

**Integer Connections**

How many tens are there in eight hundred and fifty?

How many hundreds are there in eight thousand five hundred?

How many ten-thousands are there in eighty-five million?

How many ways can you find to show your answers are correct?

What connections are there and can you **generalise**?

What else can you **ask, show** and **prove**?

**Novel Challenge**

Sally is reading a novel. It starts at Page 1 and the page numbers have a total of 570 digits. How many pages does the book have? How many of the digits are a 1?

**Different Counting**

Our counting system uses “**blocks of three**”

1’s 10’s and 100’s are followed by 1000’s, 10 000’s and 100 000’s etc.

we use **spaces** to separate blocks, but we used to use commas

e.g 1 trillion is 1 000 000 000 000 (and used to be 1,000,000,000,000)

Below is a counting system used in parts of India:

1	ones
10	tens
100	hundreds
1,000	thousands
10,000	ten thousands
1,00,000	one lakh
10,00,000	ten lakh
1,00,00,000	one crore
10,00,00,000	ten crore



What is the same and what is different about this counting system? Investigate the relationships between the Indian lakh and crore and our millions and billions. What connections can you see? Which system do you prefer? Why?

These are real headlines from Indian newspapers—can you convert them to our number system?

Two govt officials held for taking Rs 5 lakh bribe

Yamaha launches YZF-R1M in India priced at Rs 29.43 lakh

NASA Offers ₹11 Lakh for 70 Days of Bed Rest

Foreign fund inflows cross Rs 81k crore mark in 2015

**Bullet train project to cost Rs 1 lakh cr**

Modi govt to speed up implementation of projects worth Rs 2.5 lakh crore by resolving red tape hurdles

Petrochemical regions attract investment of Rs 1.06 lakh crore

1.5 lakh mails and counting: India lodges one of its biggest online protests over net neutrality

Some “simple arithmetic”...

Extension: Give your answers in the Indian Number system

Calculate:

1. Half a crore
2. Three times 75 lakhs
3. One crore subtract twenty three lakhs
4. Twenty three and a quarter lakh divided by two
5. One hundred times three crore, seventy two lakh, twenty seven thousand and ninety nine.