

1

Numbers up to 1000

Warm Up

1. Write each of the following numbers in words and expanded form.

Vocabulary

- Place Value
- Expanded Form
- Greater Than
- Less Than

In Words

Expanded Form

16 Sixteen

$10 + 6$

59 Fifty - nine

$50 + 9$

61 Sixty - one

$60 + 1$

14 Fourteen

$10 + 4$

32 Thirty - two

$30 + 2$

47 Forty - seven

$40 + 7$

88 Eighty - eight

$80 + 8$

99 Ninety - nine

$90 + 9$

Now, answer the following questions:

- (a) Use the seventh letter of each of the given numbers to spell a new number.

The new number is 19. The number name is Nineteen.

- (b) The greatest number among the given numbers is 99.

- It can be written as 9 tens 9 ones.
- On the abacus, it can be shown as:

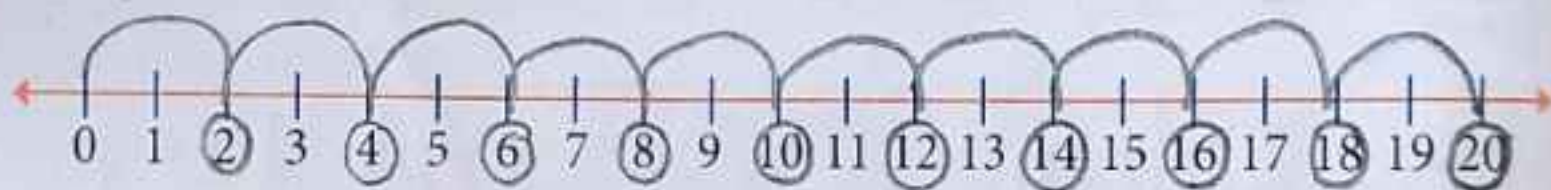


- The number just before it is 98.
- The number just after it is 100.

- (c) Write the numbers in decreasing order.

99, 88, 61, 59, 47, 32, 16, 14

2. Draw jumps in 2s from 0 on the given number line.



3. Fill in the blanks by skip counting in 5s.



4. Fill in the blanks by skip counting in 10s.



5. Compare the following using $<$, $>$ or $=$.

(a) $25 < 30$ (b) $59 < 91$ (c) $72 = 72$

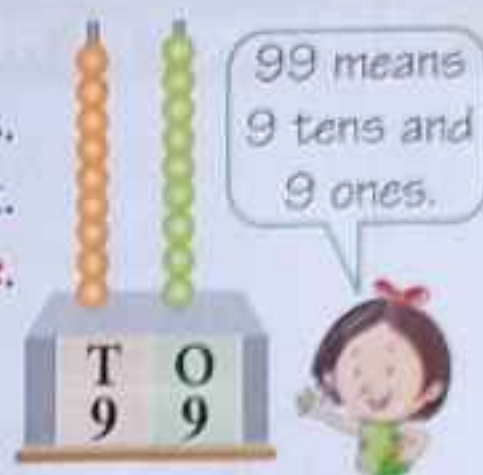
(d) $66 > 56$ (e) $84 > 48$ (f) $27 < 46$

NUMBERS UP TO 100

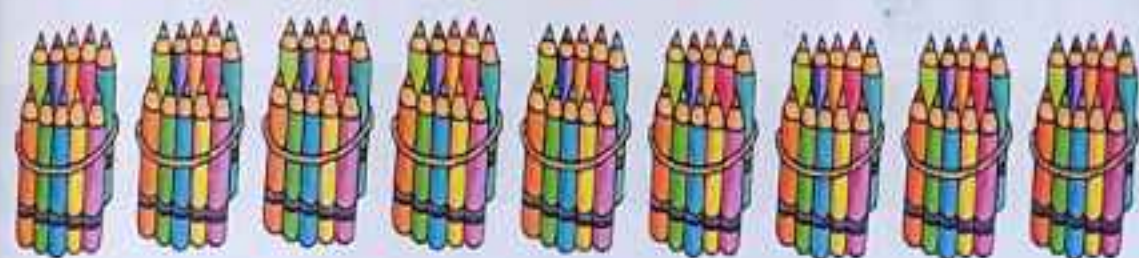
In class 1, we have learnt 1- and 2-digit numbers. Every number is 1 greater than the number before it. The greatest 2-digit number is **99**, read as **ninety-nine**.

1 more than 99 or $99 + 1$ is **100**.

It is read as **one hundred**.



Pictorially, 100 can be shown as below:



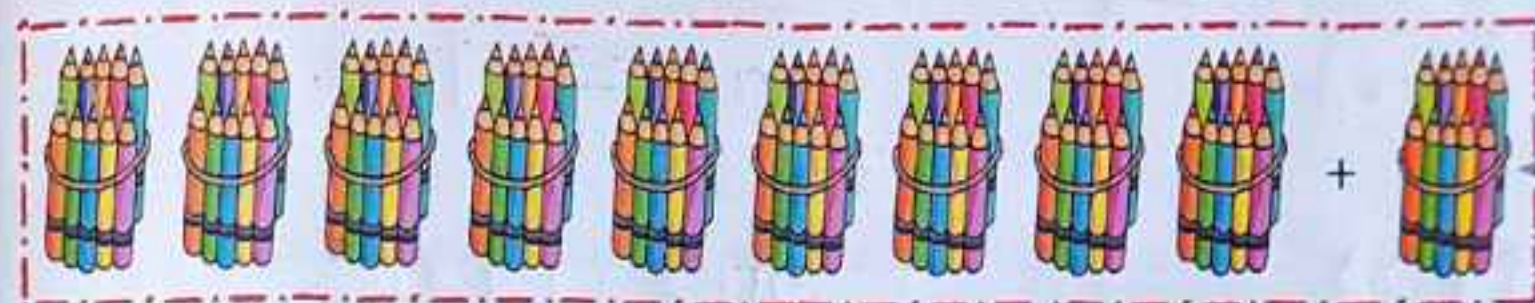
9 tens

+



9 ones + 1 one
= 10 ones

10 ones = 1 ten



9 tens + 1 ten = 10 tens

10 tens = 1 hundred



Can you tell how many tens make 100?

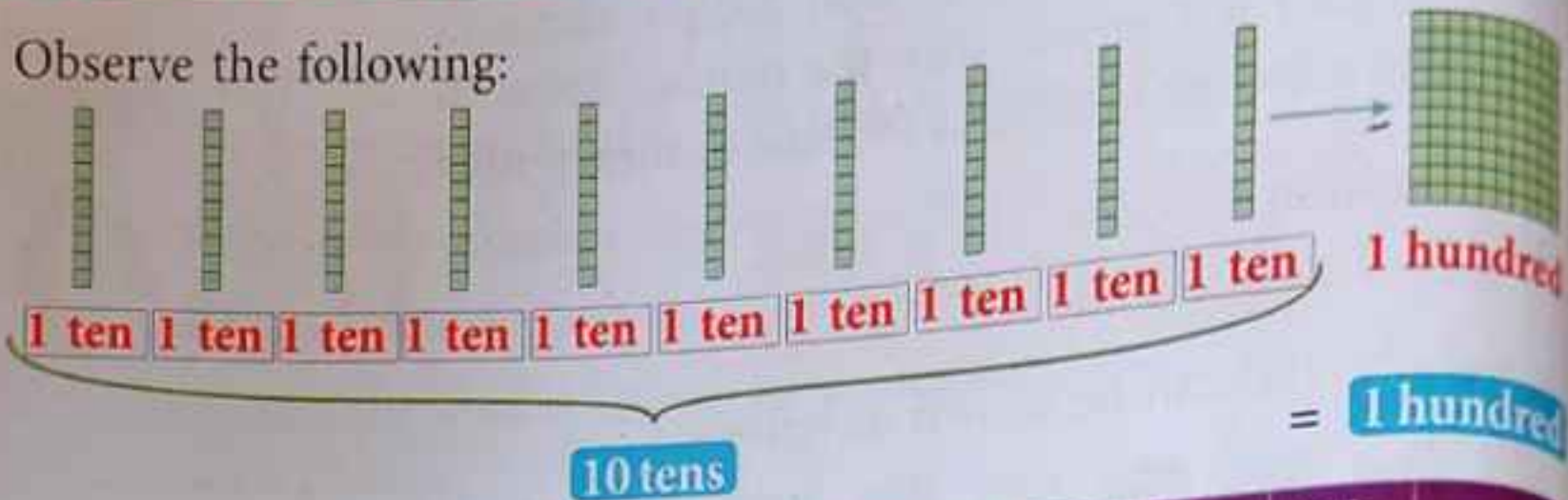



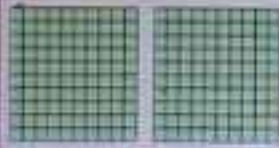

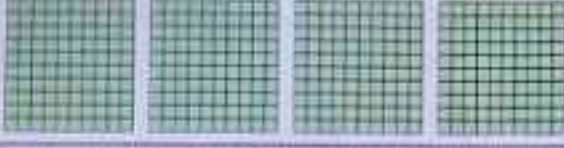

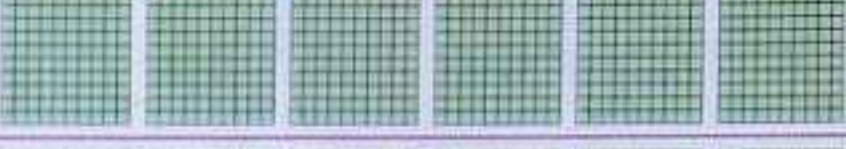

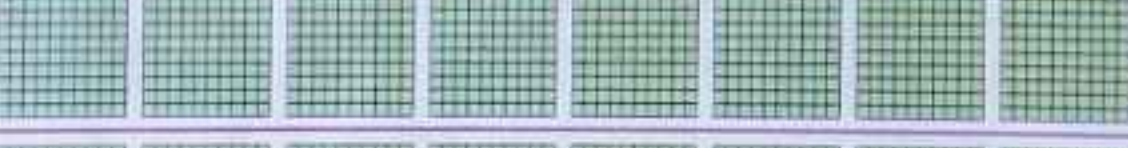

Yes, 10 tens make 100. I also know 100 is the first 3-digit number.



COUNTING IN HUNDREDS

Observe the following:



| Hundreds | We write | We say |
|--|----------|---------------|
|  | 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 |

Class Work

Complete the following.

| | | | Number | Number name |
|----|-----------|--------------|--------|---------------|
| 1. | 10 tens = | 1 hundred = | 100 | One hundred |
| 2. | 20 tens = | 2 hundreds = | 200 | Two hundred |
| 3. | 30 tens = | 3 hundreds = | 300 | Three hundred |
| 4. | 40 tens = | 4 hundreds = | 400 | Four hundred |
| 5. | 50 tens = | 5 hundreds = | 500 | Five hundred |
| 6. | 60 tens = | 6 hundreds = | 600 | Six hundred |
| 7. | 70 tens = | 7 hundreds = | 700 | Seven hundred |
| 8. | 80 tens = | 8 hundreds = | 800 | Eight hundred |
| 9. | 90 tens = | 9 hundreds = | 900 | Nine hundred |

BUILDING NUMBERS UP TO 199

Observe the following:



| Hundreds | Tens | Ones | |
|----------|------|------|-----|
| 1 | 0 | 1 | 101 |



| Hundreds | Tens | Ones | |
|----------|------|------|-----|
| 1 | 0 | 2 | 102 |



| Hundreds | Tens | Ones | |
|----------|------|------|-----|
| 1 | 0 | 3 | 103 |



| Hundreds | Tens | Ones | |
|----------|------|------|-----|
| 1 | 0 | 4 | 104 |



Class Work

Count and write the numbers. Also, read the numbers aloud.

1.



| Hundreds | Tens | Ones |
|----------|------|------|
| 1 | 0 | 3 |

103

2.



| Hundreds | Tens | Ones |
|----------|------|------|
| 1 | 0 | 5 |

105

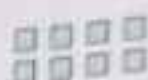
3.



| Hundreds | Tens | Ones |
|----------|------|------|
| 1 | 0 | 7 |

107

4.



| Hundreds | Tens | Ones |
|----------|------|------|
| 1 | 0 | 8 |

108

5.



| Hundreds | Tens | Ones |
|----------|------|------|
| 1 | 0 | 9 |

109

6.



| Hundreds | Tens | Ones |
|----------|------|------|
| 1 | 1 | 0 |

110

HUNDREDS, TENS AND ONES

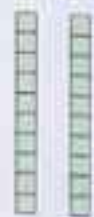
Count and fill in the boxes. One has been done for you.



| H | T | O |
|---|---|---|
| 1 | 1 | 4 |

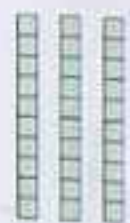
1 hundred 1 ten 4 ones = 114

One hundred fourteen



| H | T | O |
|---|---|---|
| 1 | 2 | 7 |

1 hundred 2 tens 7 ones = 127 One hundred twenty-seven



| H | T | O |
|---|---|---|
| 1 | 3 | 2 |

1 hundred 3 tens 2 ones = 132 One hundred thirty-two



| H | T | O |
|---|---|---|
| 1 | 4 | 5 |

1 hundred 4 tens 5 ones = 145 One hundred forty-five



| H | T | O |
|---|---|---|
| 1 | 5 | 8 |

1 hundred 5 tens 8 ones = 158 One hundred fifty-eight



| H | T | O |
|---|---|---|
| 1 | 6 | 1 |

1 hundred 6 tens 1 one = 161 One hundred sixty-one



| H | T | O |
|---|---|---|
| 1 | 7 | 3 |

1 hundred 7 tens 3 ones = 173 One hundred seventy-three

Exercise 1A

1. Count the number of blocks of each type and write the numbers formed both in numeral and word form. One has been done for you.

(a)



1 hundred 0 tens 5 ones

| H | T | O |
|---|---|---|
| 1 | 0 | 5 |

105

One hundred five

(b)



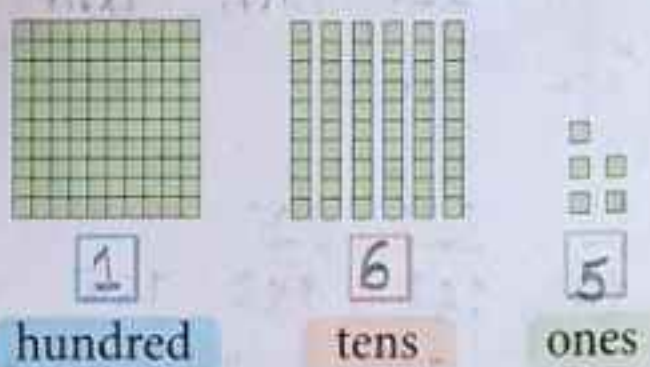
1 hundred 3 tens 4 ones

| H | T | O |
|---|---|---|
| 1 | 3 | 4 |

134

One hundred thirty-four

(c)



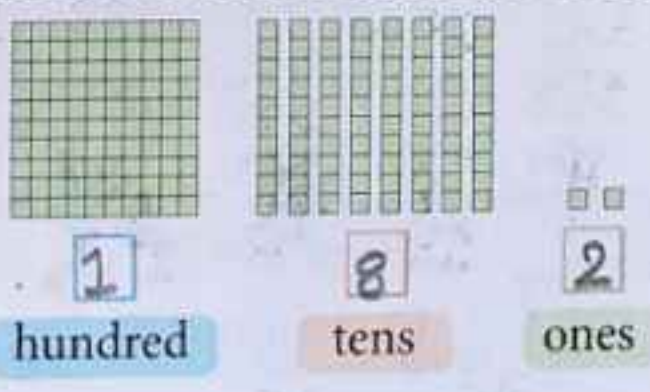
1 hundred 6 tens 5 ones

| H | T | O |
|---|---|---|
| 1 | 6 | 5 |

165

One hundred sixty-five

(d)



1 hundred 8 tens 2 ones

| H | T | O |
|---|---|---|
| 1 | 8 | 2 |

182

One hundred eighty-two

2. Write the numerals. One has been done for you.

(a) One hundred seven 107 (b) One hundred thirteen 113

(c) One hundred twenty-eight 128 (d) One hundred thirty-two 132

- (e) One hundred fifty **115** (f) One hundred sixty-four **164**
 (g) One hundred seventy-six **176** (h) One hundred eighty-three **183**
 (i) One hundred ninety-five **195** (j) One hundred ninety-nine **199**

3. Write the number names. One has been done for you.

- (a) **118** One hundred eighteen (b) **120** One hundred twenty
 (c) **139** One hundred thirty-nine (d) **148** One hundred forty-eight
 (e) **157** One hundred fifty-seven (f) **162** One hundred sixty-two
 (g) **179** One hundred seventy-nine (h) **180** One hundred eighty
 (i) **191** One hundred ninety-one (j) **198** One hundred ninety-eight

4. Complete the table.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 100 | 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 |
| 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 |
| 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 |
| 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 |
| 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 |
| 150 | 151 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 159 |
| 160 | 161 | 162 | 163 | 164 | 165 | 166 | 167 | 168 | 169 |
| 170 | 171 | 172 | 173 | 174 | 175 | 176 | 177 | 178 | 179 |
| 180 | 181 | 182 | 183 | 184 | 185 | 186 | 187 | 188 | 189 |
| 190 | 191 | 192 | 193 | 194 | 195 | 196 | 197 | 198 | 199 |

5. Write the missing numerals.

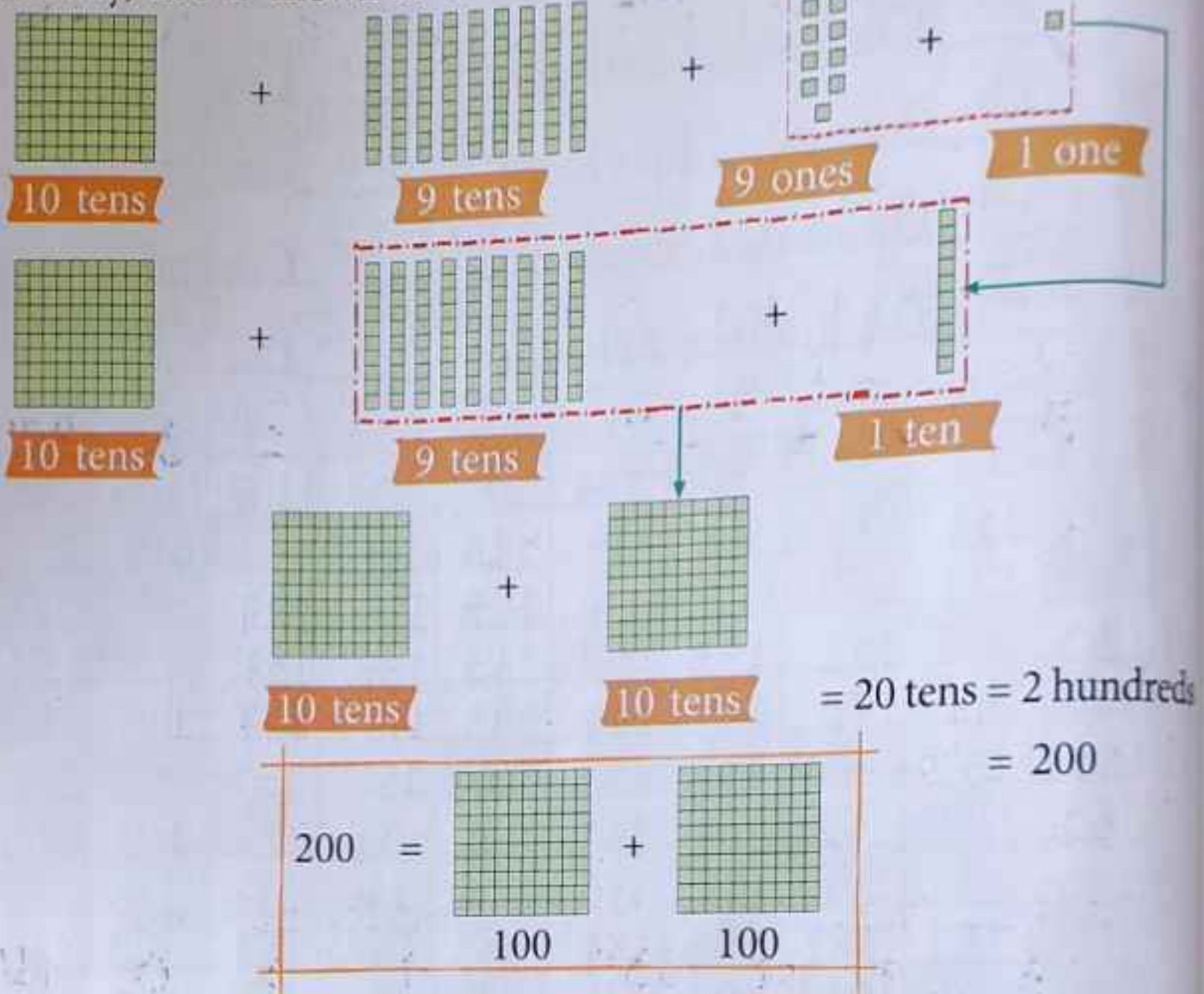
- (a) 101, 103, 105, 107, 109, 111, 123
 (b) 124, 125, 126, 127, 128, 129, 130
 (c) 188, 189, 190, 191, 192, 193, 194
 (d) 140, 130, 120, 110, 100, 90, 80
 (e) 199, 198, 197, 196, 195, 194, 193

NUMBERS FROM 200 TO 1000







In the earlier section of the chapter, we have learnt 3-digit numbers up to 199. 199 means 19 groups of tens and 9 more.

1 more than 199 is given the name **two hundred**. We write this as **200**.

Pictorially, 200 is shown as under:



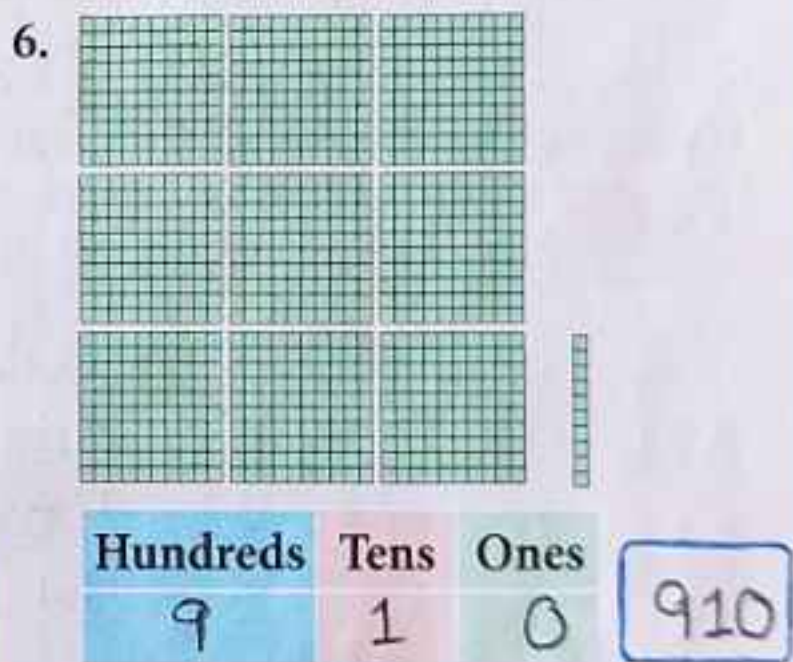
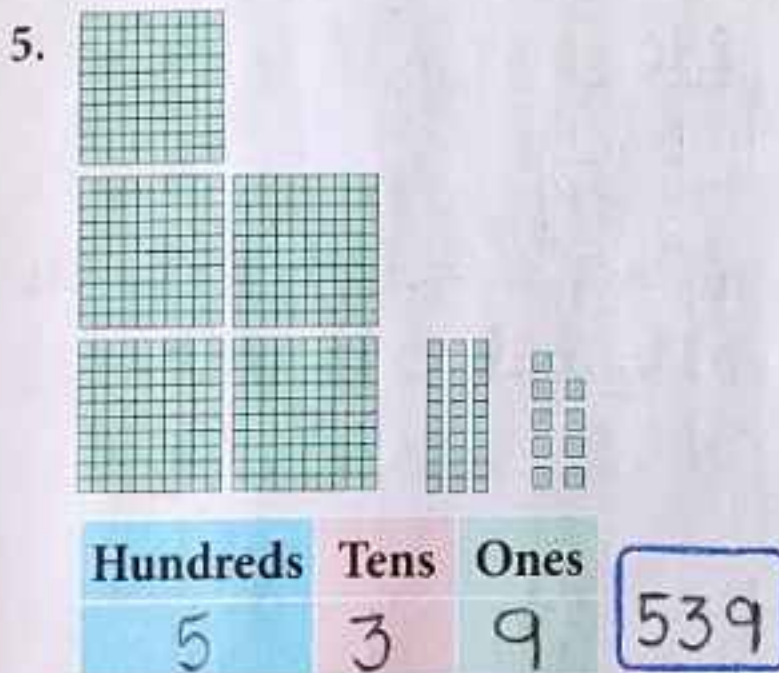
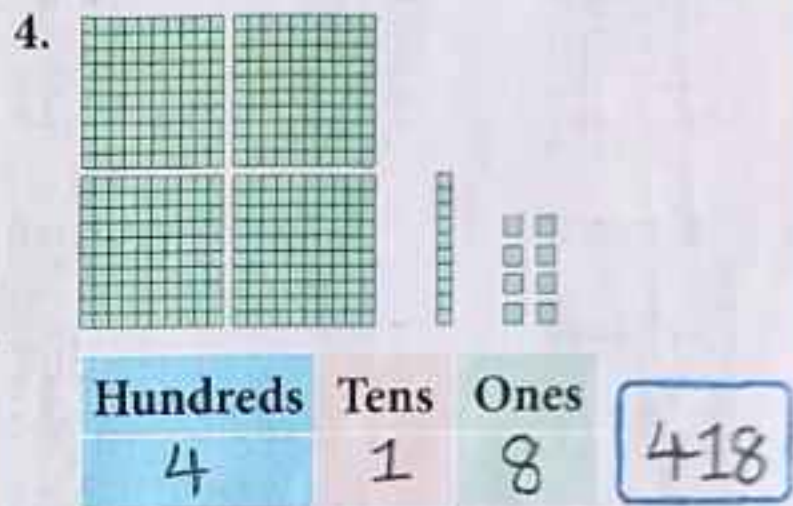
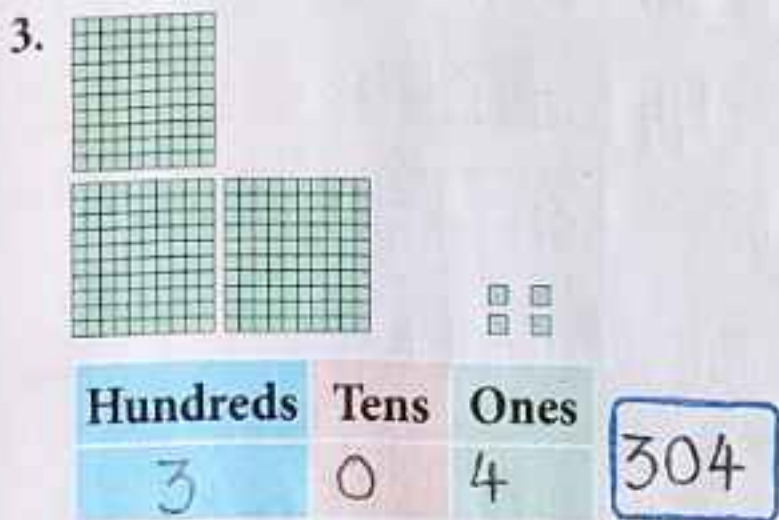
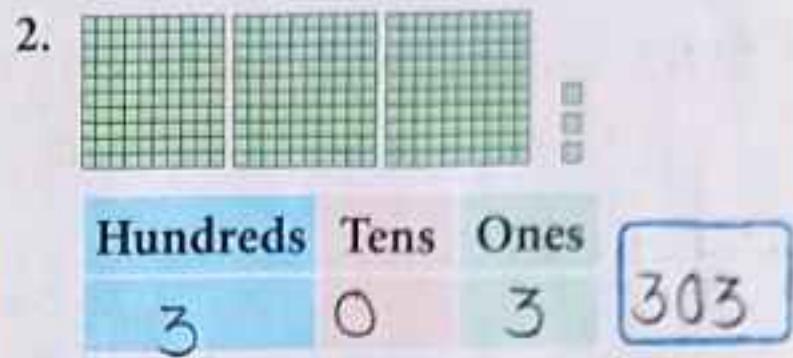
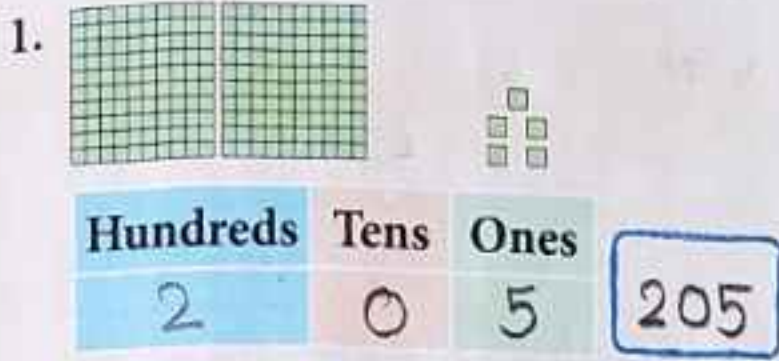
Numbers after 200 are formed as follows:

| | | | | | | | |
|---|---|---|------------|---|---|---|------------|
|  |  |  | |  |  |  | |
| Hundreds | Tens | Ones | | Hundreds | Tens | Ones | |
| 2 | 0 | 1 | 201 | 2 | 0 | 2 | 202 |

and so on

Class Work

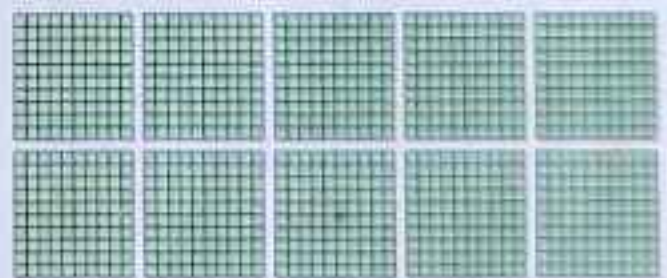
Count and write the numbers.



THE NUMBER 1000

One more than 999 is 1000. It is a 4-digit number and is equal to 10 hundreds, or 100 tens.

The number name for 1000 is one thousand.



$$10 \text{ hundreds} = 1000$$

Exercise 1B

1. Write the numbers in order from 201-300.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 201 | 202 | 203 | 204 | 205 | 206 | 207 | 208 | 209 | 210 |
| 211 | 212 | 213 | 214 | 215 | 216 | 217 | 218 | 219 | 220 |
| 221 | 222 | 223 | 224 | 225 | 226 | 227 | 228 | 229 | 230 |
| 231 | 232 | 233 | 234 | 235 | 236 | 237 | 238 | 239 | 240 |
| 241 | 242 | 243 | 244 | 245 | 246 | 247 | 248 | 249 | 250 |
| 251 | 252 | 253 | 254 | 255 | 256 | 257 | 258 | 259 | 260 |
| 261 | 262 | 263 | 264 | 265 | 266 | 267 | 268 | 269 | 270 |
| 271 | 272 | 273 | 274 | 275 | 276 | 277 | 278 | 279 | 280 |
| 281 | 282 | 283 | 284 | 285 | 286 | 287 | 288 | 289 | 290 |
| 291 | 292 | 293 | 294 | 295 | 296 | 297 | 298 | 299 | 300 |

2. Write the numbers from 301-400.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 301 | 302 | 303 | 304 | 305 | 306 | 307 | 308 | 309 | 310 |
| 311 | 312 | 313 | 314 | 315 | 316 | 317 | 318 | 319 | 320 |
| 321 | 322 | 323 | 324 | 325 | 326 | 327 | 328 | 329 | 330 |
| 331 | 332 | 333 | 334 | 335 | 336 | 337 | 338 | 339 | 340 |
| 341 | 342 | 343 | 344 | 345 | 346 | 347 | 348 | 349 | 350 |
| 351 | 352 | 353 | 354 | 355 | 356 | 357 | 358 | 359 | 360 |
| 361 | 362 | 363 | 364 | 365 | 366 | 367 | 368 | 369 | 370 |
| 371 | 372 | 373 | 374 | 375 | 376 | 377 | 378 | 379 | 380 |
| 381 | 382 | 383 | 384 | 385 | 386 | 387 | 388 | 389 | 390 |
| 391 | 392 | 393 | 394 | 395 | 396 | 397 | 398 | 399 | 400 |

3. Write the numbers from 501-600.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 501 | 502 | 503 | 504 | 505 | 506 | 507 | 508 | 509 | 510 |
| 511 | 512 | 513 | 514 | 515 | 516 | 517 | 518 | 519 | 520 |
| 521 | 522 | 523 | 524 | 525 | 526 | 527 | 528 | 529 | 530 |
| 531 | 532 | 533 | 534 | 535 | 536 | 537 | 538 | 539 | 540 |
| 541 | 542 | 543 | 544 | 545 | 546 | 547 | 548 | 549 | 550 |
| 551 | 552 | 553 | 554 | 555 | 556 | 557 | 558 | 559 | 560 |
| 561 | 562 | 563 | 564 | 565 | 566 | 567 | 568 | 569 | 570 |
| 571 | 572 | 573 | 574 | 575 | 576 | 577 | 578 | 579 | 580 |
| 581 | 582 | 583 | 584 | 585 | 586 | 587 | 588 | 589 | 590 |
| 591 | 592 | 593 | 594 | 595 | 596 | 597 | 598 | 599 | 600 |

4. Write the numbers from 651-700.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 651 | 652 | 653 | 654 | 655 | 656 | 657 | 658 | 659 | 660 |
| 661 | 662 | 663 | 664 | 665 | 666 | 667 | 668 | 669 | 670 |
| 671 | 672 | 673 | 674 | 675 | 676 | 677 | 678 | 679 | 680 |
| 681 | 682 | 683 | 684 | 685 | 686 | 687 | 688 | 689 | 690 |
| 691 | 692 | 693 | 694 | 695 | 696 | 697 | 698 | 699 | 700 |

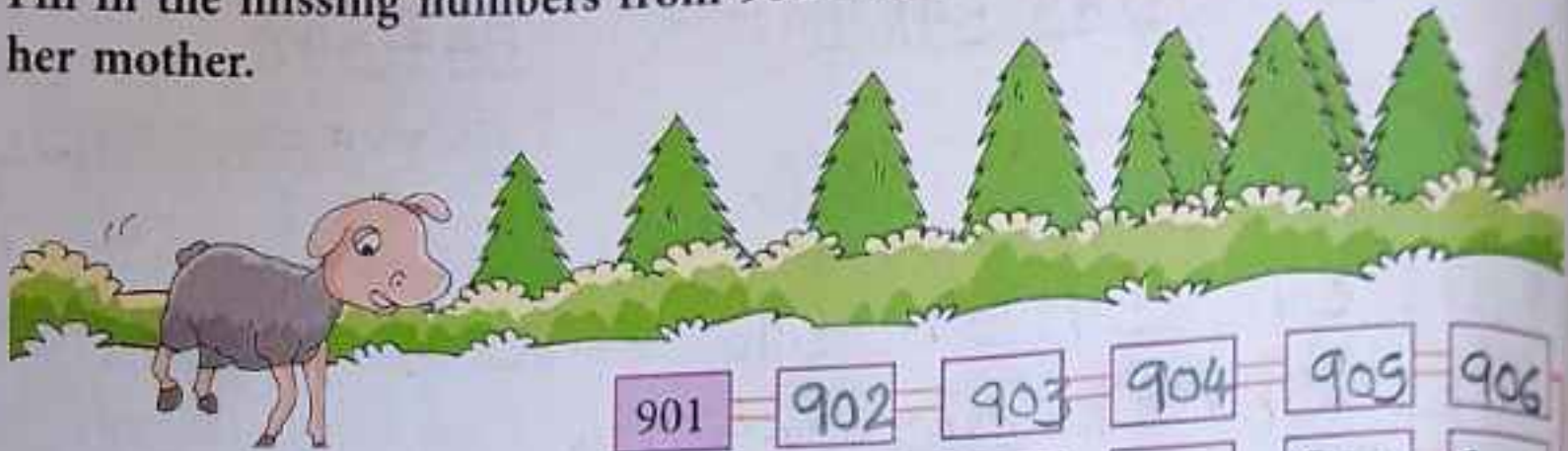
5. Write the numbers from 721-750.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 721 | 722 | 723 | 724 | 725 | 726 | 727 | 728 | 729 | 730 |
| 731 | 732 | 733 | 734 | 735 | 736 | 737 | 738 | 739 | 740 |
| 741 | 742 | 743 | 744 | 745 | 746 | 747 | 748 | 749 | 750 |

6. Write the numbers from 861-890.

| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 861 | 862 | 863 | 864 | 865 | 866 | 867 | 868 | 869 | 870 |
| 871 | 872 | 873 | 874 | 875 | 876 | 877 | 878 | 879 | 880 |
| 881 | 882 | 883 | 884 | 885 | 886 | 887 | 888 | 889 | 890 |

7. Fill in the missing numbers from 901-1000 to help the baby lamb reach her mother.



| | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|
| | | | | 901 | 902 | 903 | 904 | 905 | 906 |
| 916 | 915 | 914 | 913 | 912 | 911 | 910 | 909 | 908 | 907 |
| 917 | 918 | 919 | 920 | 921 | 922 | 923 | 924 | 925 | 926 |
| 936 | 935 | 934 | 933 | 932 | 931 | 930 | 929 | 928 | 927 |
| 937 | 938 | 939 | 940 | 941 | 942 | 943 | 944 | 945 | 946 |
| 956 | 955 | 954 | 953 | 952 | 951 | 950 | 949 | 948 | 947 |
| 957 | 958 | 959 | 960 | 961 | 962 | 963 | 964 | 965 | 966 |
| 976 | 975 | 974 | 973 | 972 | 971 | 970 | 969 | 968 | 967 |
| 977 | 978 | 979 | 980 | 981 | 982 | 983 | 984 | 985 | 986 |
| 993 | 992 | 991 | 990 | 989 | 988 | 987 | | | |
| 994 | 995 | 996 | 997 | 998 | 999 | 1000 | | | |

Did you ever help someone on the way? Express your thoughts on the following:

It is a good deed to help someone in need.



3. Match the numeral with its number name.

- (a) 963 - D
 (b) 797 - F
 (c) 425 - A
 (d) 672 - B
 (e) 399 - G
 (f) 989 - C
 (g) 898 - E

- A. Four hundred twenty-five
 B. Six hundred seventy-two
 C. Nine hundred eighty-nine
 D. Nine hundred sixty-three
 E. Eight hundred ninety-eight
 F. Seven hundred ninety-seven
 G. Three hundred ninety-nine

4. Write the number just before ...

(a) 153 154

(b) 764 765

(c) 908 909

(d) 812 813

(e) 358 359

(f) 599 600

5. Write the number just after ...

(a) 189 190

(b) 623 624

(c) 842 843

(d) 593 592

(e) 789 790

(f) 900 901

6. Write the numbers just before and after the given numbers.

(a) 172 173 174

(b) 651 652 653

(c) 309 310 311

(d) 435 436 437

(e) 501 502 503

(f) 699 700 701

7. Write the number or numbers between the given numbers.

(a) 278 and 280 279

(b) 451 and 454 452 453

(c) 798 and 800 799

(d) 648 and 651 649 650

(e) 629 and 635 630 631 632 633 634

(f) 864 and 870 865 866 867 868 869



PLACE VALUE AND FACE VALUE

- ❖ The **face value** of a digit is its actual value.
- ❖ The **place value** of a digit depends upon its place in the number.

Consider the number 532.

| H | T | O |
|---|---|---|
| 5 | 3 | 2 |

The digit 2 is at the ones place.
The place value of 2 is 2 ones = 2
The face value of 2 is 2.

The digit 3 is at the tens place.
The place value of 3 is 3 tens = 30
The face value of 3 is 3.

The digit 5 is at the hundreds place.
The place value of 5 is 5 hundreds = 500
The face value of 5 is 5.

Face value of a digit in a number never changes whereas its place value changes with the place.



Exercise 1D



1. Write the place value of each encircled digit.

(a) 6 4 5 4 tens

(b) 3 3 8 3 hundreds

(c) 2 9 5 5 ones

(d) 8 1 5 8 hundreds

(e) 6 4 8 6 hundreds

(f) 1 8 7 8 tens

2. Fill in the blanks.

(a) In 683, the digit 8 is at tens place.

(b) In 720, the digit 7 is at hundreds place.

(c) In 958, the digit 8 is at ones place.



3. Fill in the blanks.

- (a) In 374, the place value of 7 is 7 hundreds the face value of 7 is 7
- (b) In 483, the place value of 4 is 4 hundreds, the face value of 4 is 4
- (c) The face value and place value of a digit in a number is the same ones place.
- (d) The sum of the place value and face value of 5 in 750 is 55

$$50 + 5 = 55$$



Maths Lab Activity (Teacher to Assist)



EL

The teacher will take 3 to 4 sets of 3 boxes or trays. Now, he/she will put two of three open boxes or trays on a table.



The trays on each set have to be marked with letters H (hundred), T (tens) and O (ones). Besides each set of boxes or trays, the teacher should have a set of 30 buttons or counters of the same colour. A set of 30 different coloured buttons can be used for the other set.

Now, divide the children into two equal groups.

Turn by turn call one pair of students, one from each group. Give each of them different 3-digit numbers in word form, say 215 and 407.

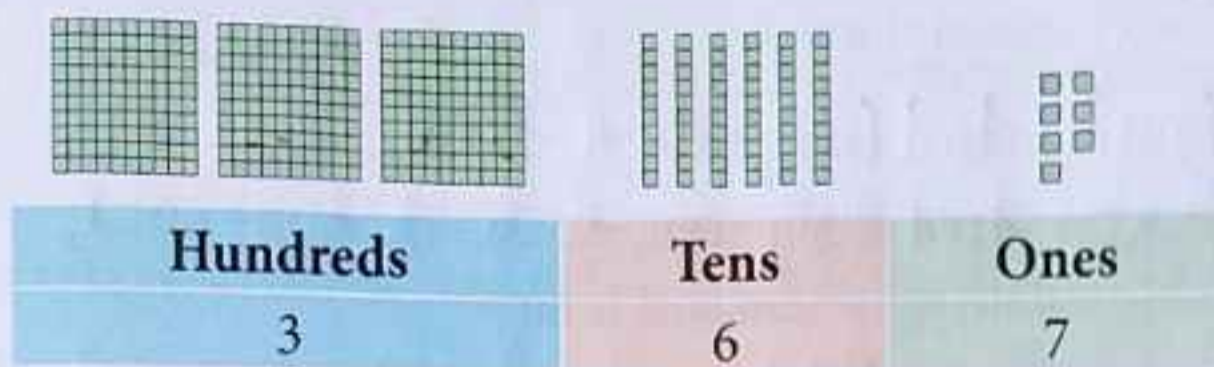
Each child according to the number given to him/her has to put correct number of buttons in the correct box.

For 215, 2 buttons in H tray, 1 in T tray and 5 in O tray. Similarly, the other child at the same time puts 4 buttons in H tray, 0 in T tray and 7 in O tray. Give 10 seconds or whatever time the teacher decides to each pair. Repeat this for another pair and so on and so forth till all the children have got a chance. The team with the greater number of correct entries wins the game.

EXPANDED FORM

There were 367 visitors for the school exhibition today.

The number 367 can be represented with blocks and by the place value chart as shown below:



$$\begin{aligned} \text{So, } 367 &= 3 \text{ hundreds} + 6 \text{ tens} + 7 \text{ ones} \\ &= 300 + 60 + 7 \end{aligned}$$

Thus, the number 367 can be written in different ways as:

Standard form: 367

Expanded form: $300 + 60 + 7$

Word form: Three hundred sixty-seven

The expanded form of a 3-digit number is given by the sum of the place values of its digit in hundreds, tens and ones places.

Exercise 1E

1. Write the number of hundreds, tens and ones for each number and hence write each number in the expanded form. *One has been done for you.*

| | Number | Hundreds | Tens | Ones | Expanded form |
|-----|--------|----------|------|------|----------------|
| (a) | 256 | 2 | 5 | 6 | $200 + 50 + 6$ |
| (b) | 327 | 3 | 2 | 7 | $300 + 20 + 7$ |
| (c) | 473 | 4 | 7 | 3 | $400 + 70 + 3$ |
| (d) | 789 | 7 | 8 | 9 | $700 + 80 + 9$ |
| (e) | 807 | 8 | 0 | 7 | $800 + 00 + 7$ |

2. Complete the table with the help of the first row. One has been done for you.

| Word form | H | T | O | Expanded form | Standard form |
|-------------------------------|---|---|---|----------------|---------------|
| (a) Three hundred twenty-five | 3 | 2 | 5 | $300 + 20 + 5$ | 325 |
| (b) Six hundred twelve | 6 | 1 | 2 | $600 + 10 + 2$ | 612 |
| (c) Two hundred thirty-six | 2 | 3 | 6 | $200 + 30 + 6$ | 236 |
| (d) Four hundred fifty-six | 4 | 5 | 6 | $400 + 50 + 6$ | 456 |
| (e) Six hundred sixty-one | 6 | 6 | 1 | $600 + 60 + 1$ | 661 |

3. Write the following in standard form.

(a) $200 + 30 + 1 = 231$

(b) $900 + 10 + 7 = 917$

(c) $500 + 40 + 9 = 549$

(d) $800 + 20 + 6 = 826$

(e) $400 + 70 + 3 = 473$

(f) $700 + 30 + 3 = 733$

(g) $300 + 0 + 4 = 304$

(h) $200 + 30 + 0 = 230$

4. Write the following in expanded form.

(a) $365 = 300 + 60 + 5$

(b) $248 = 200 + 40 + 8$

(c) $827 = 800 + 20 + 7$

(d) $980 = 900 + 80 + 0$

(e) $405 = 400 + 00 + 5$

(f) $359 = 300 + 50 + 9$

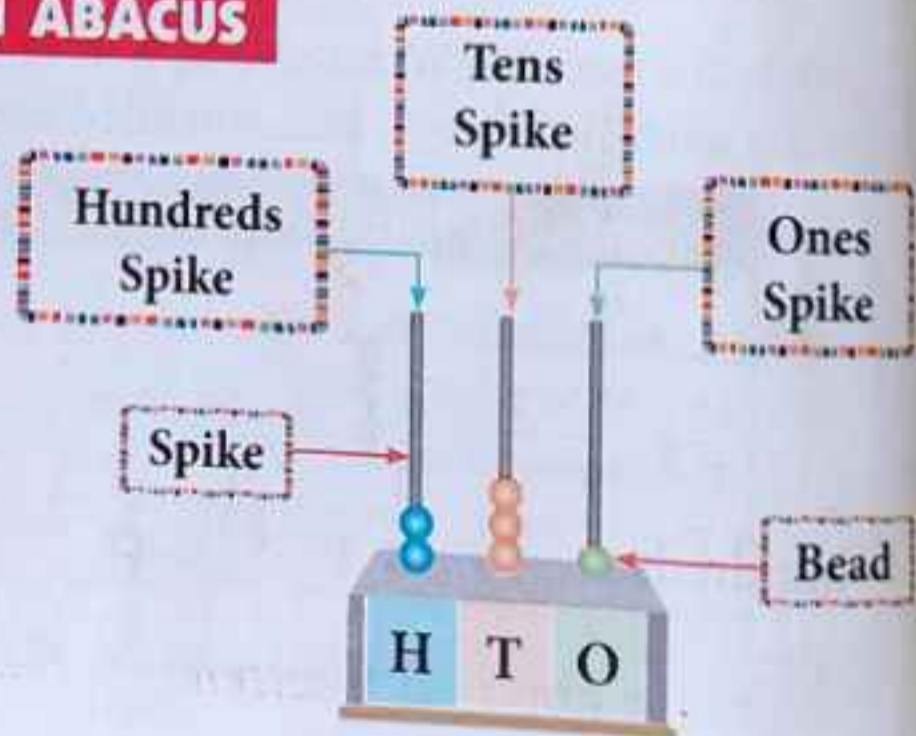
(g) $719 = 700 + 10 + 9$

(h) $694 = 600 + 90 + 4$

THREE-DIGIT NUMBERS ON ABACUS

A **spike abacus** is a tool that has beads which slide on rods (called spikes).

Each spike represents a different place value. From right to left, the place value of the spikes increases in order from ones to tens to hundreds and so on.



Example 1: Count the number of beads on the spike at each place and write the number.



Solution: There is one bead at the hundreds spike, zero beads at the tens spike and zero beads at the ones spike. So, the abacus represents

$$1 \text{ hundred} + 0 \text{ tens} + 0 \text{ ones} = 100$$

One hundred

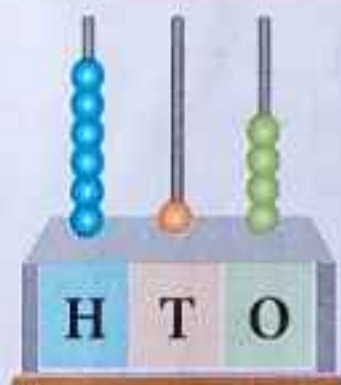
Now, observe the following:



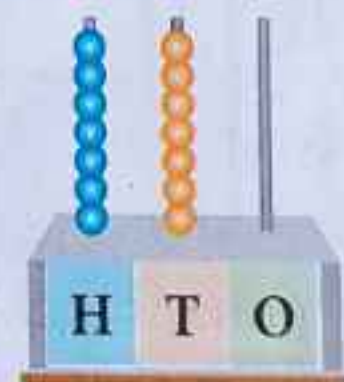
$$1 \text{ hundred} + 5 \text{ tens} + 3 \text{ ones} = 153 \text{ One hundred fifty-three}$$



$$2 \text{ hundreds} + 0 \text{ tens} + 2 \text{ ones} = 202 \text{ Two hundred two}$$



$$6 \text{ hundreds} + 1 \text{ ten} + 4 \text{ ones} = 614 \text{ Six hundred fourteen}$$

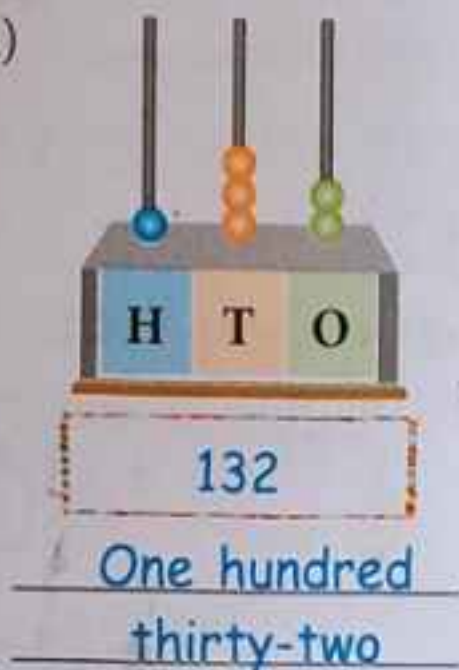


$$7 \text{ hundreds} + 7 \text{ tens} + 0 \text{ ones} = 770 \text{ Seven hundred seventy}$$

Exercise 1F

1. Count the number of beads at each place and write the number shown by the spike abacus in standard form as well as word form. One has been done for you.

(a)



(b)



(c)



(d)



(e)



(f)



(g)



(h)

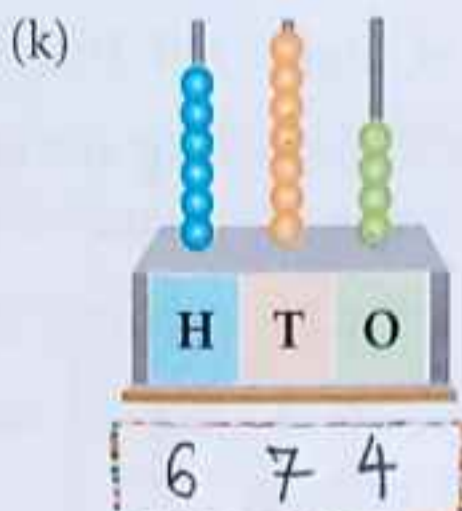


(i)

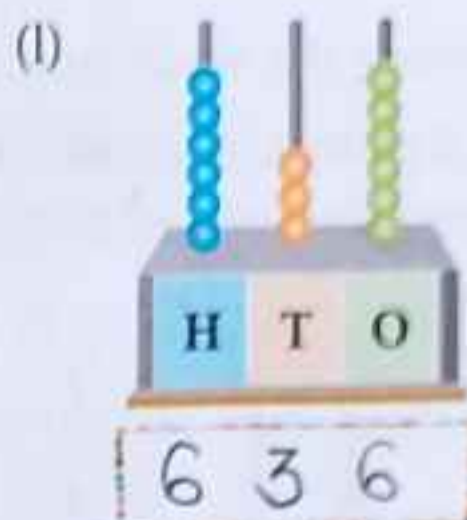




Four hundred
fifty-three



Six hundred
seventy-four



Six hundred
thirty-six

2. Draw beads to show the given number on each abacus.



COMPARING NUMBERS

We compare the numbers using the following rules:

Having different number of digits

The number with greater number of digits is the larger of the two.

$$153 > 89$$

3 digits 2 digits

$$214 > 6$$

3 digits 1 digit

$$415 > 72$$

3 digits 2 digits

Having the same number of digits

The most common and easy method to compare two numbers with same number of digits is using the place value chart.

Compare the digits in the same place value position from left to right.

- ❖ If the digits at the hundreds place are different, then the number with the greater digit is bigger.

Example 2: Compare 545 and 358.

Solution: Arranging the digits of the given numbers in the place value chart, we have:

| H | T | O |
|---|---|---|
| 5 | 4 | 5 |
| 3 | 5 | 8 |

Compare the hundreds.
500 is greater than 300.

So, $545 > 358$.

- ❖ If the digits at the hundreds place are the same, then we move onto and compare the digits at the tens place. The number with the greater tens digit is bigger.

Example 3: Compare 780 and 795.

Solution:

| H | T | O |
|---|---|---|
| 7 | 8 | 0 |
| 7 | 9 | 5 |

Compare the hundreds.
 $700 = 700$.

Compare the tens.
80 is less than 90.

So, $780 < 795$.

- ❖ If the digits at both hundreds and tens places are the same, then compare the digits at the ones place.

Example 4: Compare 467 and 463.

Solution:

| H | T | O |
|---|---|---|
| 4 | 6 | 7 |
| 4 | 6 | 3 |

Compare the hundreds.
 $400 = 400.$

Compare the tens.
 $60 = 60.$

Compare the ones.
7 is greater than 3.

So, $467 > 463.$

Exercise 1G



1. Write $>$ or $<$ correctly in the boxes.

(a) $119 < 129$

(b) $243 > 232$

(c) $350 < 367$

(d) $864 > 521$

(e) $632 < 723$

(f) $489 < 498$

(g) $540 > 524$

(h) $873 < 896$

(i) $901 > 899$

(j) $777 > 444$

(k) $602 < 820$

(l) $954 < 999$

2. Ring the greatest number.

(a) 623 264 (893)

(b) (416) 283 345

(c) 615 516 (651)

3. Ring the smallest number.

(a) 925 445 (213)

(b) 715 (481) 826

(c) (556) 860 729

ORDERING NUMBERS

Ordering numbers means writing them from the **smallest to the greatest** or from the **greatest to the smallest**.

Ascending and Descending Order

❖ When numbers are written in order from the **smallest to the greatest**, they are in **ascending order**.

For example, 48, 117, 235 and 572 are written in ascending order.

- ❖ When numbers are written in order from the **greatest to the smallest**, they are in **descending order**.

For example, 875, 612, 305 and 57 are written in descending order.

We use a place value chart to order numbers.

Example 5: Arrange 183, 475, 273, 391 in increasing and decreasing order.

Solution: First, we arrange the numbers in the place value chart as shown below.

| H | T | O |
|---|---|---|
| 1 | 8 | 3 |
| 4 | 7 | 5 |
| 2 | 7 | 3 |
| 3 | 9 | 1 |

Compare the hundreds: $1 < 2 < 3 < 4$

So, the numbers in increasing order are 183, 273, 391, 475.

The same numbers in decreasing order, that is, from the greatest to the smallest will be 475, 391, 273, 183.

Example 6: Arrange 675, 657, 603, 654 in increasing order.

Solution:

Step 1: Compare the digits at the hundreds place.

$$6 = 6 = 6 = 6, \\ \text{all equal.}$$

| H | T | O |
|---|---|---|
| 6 | 7 | 5 |
| 6 | 5 | 7 |
| 6 | 0 | 3 |
| 6 | 5 | 4 |

Step 2: Compare the digits at the tens place.

$$0 < 5 \text{ and } 5 < 7$$

So, the smallest number is 603 and the greatest number is 675.

Ascending order means increasing order.

Descending order means decreasing order.



Now, we need to compare the ones of the two numbers with 5 at tens place. We see that $7 > 4$. So, $657 > 654$.
Hence, the numbers in increasing order are 603, 654, 657, 675.

Exercise 1H



1. Arrange the following numbers in ascending order.

(a) 319, 391, 328, 383

319 328 383 391

(b) 236, 615, 143, 789

143 236 615 789

(c) 893, 915, 898, 909

893 898 909 915



2. Arrange the following numbers in descending order.

(a) 117, 171, 177, 135

177 171 135 117

(b) 154, 612, 345, 890

890 612 345 154

(c) 467, 860, 318, 460

860 467 460 318



Mental Maths 21st CS

Answer the following questions.

1. Write the number that comes just before 680. 679

2. Which is greater: 742 or 724? 742

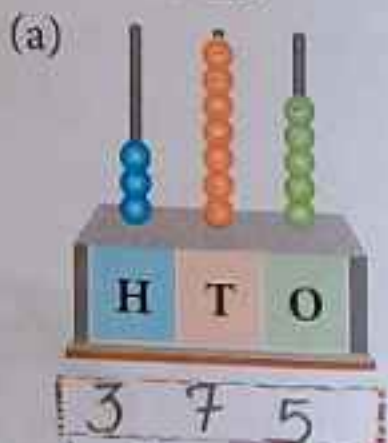
3. What is the place value of 9 in 935? 9 hundreds

4. What is the sum of the face value and place value of 4 in 348? $40 + 4 = 44$

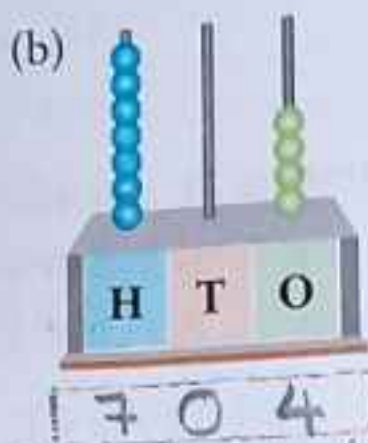
5. Write the number that comes just after 535. 536

Chapter Test

1. What number does each abacus show? Write in both standard and word form.



Three hundred seventy-five



Seven hundred four



Nine hundred twenty-nine

2. Compare. Write $<$ or $>$.

(a) Seven hundred twenty-nine $>$ 72

(b) 328 $<$ $300 + 40 + 5 = 345$

(c) 870 $>$ 8 hundreds 7 ones



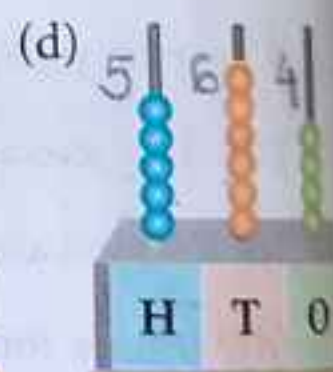
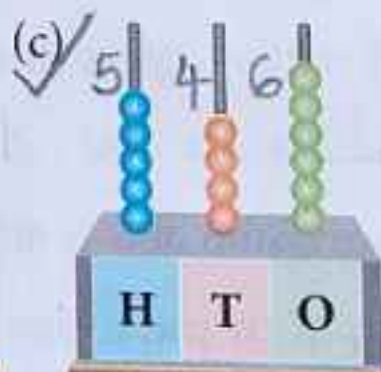
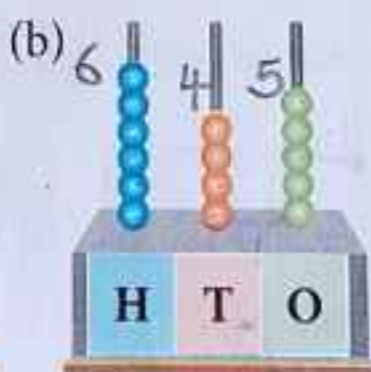
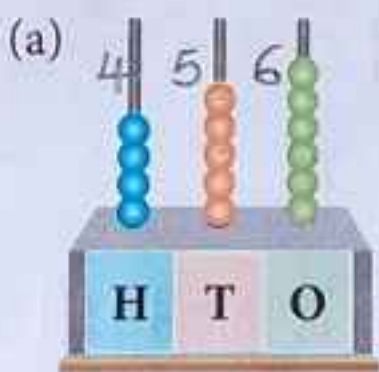
MCQs

Tick (\checkmark) the correct answer. (Q. 3 to Q. 10)

3. Six hundreds and eight ones is the same as

- (a) 806 (b) 860 (c) 680 (d) 608

4. Which abacus shows the number 546?



5. The largest three-digit number is

- (a) 900 (b) 999 (c) 199 (d) 990

6. Which of the following numbers is greater than 5 hundreds but less than 6 hundreds?
- (a) 499 (b) 650 (c) 575 (d) 600
7. Which of the following sets of numbers is arranged in decreasing order?
- (a) 748, 784, 874, 847 (b) 847, 874, 784, 748
- (c) 874, 847, 748, 784 (d) 874, 847, 784, 748
8. Which of the following expressions is false?
- (a) $345 < 496$ (b) 2 hundreds 4 tens = 204
- (c) 6 hundreds 9 ones < 690 (d) $994 > 949$
9. The place value of 8 in 805 is
- (a) 80 (b) 8 (c) 88 (d) 800
10. I am a 3-digit number. My tens digit is 3. My ones digit is two times of the tens digit. My hundreds digit is the sum of the tens and ones digits. What number am I?

| | | |
|---|---|---|
| H | T | O |
| 9 | 3 | 6 |

- (a) 396 (b) 639 (c) 936 (d) 963

11. Fill in the blanks.

- (a) The numeral for 'eight hundred ninety-eight' is 898
- (b) The number name for 580 is Five hundred eighty
- (c) 479 in expanded form is $400 + 70 + 9$
- (d) The smallest 3-digit number is 100
- (e) In 210, the digit 0 is at the ones place.

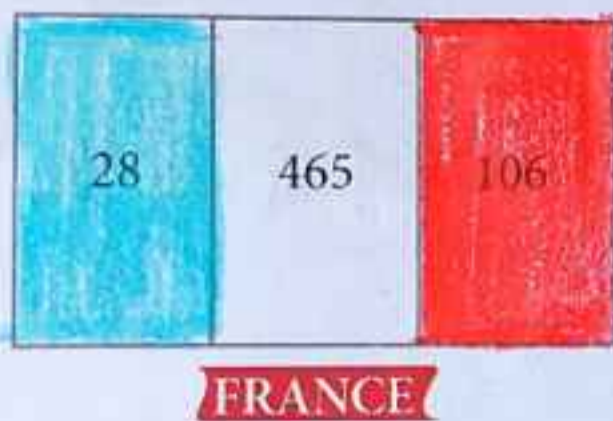
12. Write 'T' for true and 'F' for false.

- (a) 450 is 45 tens.
- (b) 100 less than 975 is 865.
- (c) Place value of 6 in 860 is 60.
- (d) 9 tens more than 700 is 709.
- (e) The smallest 3-digit number is 102.



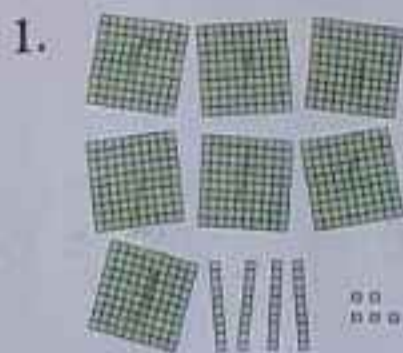
Look at the following colour code and colour the spaces as instructed to know the flags of various countries.

- Blue** if the number is between 1 and 40.
- Red** if the number is between 105 and 124.
- Orange** if the number is between 201 and 243.
- White** if the number is between 451 and 498.
- Yellow** if the number is between 510 and 540.
- Green** if the number is between 718 and 769.

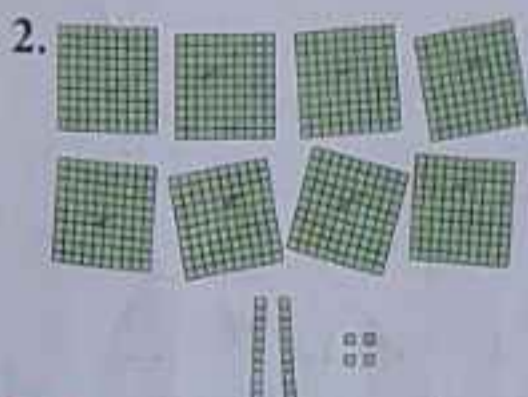


Worksheet

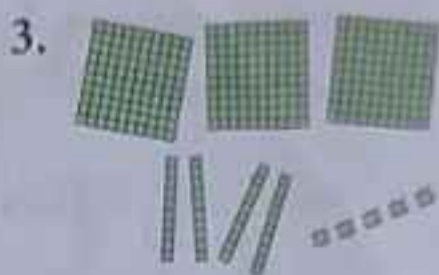
Write the number shown by the dancing blocks in each picture in standard as well as expanded form.



$$\textcircled{745} = \underline{700} + \underline{40} + \underline{5}$$



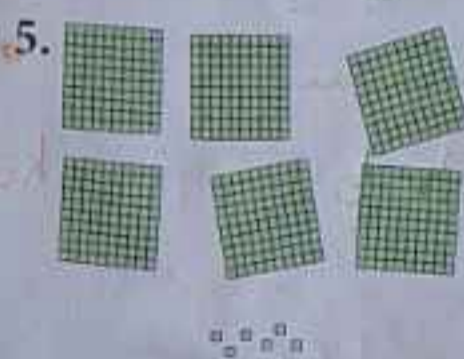
$$\textcircled{824} = \underline{800} + \underline{20} + \underline{4}$$



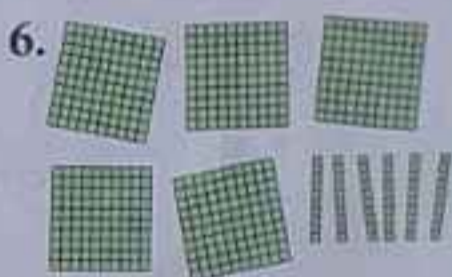
$$\textcircled{345} = \underline{300} + \underline{40} + \underline{5}$$



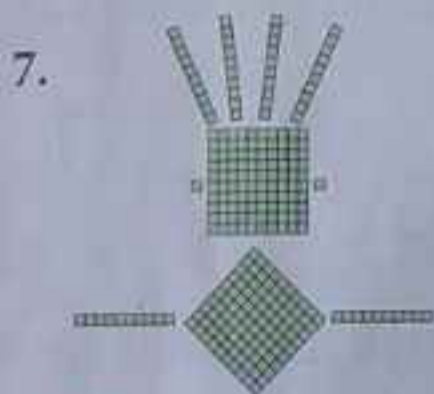
$$\textcircled{427} = \underline{400} + \underline{20} + \underline{7}$$



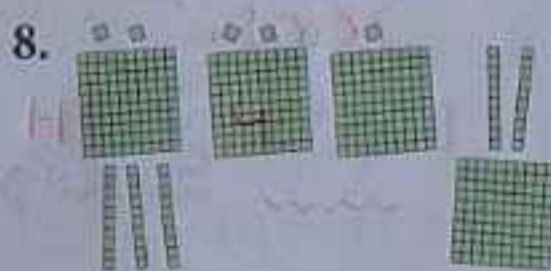
$$\textcircled{606} = \underline{600} + \underline{00} + \underline{6}$$



$$\textcircled{560} = \underline{500} + \underline{60} + \underline{0}$$



$$\textcircled{262} = \underline{200} + \underline{60} + \underline{2}$$



$$\textcircled{455} = \underline{400} + \underline{50} + \underline{5}$$



Now, write the numbers in a row from the greatest to the smallest.

$\textcircled{824}$ $\textcircled{745}$ $\textcircled{606}$ $\textcircled{560}$ $\textcircled{455}$ $\textcircled{427}$ $\textcircled{345}$ $\textcircled{262}$