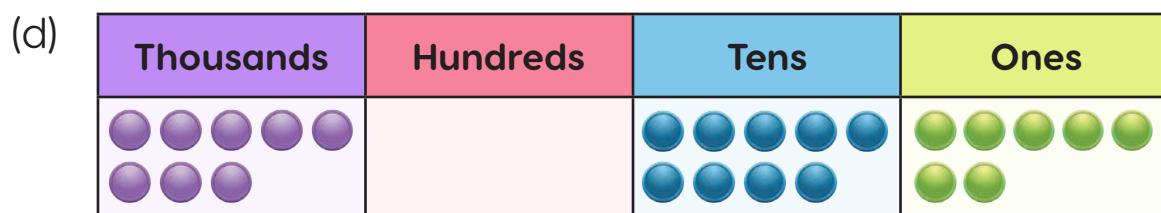
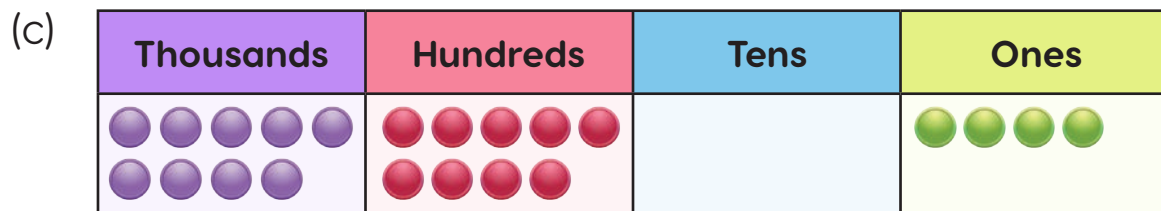
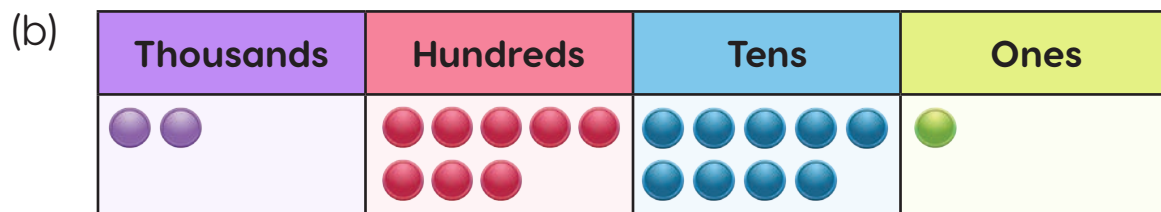
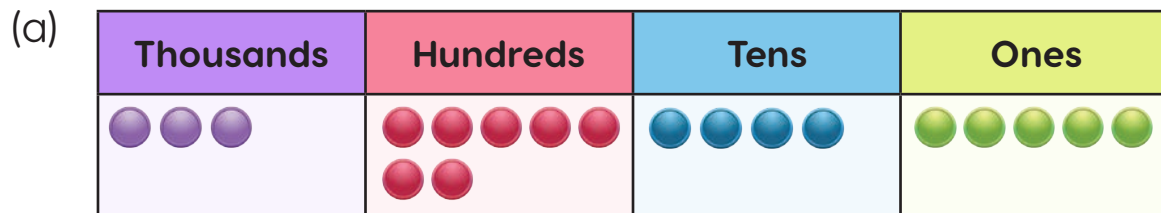


The value of the digit 1 is 1,000.
The value of the digit 3 is 300.
The value of the digit 5 is 50.
The value of the digit 7 is 7.
 $1,000 + 300 + 50 + 7 = 1,357$



Let's Practice

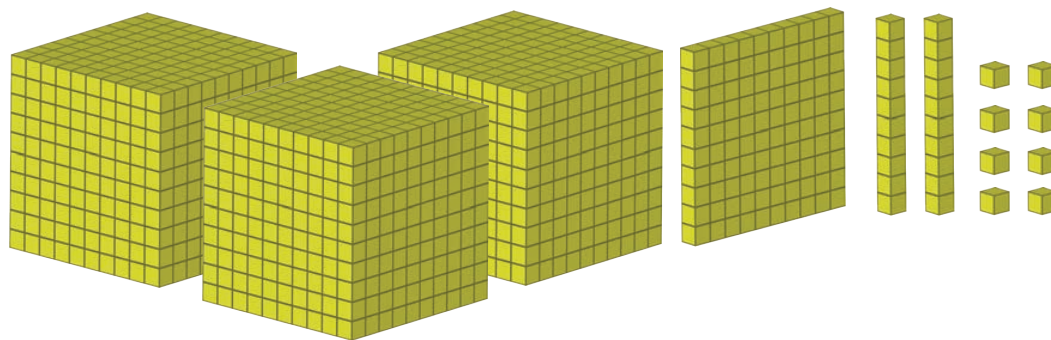
1. Write the numbers shown in the place value charts.





2. Fill in the blanks.

(a)



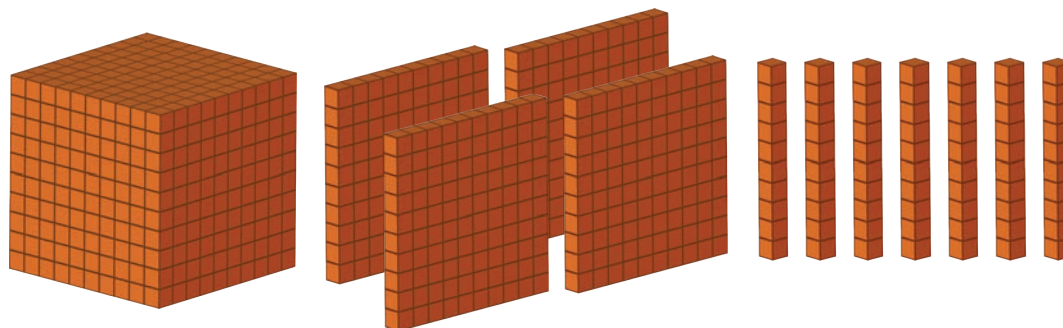
There are thousand blocks. They represent .

There are hundred blocks. They represent .

There are ten blocks. They represent .

There are unit blocks. They represent .

(b)



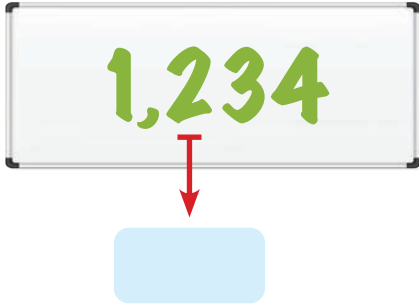
There are thousand blocks. They represent .

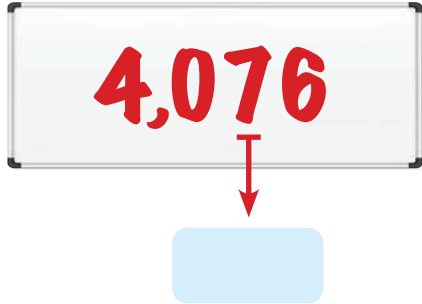
There are hundred blocks. They represent .

There are ten blocks. They represent .

There are unit blocks. They represent .

3. Write the value of the digit.


(a) 

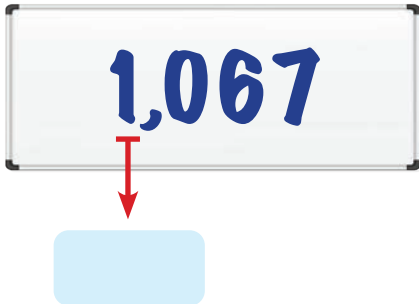
(b) 

(c) 

(d) 

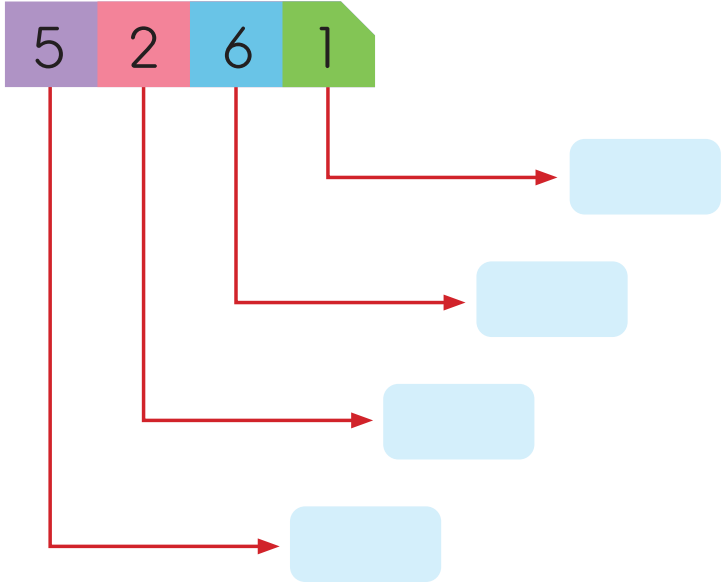
(e) 

(f) 

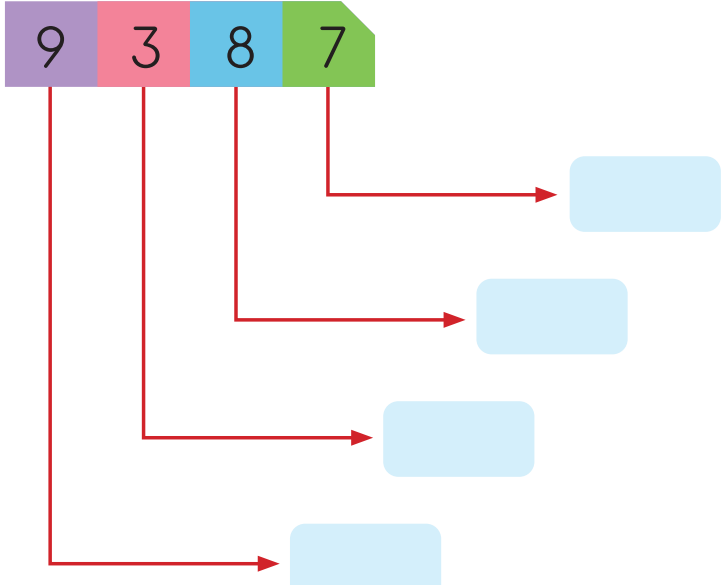
(g) 

(h) 

4. Write the value of each digit. Then add the values.

(a) 

+ + + =

(b) 

+ + + =



Hands On

Work in pairs. Partner 1 uses base-ten blocks to make a 4-digit number. Partner 2 uses place value tiles to represent the same number. Write the number as numerals and in words. Switch roles and repeat.

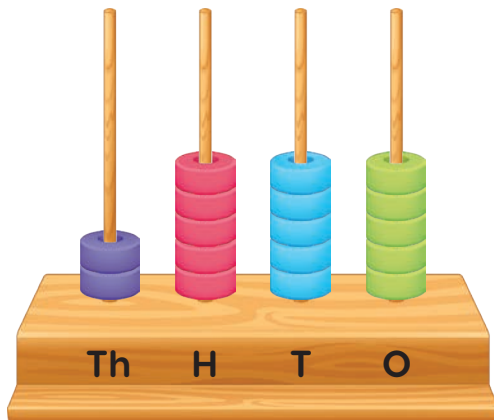


Number	Words

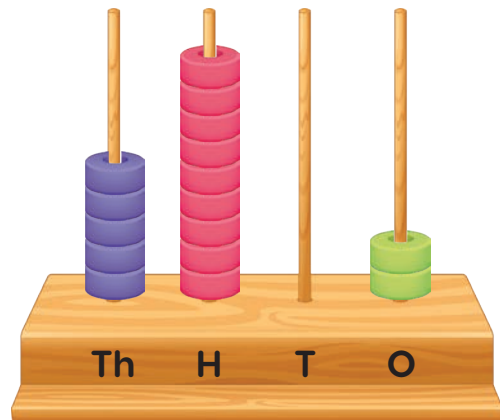
At Home

1. Write the numbers shown in the place value abacus.

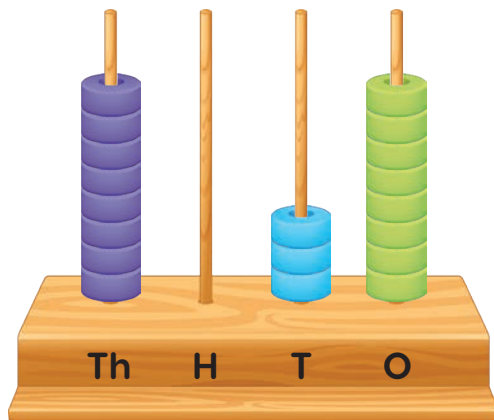
(a)



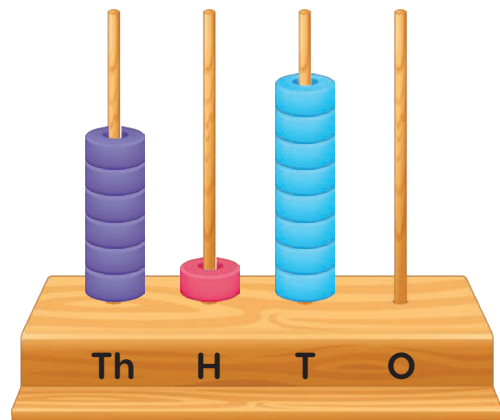
(b)



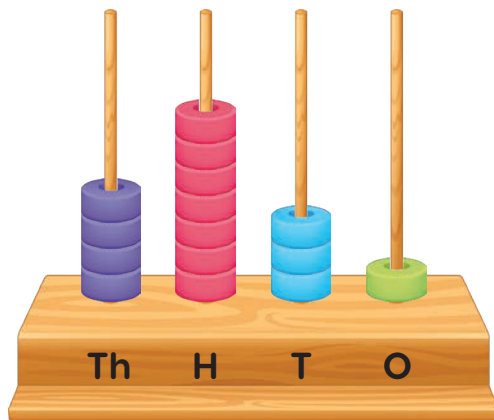
(c)



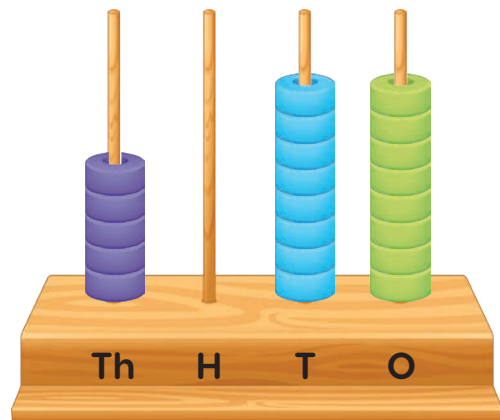
(d)



(e)



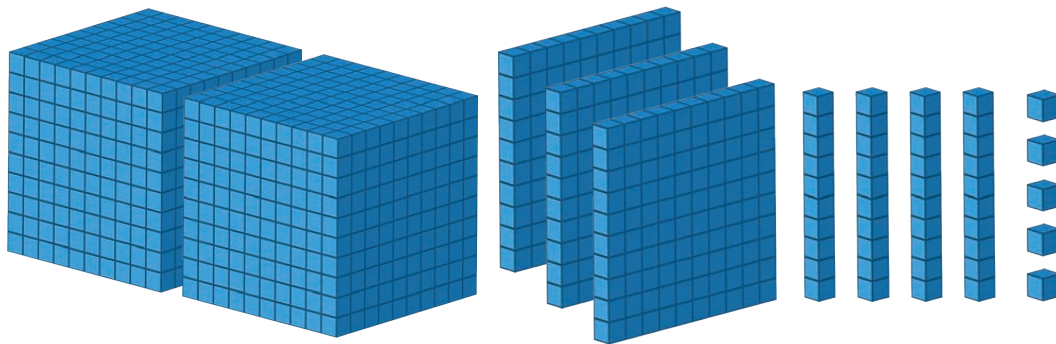
(f)





2. Fill in the blanks.

(a)



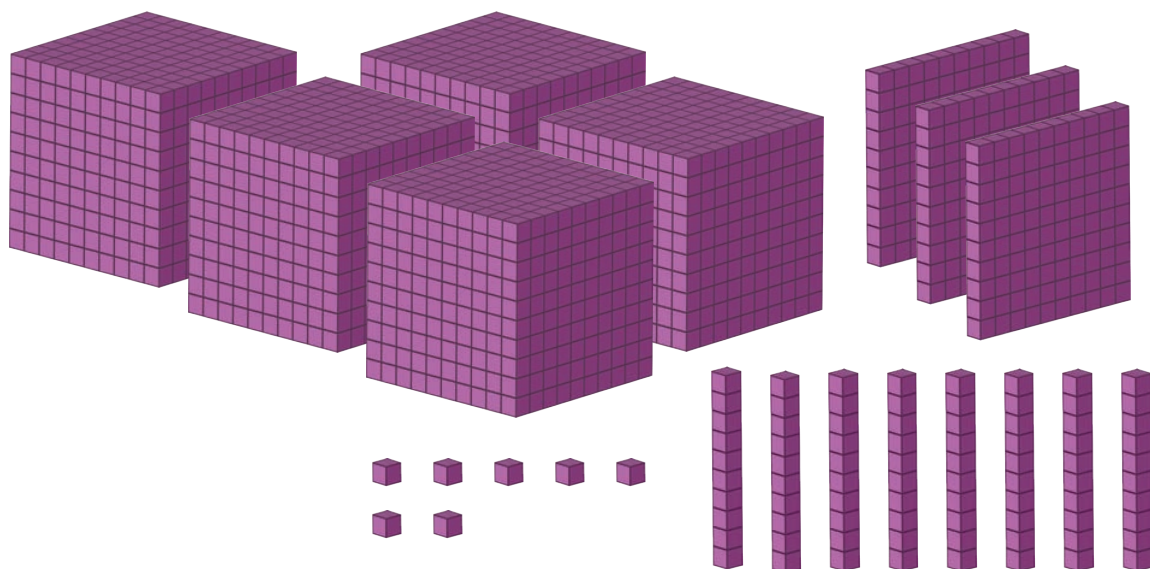
There are thousand blocks. They represent .

There are hundred blocks. They represent .

There are ten blocks. They represent .

There are unit blocks. They represent .

(b)



There are thousand blocks. They represent .

There are hundred blocks. They represent .

There are ten blocks. They represent .

There are unit blocks. They represent .

3. Write the value of each digit. Then add the values.

(a)

1 9 2 8

_____ + _____ + _____ + _____ = _____

(b)

3 7 4 6

_____ + _____ + _____ + _____ = _____