Mathematics

## Indian Number System

Mr Millar

## Try this

What's the same and what's different about the standard short scale system (which we use) and the Indian number system?

| The standard short scale system | The Indian number system |  |  |
| ---: | :--- | :--- | :--- |
| 1 | ones | 1 | ones |
| 10 | tens | 10 | tens |
| 100 | hundreds | 100 | hundreds |
| 1000 | thousands | 1000 | thousands |
| 10000 | ten thousands | 10000 | ten thousands |
| 100000 | hundred thousands | 100000 | lakhs |
| 1000000 | millions | 1000000 | ten lakhs |
| 10000000 | ten millions | 10000000 | crores |
| 100000000 | hundred millions | 100000000 | ten crores |
|  |  |  |  |

## Connect

## Write each of the numbers below in both systems

| The standard short scale system | The Indian number system |  |  |
| ---: | :--- | ---: | :--- |
| 10 | ones | 1 | ones |
| 10 | tens | 10 | tens |
| 100 | hundreds | 100 | hundreds |
| 1000 | thousands | 1000 | thousands |
| 10000 | ten thousands | 10000 | ten thousands |
| 100000 | hundred thousands | 100000 | lakhs |
| 1000000 | millions | 1000000 | ten lakhs |
| 10000000 | ten millions | 10000000 | crores |
| 100000000 | hundred millions | 100000000 | ten crores |


| 50000 |  |  | fifty thousand |
| :---: | :---: | :---: | :---: |
| 300000 |  |  | three lakhs |
|  | twenty-five million |  |  |

## Independent task

1. Write each of these numbers in both number systems

| 1 | ones | 1 | ones |
| ---: | :--- | :--- | :--- |
| 10 | tens | 10 | tens |
| 100 | hundreds | 100 | hundreds |
| 1000 | thousands | 1000 | thousands |
| 10000 | ten thousands | 10000 | ten thousands |
| 100000 | hundred thousands | 100000 | lakhs |
| 1000000 | millions | 1000000 | ten lakhs |
| 10000000 | ten millions | 10000000 | crores |
| 100000000 | hundred millions | 100000000 | ten crores |

## 200407

Two hundred thousand, four hundred and seven.
In the Indian number systems that is 200 407:
Two lakh, four hundred and seven.

130000
5200080
15000000

## Explore

Complete the statements below using <, >, or = symbols.

| 1 | ones | 1 |
| ---: | :--- | :--- |
| 10 | tens | 10 |
| 100 | hundreds | tens |
| 1000 | thousands | 100 |
| hundreds |  |  |
| 10000 | ten thousands | 1000 | thousands

$\square$
$\square$
$\square$

## Answers

## Try this

What's the same and what's different about the standard short scale system (which we use) and the Indian number system?

| The standard short scale system | The Indian number system |  |  |
| ---: | :--- | :--- | :--- |
| 1 | ones | 1 | ones |
| 10 | tens | 10 | tens |
| 100 | hundreds | 100 | hundreds |
| 1000 | thousands | 1000 | thousands |
| 10000 | ten thousands | 10000 | ten thousands |
| 100000 | hundred thousands | 100000 | lakhs |
| 1000000 | millions | 1000000 | ten lakhs |
| 10000000 | ten millions | 10000000 | crores |
| 100000000 | hundred millions | 100000000 | ten crores |
|  |  |  |  |

The two systems are the same up until the ten thousands.
After that, the naming convention is different. Also in the standard short scale system, digits are always grouped in 3 s . In the Indian system, the final group is 3 digits, but all groups

## Try this

## Write each of the numbers below in both systems

| The standard short scale system | The Indian number system |  |  |
| ---: | :--- | ---: | :--- |
| 10 | ones | 1 | ones |
| 10 | tens | 10 | tens |
| 100 | hundreds | 100 | hundreds |
| 1000 | thousands | 1000 | thousands |
| 10000 | ten thousands | 10000 | ten thousands |
| 100000 | hundred thousands | 100000 | lakhs |
| 1000000 | millions | 1000000 | ten lakhs |
| 10000000 | ten millions | 10000000 | crores |
| 100000000 | hundred millions | 100000000 | ten crores |


| 50000 | fifty thousand | 50000 | fifty thousand |
| :---: | :---: | :---: | :---: |
| 300000 | Three hundred <br> thousand | 300000 | three lakhs |
| 25000000 | twenty-five million | 25000000 | Two crores, three <br> lakhs |

The standard short scale system
The Indian number system

## Try this

1. Write each of these numbers in both number systems

| 1 | ones | 1 | ones |
| ---: | :--- | :--- | :--- |
| 10 | tens | 10 | tens |
| 100 | hundreds | 100 | hundreds |
| 1000 | thousands | 1000 | thousands |
| 10000 | ten thousands | 10000 | ten thousands |
| 100000 | hundred thousands | 100000 | lakhs |
| 1000000 | millions | 1000000 | ten lakhs |
| 10000000 | ten millions | 10000000 | crores |
| 100000000 | hundred millions | 100000000 | ten crores |

## 200407

Two hundred thousand, four hundred and seven.
In the Indian number systems that is 200 407:
Two lakh, four hundred and seven.

130000
1 lakh, thirty thousand
130000 (One hundred and thirty thousand)

5200080
Five million, two hundred thousand
and eighty
5200080 (Fifty two lakh and eighty)

15000000
Fifteen million
$15000000(1$
crore, fifty lakh)

## Try this

Complete the statements below using <, >, or = symbols.

| 1 | ones | 1 |
| ---: | ---: | :--- |
| 10 | tens | 10 |
| 100 | hundreds | tens |
| 1000 | thousands | 100 |
| hundreds |  |  |
| 10000 | ten thousands | 1000 |
| 100000 | hundred thousands | 10000 | ten thousands

$\square$
$\square$

$$
6040200>\text { six million, forty thousand }
$$

```
twenty-two million
two crore, two lakh
```

