

# How to write using numbers



- **CUT THE CLUTTER**
- **CONTEXTUALISE**
- **SIMPLIFY**

# What makes for good writing



1. Communicates an idea clearly (Need to have **something to say** and think **clearly**)
2. Elegant and stylish (takes time, revision and a good editor!)

# What makes a good writer?



- Inborn talent? The writing gene?
- Years of language classes?
- An artistic nature?
- Influence of alcohol?
- Divine intervention?

Truth is :

- Have something to say
- Logical thinking
- Few simple, learnable tools of style (We will talk about this)

# How to use data in a writing



- According to the 2007 Urban Mobility Report of the Texas Transportation Institute, congestion has caused urban Americans to travel 4.2 billion hours more and spend an extra 11,000,000,000 litres of petrol at a total cost of USD 78 billion. This is an increase of 220 million hours, 529,957,650 litres and USD 5 billion from 2004. A 1997 study by the Petroleum Conservation Research Association, Delhi found that 321,432 litres of petrol and 101,312 litres of diesel are wasted daily by idling vehicles in the city. Congestions cost India about RS 3000-4000 crores per year, according to some estimates, while Bangkok loses six per cent of its economic production thanks to congestion.



- The statue of Sardar Patel in Gujarat is very tall.
- Chhattisgarh accounts for a tiny share of India's population. The majority of its people live in rural areas, primarily concentrated in the central plains region. Scheduled Castes and Tribes constitute a large part of Chhattisgarh's population.



- The statue of Sardar Patel in Gujarat is 182 m tall.
- Chhattisgarh accounts for two per cent of India's population. About 80 per cent of its people live in rural areas, primarily concentrated in the central plains region. Scheduled Castes and Tribes constitute 43.4 per cent of Chhattisgarh's population.



383 of the 1,142 people in the village  
have diabetes.







Of the total 228,721.73 MW electricity generated in India coal power plants contribute 134,388.39 MW.





In the past year, on an average 20016.43 kg of fish reached the Kandavi fish market every month.



*Use half, a third, two-thirds, etc*



383 of the 1,142 people in the village have diabetes.

A third of the village population has diabetes. Every third person in the village is diabetic.



## *Convert to %*



Of the total 2,28,721.73 MW electricity generated in India coal plants contribute 134,388.39 MW.

Coal plants contribute 58 per cent of India's total power generation.





# Round it off



In the past year, on an average 20,016.43 kg of fish reached the Kandavi fish market every month.

In the past year, on an average 20 tonnes of fish reached the Kandavi fish market every month.

## *Put it in perspective*



9.5 billion tonnes of silt has been trapped upstream of Farakka barrage since 1975. Even a conservative estimate reveals that the number of trucks required to dispose of this silt would be so many that their total length could encircle the equator 126 times. The cost of transporting this silt to the sea would be double the annual revenue of the Indian government.



Hydroelectric projects are a big booming business in Arunachal Pradesh. In just 11 months from April 2007 to February 2008, the state government signed agreements for 38 projects with private companies. That is three-and-a-half projects a month or a project every nine days. Where will it stop? The government plans to erect 104 hydroelectric projects in the state, with a cumulative generation capacity of about 56,000 MW -- one-third of India's hydropower potential. It has smelt a cash cow in these projects. The Arunachal Pradesh government estimates that mega hydropower projects planned in the state can augment its annual income by up to Rs 8,000 crore through the sale of its share of electricity--the 2008 state budget was Rs 2,065 crore.

# Examples



- CO<sub>2</sub> concentration in the atmosphere in the 16th century was 280 parts per million (ppm). In the 21st century it increased to 380 ppm. The concentration is increasing at a rate of 2 ppm per year.
- When William Shakespeare took a breath, 280 molecules of every million entering his lungs were carbon dioxide. Each time you draw breath today, 380 molecules per million are carbon dioxide. That portion climbs about two molecules every year.

# Examples



The earth probably came into existence 4.5 billion years ago. Evidence suggests that life first evolved around 3.5 billion years ago. A range of soft body creatures, including jellyfish and worms, appeared in the sea in Precambrian Era 570 million years ago.

Then, some 443 million years ago life began to appear on land. In Cenozoic Era about 65 million years ago, mammals appeared on the earth. It was not until 2.5 million years ago that the genus *Homo* appeared. Civilization began only about 6,000 years ago.

# Examples



If we imagine that the 4,500 million years of the earth's history since its birth are represented by a road of hundred kilometres and we walk along it, we would not come across any life visible to naked eyes at all for the first half of our journey. We would have to continue up to the 88<sup>th</sup> kilometre before even simple invertebrates, such as worms and jellyfish, would begin to appear in the sea. At the 93<sup>rd</sup> kilometre certain organisms would leave the sea to live on land, but the mammals would not come on the scene till the 98<sup>th</sup> kilometre is reached. The entire period of man's physical evolution would not take more than the last 20 metres of our journey. And the age of written history and civilization would hardly take more than half of the very last stride!

# Examples



The average adult human heart beats 72 times a minutes, 100,000 times a day, 36 million times a year and in an average lifetime, pumps about one million barrels of blood which is enough to fill four supertankers. Your heart is an incredible workhorse. With every beat, blood circulates through a network of vessels, arteries, veins and capillaries that if stretched out, would equate to nearly 96,000 km. Imagine the distance from Shimla to Kantakumari traversed 3 times and that's the distance of the network.



# Thank You

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