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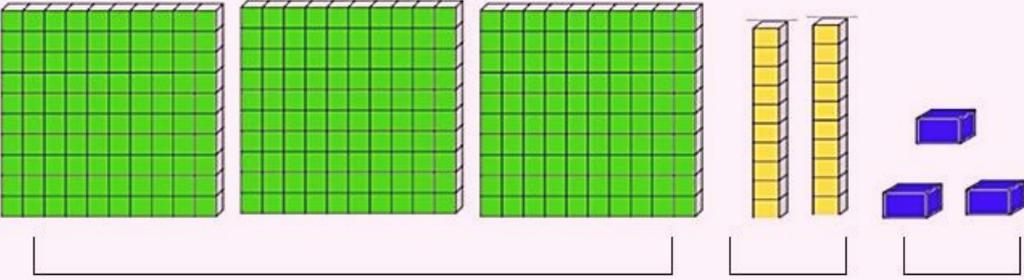
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UNIT 1: NUMERATION & NOTATIONS

Expanded form

Remember!

The number 323 can be represented as follows:



3 hundreds
 3×100

2 tens
 2×10

3 units
 3×1

$$\begin{aligned} 323 &= 3 \text{ hundreds} + 2 \text{ tens} + 3 \text{ units} \\ &= (3 \times 100) + (2 \times 10) + (3 \times 1) \\ &= 300 + 20 + 3 \end{aligned}$$

Exercise 1: Complete the following. The first one has been done for you.

- (a) $456 = \underline{4}$ hundreds + $\underline{5}$ tens + $\underline{6}$ units
- (b) $789 = \underline{\quad}$ hundreds + $\underline{\quad}$ tens + $\underline{\quad}$ units
- (c) $915 = \underline{\quad}$ hundreds + $\underline{\quad}$ tens + $\underline{\quad}$ units
- (d) $693 = \underline{\quad}$ hundreds + $\underline{\quad}$ tens + $\underline{\quad}$ units
- (e) $257 = \underline{\quad}$ hundreds + $\underline{\quad}$ tens + $\underline{\quad}$ units

Exercise 2: Complete the following. The first one has been done for you.

- (a) $345 = (3 \times 100) + (4 \times 10) + (5 \times 1)$
- (b) $789 = (\underline{\quad} \times 100) + (\underline{\quad} \times 10) + (\underline{\quad} \times 1)$
- (c) $217 = (\underline{\quad} \times 100) + (\underline{\quad} \times 10) + (\underline{\quad} \times 1)$
- (d) $653 = (\underline{\quad} \times 100) + (\underline{\quad} \times 10) + (\underline{\quad} \times 1)$
- (e) $368 = (\underline{\quad} \times 100) + (\underline{\quad} \times 10) + (\underline{\quad} \times 1)$

Exercise 3: Complete the following. The first one has been done for you.

- (a) $743 = 700 + 40 + 3$
 (b) $458 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
 (c) $340 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
 (d) $525 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$
 (e) $267 = \underline{\hspace{2cm}} + \underline{\hspace{2cm}} + \underline{\hspace{2cm}}$

Abacus

Remember!

The number 643 can be represented on an abacus:

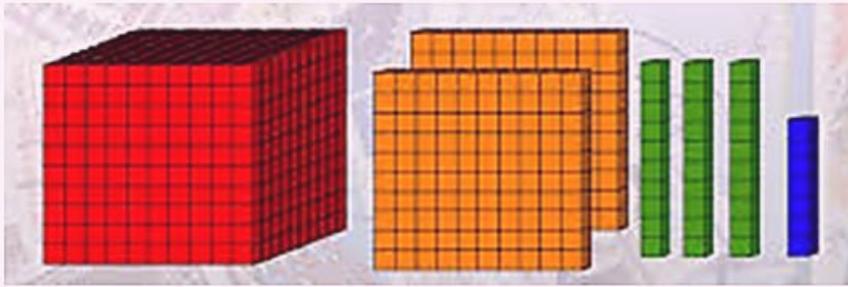
3	→ 3 units	= 3 X 1
4	→ 4 tens	= 4 X 10
6	→ 6 hundreds	= 6 X 100

Exercise 4: Complete the following.

(a) 792	(b) <input style="width: 100px; height: 40px;" type="text"/>	(c) <input style="width: 100px; height: 40px;" type="text"/>
(d) <input style="width: 100px; height: 40px;" type="text"/>	(e) <input style="width: 100px; height: 40px;" type="text"/>	(f) <input style="width: 100px; height: 40px;" type="text"/>

4-digit numbers

1 237 can be represented as follows:



1 thousand

(1 x 1 000)

2 hundreds

(2 x 100)

3 tens

(3 x 10)

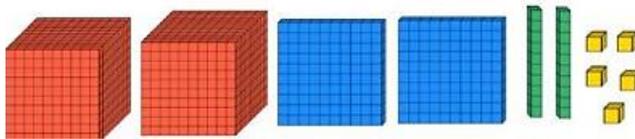
7 units

(7 x 1)

$$\begin{aligned}
 1\ 237 &= 1\ \text{thousand} + 2\ \text{hundreds} + 3\ \text{tens} + 7\ \text{units} \\
 &= (1 \times 1\ 000) + (2 \times 100) + (3 \times 10) + (7 \times 1) \\
 &= 1\ 000 + 200 + 30 + 7
 \end{aligned}$$

In words: One thousand two hundred and thirty seven

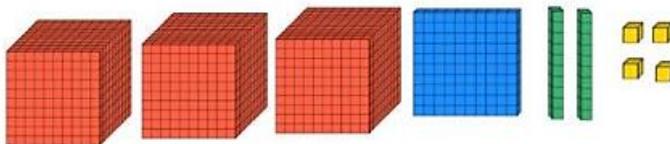
Exercise 5: Write down the correct number.



(a)

(i) In figures: _____

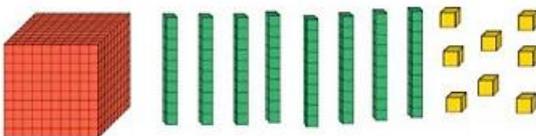
(ii) In words: _____



(b)

(i) In figures: _____

(ii) In words: _____

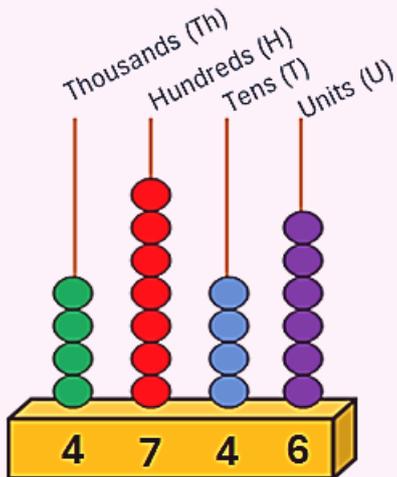


(c)

(i) In figures: _____

(ii) In words: _____

Representing 4-digit numbers on abacus



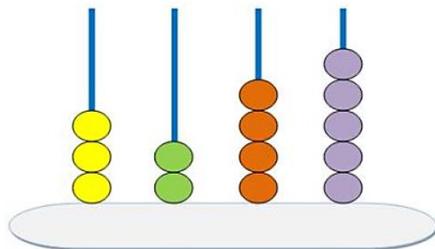
	6	→	6 units	=	6 X 1
	4 0	→	4 tens	=	4 X 10
	7 0 0	→	7 hundreds	=	7 X 100
	4 0 0 0	→	4 thousands	=	4 X 1 000

$$\begin{aligned}
 4746 &= 4 \text{ thousands} + 7 \text{ hundreds} + 4 \text{ tens} + 6 \text{ units} \\
 &= (4 \times 1000) + (7 \times 100) + (4 \times 10) + (6 \times 1) \\
 &= 4000 + 700 + 40 + 6
 \end{aligned}$$

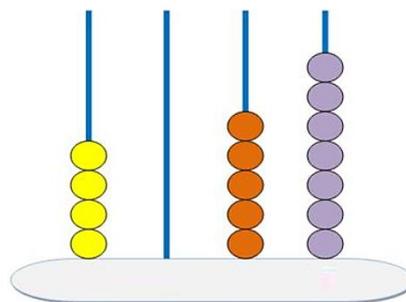
In words: Four thousand seven hundred and forty six

Exercise 6: Complete the following by writing the correct numerals.

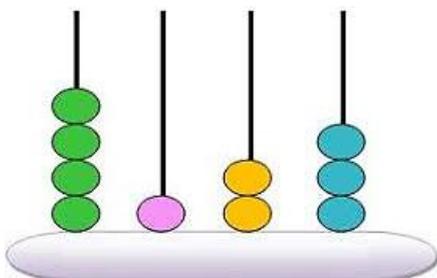
(a)



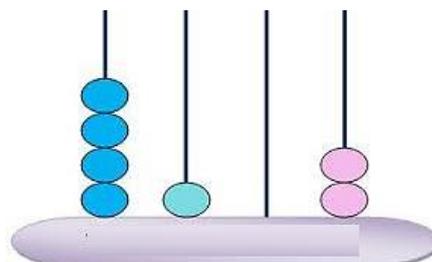
(b)



(c)

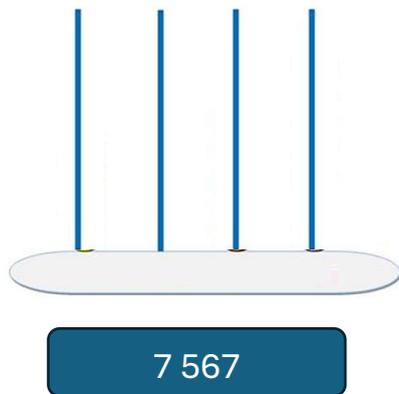


(d)

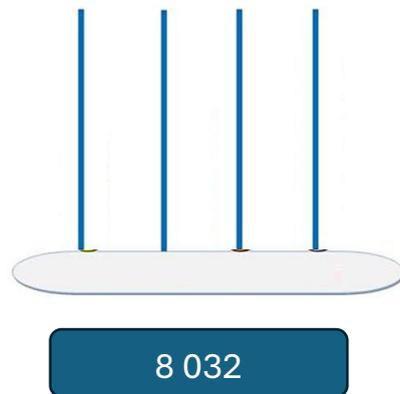


Exercise 7: Draw the appropriate number of beads on each abacus to represent the given number.

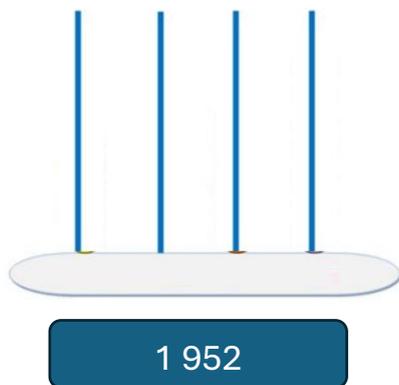
(a)



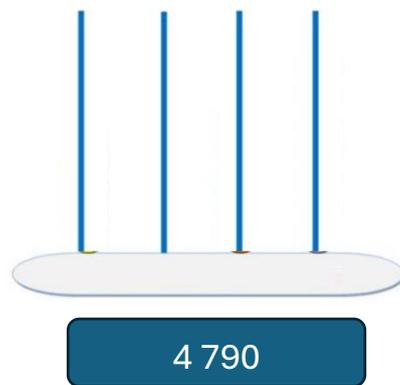
(b)



(c)



(d)



Number names

<p>1 = One 2 = Two 3 = Three 4 = Four 5 = Five 6 = Six 7 = Seven 8 = Eight 9 = Nine 10 = Ten 11 = Eleven 12 = Twelve 13 = Thirteen 14 = Fourteen 15 = Fifteen 16 = Sixteen 17 = Seventeen 18 = Eighteen 19 = Nineteen 20 = Twenty</p>	<p>25 = Twenty-five 30 = Thirty 35 = Thirty-five 40 = Forty 45 = Forty-five 50 = Fifty 55 = Fifty-five 60 = Sixty 65 = Sixty-five 70 = Seventy 75 = Seventy-five 80 = Eighty 85 = Eighty-five 90 = Ninety 95 = Ninety-five 100 = One Hundred 110 = One Hundred Ten 120 = One Hundred Twenty 130 = One hundred thirty 140 = One hundred forty</p>	<p>150 = One hundred fifty 160 = One hundred Sixty 170 = One hundred Seventy 180 = One hundred eighty 190 = One hundred Ninety 200 = Two hundred 210 = Two hundred ten 220 = Two hundred twenty 230 = Two hundred thirty 240 = Two hundred forty 250 = Two hundred fifty 260 = Two hundred Sixty 270 = Two hundred Seventy 280 = Two hundred eighty 290 = Two hundred Ninety 300 = Three hundred 310 = Three hundred ten 320 = Three hundred twenty 330 = Three hundred thirty 340 = Three hundred forty</p>	<p>350 = Three hundred fifty 360 = Three hundred Sixty 370 = Three hundred Seventy 380 = Three hundred eighty 390 = Three hundred Ninety 400 = Four hundred 410 = Four hundred ten 420 = Four hundred twenty 430 = Four hundred thirty 440 = Four hundred forty 450 = Four hundred fifty 500 = Five hundred 550 = Five hundred fifty 600 = Six hundred 650 = Six hundred fifty 700 = Seven hundred 750 = Seven hundred fifty 800 = Eight hundred 900 = Nine hundred 1000 = One Thousand</p>
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Exercise 8: Complete the table below.

	Figures	Words
(a)	6 782	
(b)	3 256	
(c)		Two thousand five hundred and forty-nine
(d)	1 203	
(e)		Four thousand and ninety-two
(f)		Seven thousand eight hundred and ten
(g)	6 098	
(h)		Six thousand two hundred and sixteen
(i)	8 067	
(j)		Two thousand three hundred and eleven
(k)	4 569	
(l)		One thousand and nine hundred
(m)	9 999	

Exercise 9: What is the value of the digit which is underline ?

- (a) 7 689 = _____ 80 _____ (f) 7 890 = _____
- (b) 3 245 = _____ (g) 2 369 = _____
- (c) 4 567 = _____ (h) 3 591 = _____
- (d) 2 134 = _____ (i) 8 223 = _____
- (e) 9 841 = _____ (j) 4 856 = _____

Exercise 10: Complete the following.

- (a) 6 783 = 6 thousands + 7 hundreds + 8 tens + 3 units
= (6 x 1 000) + (7 x 100) + (8 x 10) + (3 x 1)
= 6 000 + 700 + 80 + 3

In words : Six thousand seven hundred and eighty three

- (b) 4 567 = _____
= _____
= _____

In words : _____

- (c) 2 382 = _____
= _____
= _____

In words : _____

- (d) 3 478 = _____
= _____
= _____

In words : _____

- (e) 1 405 = _____
= _____
= _____

In words : _____

Exercise 11: Complete the following.

- (a) _____ + 400 + 20 + 9 = 3 429
- (b) 2 000 + _____ + 50 + 8 = 2 458
- (c) 4 000 + 300 + _____ + 6 = 4 346
- (d) 8 000 + _____ + 3 = 8 093
- (e) 7 000 + 500 + 60 + _____ = 7 561
- (f) 5 000 + _____ + _____ + 3 = 5 243

Exercise 12: Fill in the blanks.

- (a) _____ + 3 hundreds + 4 tens + 7 units = 5 347
- (b) 8 thousands + _____ + 6 tens + 5 units = 8 565
- (c) 6 thousands + 3 tens + 2 units + 6 hundreds = _____
- (d) 5 hundreds + 6 units + 2 tens = _____
- (e) _____ + six units + _____ + seven tens = 8 576

Exercise 13: Match the following.

- (a) 7 thousands + 4 hundreds + 2 tens + 1 unit
- (b) 3 hundreds + 2 tens + 5 units + 1 thousand
- (c) 6 tens + 7 thousands + 3 units + 1 hundred
- (d) 8 thousands + 3 hundreds + 4 tens + 5 units
- (e) 2 tens + 8 hundreds + 4 thousands + 5 units

4 825

8 345

1 325

7 421

7 163

Exercise 14: Complete the following.

- (a) 4 thousands + 2 hundreds + 4 tens + 3 units = _____
- (b) 4 hundreds + 6 tens + 3 units + 2 thousands = _____
- (c) 3 units + 5 hundreds + 4 tens + 1 thousand = _____
- (d) 8 units + 3 tens + 4 hundreds + 5 thousands = _____
- (e) 3 thousands + 8 tens + 4 units + 5 hundreds = _____
- (f) 6 hundreds + 2 units + 1 ten + 7 thousands = _____

Exercise 15: Write the correct number for each expansion.

- (a) $(3 \times 1\,000) + (4 \times 100) + (2 \times 10) + (9 \times 1) =$ _____
- (b) $(2 \times 100) + (1 \times 1\,000) + (5 \times 10) + (6 \times 1) =$ _____
- (c) $(4 \times 1) + (6 \times 10) + (4 \times 100) + (7 \times 1\,000) =$ _____
- (d) $(5 \times 1\,000) + (2 \times 1) + (6 \times 100) + (7 \times 10) =$ _____
- (e) $(2 \times 10) + (4 \times 1\,000) + (1 \times 1) + (8 \times 100) =$ _____
- (f) $(5 \times 1) + (9 \times 100) + (6 \times 1\,000) =$ _____

Exercise 16: Complete the following.

- (a) $7\,653 = 7 \text{ thousands} + 6 \text{ hundreds} + 5 \text{ tens} + 3 \text{ units}$
- (b) $8\,075 =$ _____
- (c) $4\,607 =$ _____
- (d) $5\,126 =$ _____
- (e) $2\,480 =$ _____
- (f) $9\,873 =$ _____

Exercise 17: Write in figures.

- (a) Six thousand seven hundred and thirty-two = _____
- (b) Four thousand two hundred and sixty = _____
- (c) Three thousand one hundred and twelve = _____
- (d) Eight thousand and one = _____
- (e) One thousand five hundred and thirty-three = _____
- (f) Seven thousand and seventeen = _____

Exercise 18: Write in words.

- (a) $4\,562 =$ _____
- (b) $1\,324 =$ _____
- (c) $7\,809 =$ _____
- (d) $2\,045 =$ _____
- (e) $8\,006 =$ _____
- (f) $5\,050 =$ _____

Exercise 19: Write down the missing numbers.

- (a) 4 000 , 4 100 , 4 200 , _____ , _____ , _____ .
- (b) 3 250 , 3 251 , 3 252 , _____ , 3 254 , _____ , _____ .
- (c) 1 650 , 1 700 , _____ , 1 800 , _____ , 1 900 .
- (d) 2 000 , 3 000 , _____ , _____ , _____ , 7 000.
- (e) 7 340 , 7 342 , 7 344 , _____ , _____ , _____ .
- (f) 1 550 , 1 555 , 1 560 , _____ , _____ , _____ .

Exercise 20: Using the digits below only once, complete the following.

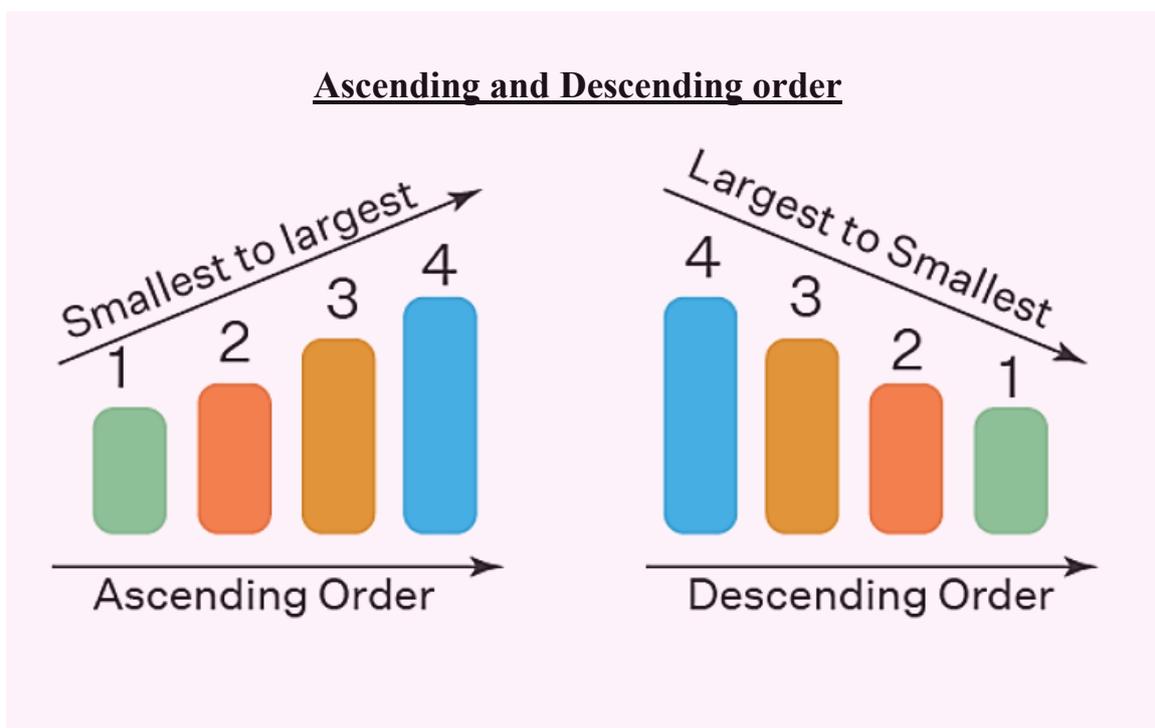


- (a) The smallest 4-digit number that can be formed is _____.
- (b) The largest 4-digit number that can be formed is _____.

Exercise 21: Using the digits below only once, complete the following.



- (a) The largest 4-digit number that can be formed is _____.
- (b) The smallest 4-digit number that can be formed is _____.



Exercise 22: Arrange in ascending order.

(a) 6 000 , 4 000 , 1 000 , 2 000 , 9 000 .

(b) 6 768 , 3 458 , 2 198 , 9 078 , 4 888 .

(c) 1 234 , 4 321 , 2 134 , 1 342 , 4 312 .

(d) 2 050 , 3 060 , 1 070 , 9 080 , 6 050 .

(e) 6 795 , 8 645 , 1 235 , 3 895 , 585 .

Exercise 23: Arrange in descending order.

(a) 6 000 , 3 000 , 7 000 , 2 000 , 1 000 .

(b) 7 168 , 2 568 , 3 354 , 1 906 , 481 .

(c) 2 434 , 4 521 , 4 242 , 1 423 , 3 412 .

(d) 4 060 , 1 020 , 3 050 , 8 040 , 6 010 .

(e) 5 785 , 5 645 , 5 435 , 5 895 , 5 975 .

