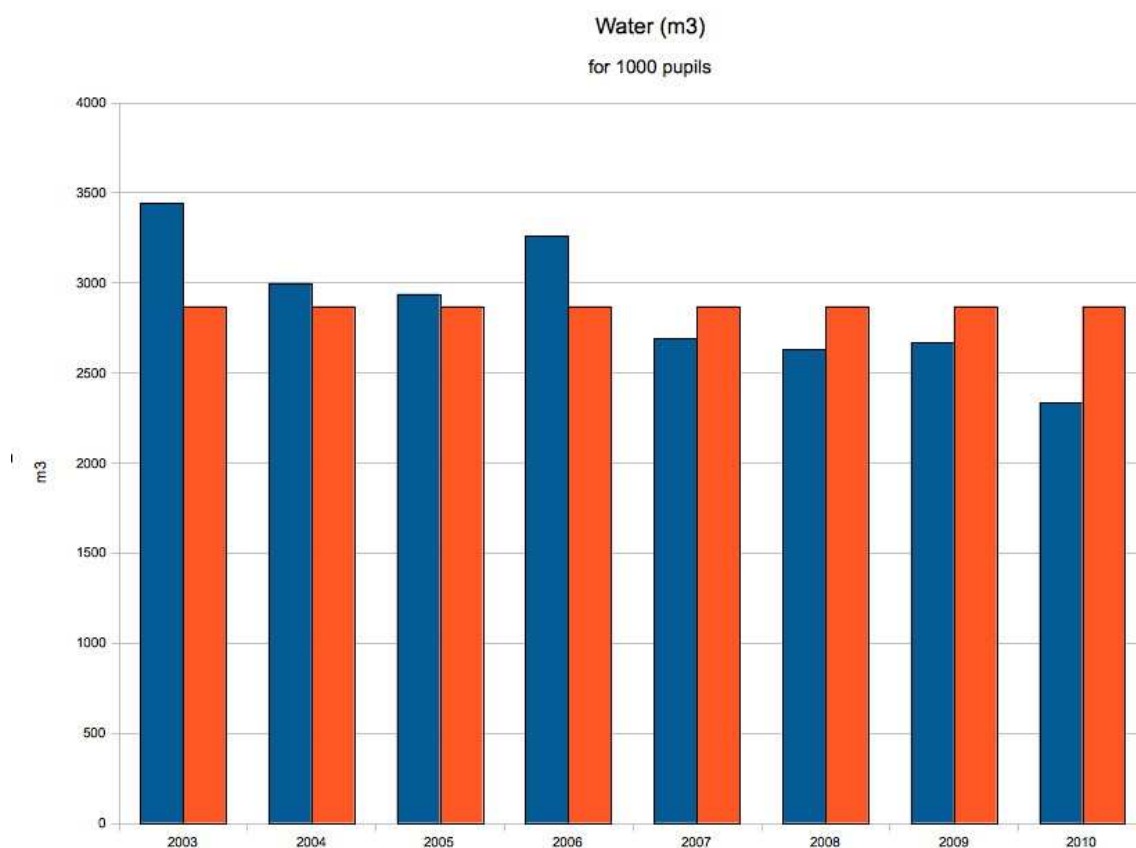


## Subject n°29

Please don't write on the exam paper.

The following bar chart shows the annual consumption of water (in  $\text{m}^3$ ), in a college of 1000 pupils, between 2003 and 2010 (these data are real). The dark bars are the annual consumptions, and the grey bars represent the average consumption, over the eight years.



Year	2003	2004	2005	2006	2007	2008	2009	2010
$\text{m}^3$	3440	2997	2936	3258	2690	2629	2665	2331
Average	2868.25	2868.25	2868.25	2868.25	2868.25	2868.25	2868.25	2868.25

- 1) What information does the average's chart give, compared to that of yearly consumptions?
  - 2) What is the tendency of the consumption of water, over the years?
  - 3) Construct the box-and-whisker plot of these data. (*Reminder: a box-and-whisker plot is a diagram with the median, both quartiles and both extrema*).
- What can you deduce from this plot?
- 4) Taking the average figure as the yearly consumption, ( $2868.25 \text{ m}^3$ ) how many litres does it make, per person and per day ? (*Reminder :  $1 \text{ m}^3 = 1000 \text{ L}$* ). Does it seem a lot ?