H	T	O
5	2	1

The value of zero is always 0.

1 is in the **ones** place. Its place value is 1.

2 is in the **tens** place. Its place value is 20.

5 is in the **hundreds** place. Its place value is 500.

Spot Check

Write the place value of each digit in these numbers.

a) 1 4 0

b) 1 1 2

c) 1 8 3

Expanded form of a number

We write the expanded form of a number by writing the place value of each digit of a number.

The number 146 has

1 hundreds, 4 tens and 6 ones.

The expanded form of 146 is

1 hundred + 4 tens + 6 ones or 100 + 40 + 6

Hundred 1 4 6 ones

100 40 6

Tens

H	T	O
1	4	6

Write the expanded form of 164.

Number 164

Expanded form 100 + 60 + 4

Hundred Tens ones

6×10 4×1

Write the expanded form of 102.

Number 102

H T O

Expanded form 100 + 0 + 2

Exercise 2

1. Colour the boxes that show the place value of the numbers in pink.

		H	T	O
a)	524			
b)	736			
c)	435			
d)	810			
e)	497			
f)	546			

		H	T	O
g)	956			
h)	873			
i)	297			
j)	435			
k)	999			
l)	678			

2. Write the expanded form.

a) 164 = 100 + 60 + 4

b) 179 = 100 + 70 + 9

c) 275 = 200 + 70 + 5

d) 999 = ____ + ____ + ____

3. Write the numbers. standard form.

a) 800 + 10 + 7 = 817

b) 400 + 50 + 3 = 453

c) 200 + 80 + 0 = 280

d) 600 + 70 + 3 = 673

Comparing numbers

When the number of digits is different

A 3-digit number is bigger than a 2-digit number.

H	T	O
7	2	8
	8	3

is a 3-digit number.

is a 2-digit number.

We say, 728 is greater than 83 or $728 > 83$.

Maths Tip

The closed end of < points towards the smaller number.

$158 < 480$ ✓

$158 > 480$ ✗

When the number of digits is the same

Different digits in the hundreds place

H	T	O
3	4	1

When digits in the hundreds place are the same, compare the digits in the tens place.

H	T	O
6	2	1

3 is smaller than 6

So, 341 is smaller than 621 or $341 < 621$.

Same digits in the hundreds place

H	T	O
7	5	1

When digits in the hundreds place are the same, compare the digits in the tens place.

H	T	O
7	2	3

5 is greater than 2

So, 751 is greater than 723 or $751 > 723$.

Same digits in the hundreds and tens places

H	T	O
4	8	4

When digits in the hundreds and tens place are the same, compare the digits in the ones place.

H	T	O
4	8	6

4 is smaller than 6

So, 484 is smaller than 486 or $484 < 486$.

1. Circle the bigger number.

a) 451 142

b) 562 656

c) 475 735

d) 301 404

e) 237 239

f) 289 290

2. Circle the smaller number.

a) 541 721

b) 340 100

c) 295 364

d) 203 178

e) 276 275

f) 435 635

3. Arrange the numbers in ascending order.

a) 134, 432, 560, 764, 321 _____, _____, _____, _____, _____

b) 303, 501, 804, 422, 234 _____, _____, _____, _____, _____

c) 231, 444, 658, 600, 123 _____, _____, _____, _____, _____

d) 909, 876, 542, 320, 808 _____, _____, _____, _____, _____

4. **Arrange the numbers in descending order.**

a) 324, 436, 709, 655, 455 _____, _____, _____, _____, _____

b) 101, 239, 789, 650, 440 _____, _____, _____, _____, _____

c) 227, 586, 729, 144, 343 _____, _____, _____, _____, _____

d) 512, 625, 111, 121, 862 _____, _____, _____, _____, _____

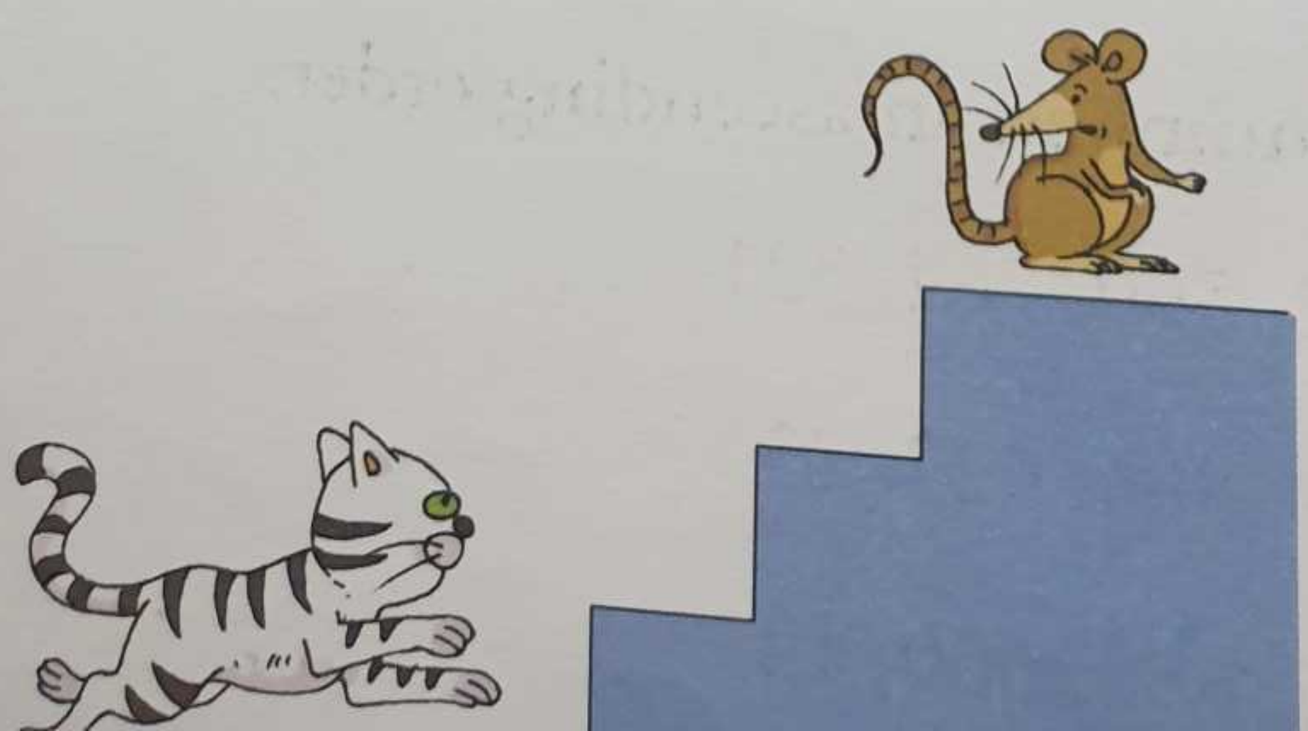
Maths Lab Activity

EXPERIENTIAL LEARNING

Objective: to understand ascending and descending order of numbers

You will need: 3-digit number cards

Preparation: The teacher will prepare the number cards.

Steps:

1. Divide the class into 4 groups.
2. Explain that they are going to play a game of ascending and descending order of numbers.
3. Spread the number cards on the floor of the classroom.
4. Ask one group to go round the class picking up cards and set them in ascending order.
5. The group that completes the task the fastest is the winner.
6. Repeat the same process for descending order.