# Didactical Document Theme-Based Trail on Statistics (grades 7-9)
## *French curriculum*

In a city/a village :

**163291   "Statistics in Anse"**

**343208   "Statistics in Reyrieux"**

In a highschool :

**895733   "Statistics in the highschool "Raoul Dufy", Lyon, France"**

**List of the tasks**

| Statistics in Anse | Statistics in Reyrieux | Statistics in the Highschool Raoul Dufy - Lyon - France |
|---|---|---|
| 1. Disabled's person parking space : 0617763 | 1. Places of interest : 7817388 | 1. Encyclopedia : 1828325 |
| 2. Majority of initials : 4717767 | 2. The median prop : 0917389 | 2. Place of memory : 7928326 |
| 3. Most common initial : 8917768 | 3. Going to Trévoux on a saturday : 3717392 | 3. School Cafeteria : 2528327 |
| 4. Distance's median : 2917766 | 4. Common firstnames : 7817391 | 4. Enlightened administration : 5928328 |
| 5. Distances' average : 2317765 | 5. Yearly deaths during World War One : 0417390 | 5. Recess space : 0528329 |
| 6. Prime numbers Street Saint Antoine : 2317764 | 6. Places for the handicap ? : 0517386 | 6. Enlightening : 3828330 |
| 7. Distances' average (town hall) : 1517771 | | |
| 8. Distance's median (town hall) : 1317774 | | |

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|---|---|---|---|---|---|---|
| | | | 7. Mail collection : 6917387 | | | |

| Title | Grade | Main concepts | Students learn | Data to collect | Objects | MCM References |
|---|---|---|---|---|---|---|
| Sizes & Frequency | 7 | Proportion (of an identified subpopulation) | . Determine a frequency of an obvious sub-population<br>. Calculate a rounded percentage | Number of elements | . Parking spaces<br>. Parking spaces<br>. Memorial<br>. Proportion of tiles with or without lamps (or other object) | 0617763<br>0517386<br>7928326<br>3828330 |
| Sizes & Frequency | 7 | Proportion (of a subpopulation to identify) | . Determine a subpopulation to find its frequency | Number of elements | .Proportion of Prime numbers in street addresses<br>. On a map, proportion of places of interest near a center | 2317764<br>7817388 |
| Sizes & Frequency | 7 | Proportion (as a ratio of sizes of population) | . Determine the ratio between two populations | Number of elements | .Cafeteria/Restaurant tables | 2528327 |

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|---|---|---|---|---|---|
| Sizes & Frequency | 7 | Modal value of a population | . Find the most common element in a population | Number of elements | .Memorial (most common initial) | 8917768 |
| Sizes & Frequency | 8 | Cumulative frequency of subpopulation ordered by size | . Sort subpopulations by size<br>. Compute a cumulative frequency | Number of elements | .Memorial (the most common names) | 4717767 |
| Averages | 7 | Average value of a list of numbers | .Compute the average value of a list | List of numbers | .Distance signs | 1517771<br>2317765 |
| Averages | 7 | Average size of subpopulations | .List the sizes of subpopulation<br>.Compute the average value of a list | Number of elements | .Memorial (average number of deaths/year) | 0417390 |
| Averages | 7 | Average distance/time between objects/events | .Determine the number of objects or events<br>.Measure and/or compute the total distance or duration | Number of elements<br>Total distance or duration | .Average Distance between identical objects like lights/doors in a corridor<br>.Bus stop (average waiting time on a specific day) | 5928328<br>3717392 |
| Averages | 7 | Average area for each individual of a population (inverse of a density) | .Modelization of 2D-shapes<br>.Measurement of distances<br>.Computation of the average area for an element of the population | .Relevant distances | .Recess space at school | 0528329 |

Note: the header row for this table has 7 columns. I've listed them as (Topic, number, title, tasks, data, example, code).

| Median | 8 | Median value of a given list of numbers | .Sort the values of a list<br>.Find the median by taking the middle value of the sorted list | .List of numbers | .Distance signs | 2917766<br>1317774 |
| --- | --- | --- | --- | --- | --- | --- |
| Median | 8 | Median value for a given population | .Find the median element of a population by sorting it.<br>.Find the median by measuring the median element | .Median element of a population<br>.Measurement or observation of the element | .Books of a collection in a School Library<br>.Objects decreasing by size on the border of a walking way (like stacks) | 1828325<br>0917389 |