



## SCOPE & SEQUENCE

### GR. 8 – MATH



## Student Task

**GRADE 8: Math**

**STRAND: Statistics and Probability (Data Analysis)**

**TASK: Data Analysis of Lunches Using Spreadsheet and Various Graphs**







**PRODUCTIVITY TOOL: Spreadsheet**

**TIMELINE: 4 Classes (1 preparation, 1 summarizing data, 1 graphing, 1 analyzing results)**

**LEVEL OF DIFFICULTY: ☺☺ Average**

Students are asked to survey 10% of the school population (i.e. 40 of 400 students) about their eating habits at lunch. Specifically, the survey will include questions regarding five food categories: each of the four basic food groups, i.e. fruits and vegetables, dairy products, protein, breads and cereals, in addition to junk food.

Students are to:

-  survey a random sample from the population
-  tally the results, record them in a spreadsheet,
-  create various graphs to depict their results,
-  determine the appropriateness of graphs to depict the results,
-  extrapolate the results based on a larger sample, and
-  extrapolate the results over time




## ICT Outcomes

**The learner will:**

- C4** 3.1 create a plan for an inquiry that includes consideration of time management
- C6** 3.2 identify the appropriate materials and tools to use in order to accomplish a plan of action
- F1** 3.1 demonstrate an understanding that information can be transmitted through a variety of media
  - 3.3 apply terminology appropriate to the technology being used at this division level
  - 3.4 demonstrate an understanding that digital technology follows a logical order of operations
  - 3.8 demonstrate an understanding that technology is a process, technique or tool used to alter human activity
- F2** 3.2 identify potential technology-related career paths
  - 3.6 explain ways in which technology can assist in the monitoring of local and global environmental conditions
- F3** 3.2 explain the issues involved in balancing the right to access information with the right to personal privacy
  - 3.6 model and assume personal responsibility for ethical behavior and attitudes and acceptable use of information technologies and sources in local and global contexts
- F4** 3.2 understand the nature of various media and how they are consciously used to influence an audience
  - 3.3 identify specific techniques used by the media to elicit particular responses from an audience
- P2** 3.2 design, create and modify a spreadsheet for a specific purpose, using functions such as SUM, PRODUCT, QUOTIENT and AVERAGE
  - 3.3 use a variety of technological graphic tools to draw graphs for data involving one or two variables
- P5** 3.2 demonstrate proficient use of various information retrieval technologies






## Curriculum Outcomes

### **GRADE 8: Math**



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#### ***General Outcome***

-  Develop and implement a plan for the collection, display and analysis of data, using technology as required.

#### ***Specific Outcomes #1, 2, and 3***

1. Formulate questions for investigation, using existing data.
2. Select, defend and use appropriate methods of collecting data:
  -  designing and using surveys
  -  research, using electronic media
3. Display data by hand or by computer in a variety of ways, including box and whisker plots.

