**Analysis of Water Use Data**

Use this comparison of European water use produced by the UK Environment Agency to practice skills of data analysis - graph production, percentages and explanations. Students often struggle to choose the correct form of data display and even struggle with how to calculate percentages.

Try to come up with potential reasons for the differences in the data.

A comparison made by the UK Environment Agency [**published**](http://webarchive.nationalarchives.gov.uk/20140328161547/http:/cdn.environment-agency.gov.uk/geho0809bqtd-e-e.pdf)in 2008 compared the use of fresh water by several European countries.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Drinking | Toilet Flushing | Baths and Showers | Kitchen & other use / Dish washing / Clothes Washing | External / Outdoor Use / Misc | Total (Litres) |
| UK | na | 51 | 33 | 63 | 3 | 150 |
| Denmark | 6.6 | 30.1 | 48.5 | 40.6 | 5.2 | 131 |
| Finland | 1 | 16 | 57 | 38 | 3 | 115 |
| Netherlands | 3.5 | 37.1 | 52.3 | 32.8 | 5.3 | 131 |
| Germany | 3.5 | 36.8 | 34.5 | 43.7 | 10.3 | 128.8 |
| Austria | 4 | 29.7 | 55.4 | 35 | 14.9 | 139 |

1. Use this data to plot graphs comparing the domestic water use in these six European countries.
2. What percentage of UK water use is needed for toilet flushing?
3. Which country uses the least water per capita?
4. Which country uses the most water as a percentage of its total for Baths and Showers.
5. Suggest a reason for the differences in the amounts of water used for toilet flushing.

**Views on Water**

Reading the [**Siemens Green City Index**](http://www.siemens.com/entry/cc/en/greencityindex.htm) you will see that the study rated different cities on water for different environmental indicators. Access to clean water was not the only indicator in use. They rated water consumption, system leakages, wastewater system treatment and water efficiency and treatment policies. This meant that Zurich, for instance, scored less well than Amsterdam because Switzerland’s abundance of water means that there is no political pressure to educate about reducing water use, becoming more efficient etc.

[**Here**](http://www.globescan.com/pdf/WaterViews_GlobalWaterPoll_GlobeScan.pdf) is a nice survey on global views on water from Globescan. If you click on the link you will download a pdf file. This might serve as inspiration for a study for an IA.

If you need to learn to design your own surveys and questionnaires, for information and guidance try  [**Designing Surveys and Questionnaires**](https://www.thinkib.net/ess/page/19370/designing-surveys-and-questionnaires)

**Possible research ideas:**

* To what extent does your country / state of origin affect the value you place on water?
* To what extent does your political allegiances affect your views on access to water?
* To what extent does your EVS affect your use of bottled water?

**Example Survey:**

1. Which Environmental Value System do you feel most closely aligned with? (An explanation would need to be given)

* ecocentric
* anthropocentric
* technocentric

Alternatively, you could ask to rate yourself 1-ecocentric 5-technocentric)

1. How often do you buy bottled water?

1 Never - 5 Every day ( 1 2 3 4 5 )

OR Why do you / don't you buy bottled water? (please tick as many reasons as needed)

* convenience
* taste
* habit
* security of being clean water
* fashion
* production of unnecessary waste
* tap water is fresher
* other - please specify