## Task-based Activity Cover Sheet

**Task Title:** Identify peak production periods by interpreting a line graph

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|---|
| **Learner Name:** |
| **Date Started:**                                          **Date Completed:**<br><br><br>**Successful Completion:**        Yes___            No___ |
| **Goal Path:** Employment ___ Apprenticeship___  Secondary School ✓ Post Secondary ✓ Independence___ |
| **Task Description** |
| Read a line graph to compare same store Tim Horton's sales in Canada and the US over time |

| Competency: | Task Group(s): |
|---|---|
| C: Understand and Use Numbers | C4: Manage Data |
| A: Find and Use Information | A2: Interpret documents |

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|---|
| **Level Indicators:** |
| C4.2:   Make low level inferences to organize, make summary calculations, and represent data |
| A2.2:   Interpret simple documents to locate and connect information |
| **Performance Descriptors:**  see chart or click here |
| **Skill Building Activities:**  see the last page or click here |
| **Materials Required:** |
| • Pen or Pencil |
| • The learner should have a knowledge of line graphs |

**ESKARGO:**

C4.2:
- Interprets rates (e.g., crime rates) and ratios (e.g., shots–on-net to goals)
- Chooses and performs required operation(s); may make inferences to identify required operation(s)
- Selects appropriate steps to solutions
- Recognizes patterns and begins to identify trends in data (e.g., population, crime, demographic, inventory, injury)
- Uses strategies to check accuracy

A2.3:
- Manages unfamiliar elements (vocabulary, context, topic) to complete tasks
- Uses knowledge of vocabulary and sight words related to specific forms, tables, graphs, maps and flow charts to obtain meaning
- Navigates various displays of information to locate information

- Uses layout to locate information
- Uses various conventions of more complex forms, tables, graphs, maps and flow charts to obtain meaning; i.e., layout, rows and columns, titles, headings and sub-headings, types of graphs, x and y-axis, legends, symbols and icons to comprehend and interpret data
- Uses organizational features, such as headings, to locate information
- Reads graphs made with concrete materials, and demonstrates understanding (e.g., reads Canada Food guide icons for number of recommended daily portions)
- Identifies and describes trend in graphed data using informal language
- Makes inferences and draws conclusions based on the analysis of tables, charts and graphs
- Identifies sources, evaluates and integrates information
- Evaluates arguments that are based on data analysis

**Attitudes:**

Practitioner,

We encourage you to talk with the learner about attitudes required to complete this task set.  The context of the task has to be considered when identifying attitudes.  With your learner, please check one of the following:

□ Attitude is not important     □ Attitude is somewhat important     □ Attitude is very important

**Task Title:** Identify peak production periods by interpreting a line graph

Graphs represent data visually to:

- compare data from different sources

- make complex data more easily understood

- to make predictions or to show change over time

Look at the line graph "Figure 1:  Same-store sales".

**Learner Information and Tasks:**

**Task 1:**     In which quarter and year did this Canadian Tim Horton's Store experience the best sales?

**Task 2:**     Calculate the percentage difference between the best sales and the worst sales for the Canadian Tim Horton's Store.

**Task 3:**     Which store, Canadian or US Tim Horton's, experienced the largest drop in percent sales within one year and what was that percent difference?

**Task 4:**     Which quarter and year had the best combined percent sales for both the Canadian and US stores?

**Task 5:**     What is the percent difference in sales from the start of the graph in 2008 compared to the end of the graph in 2014 for both the Canadian and the US stores?

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### Figure 1: Same-store sales
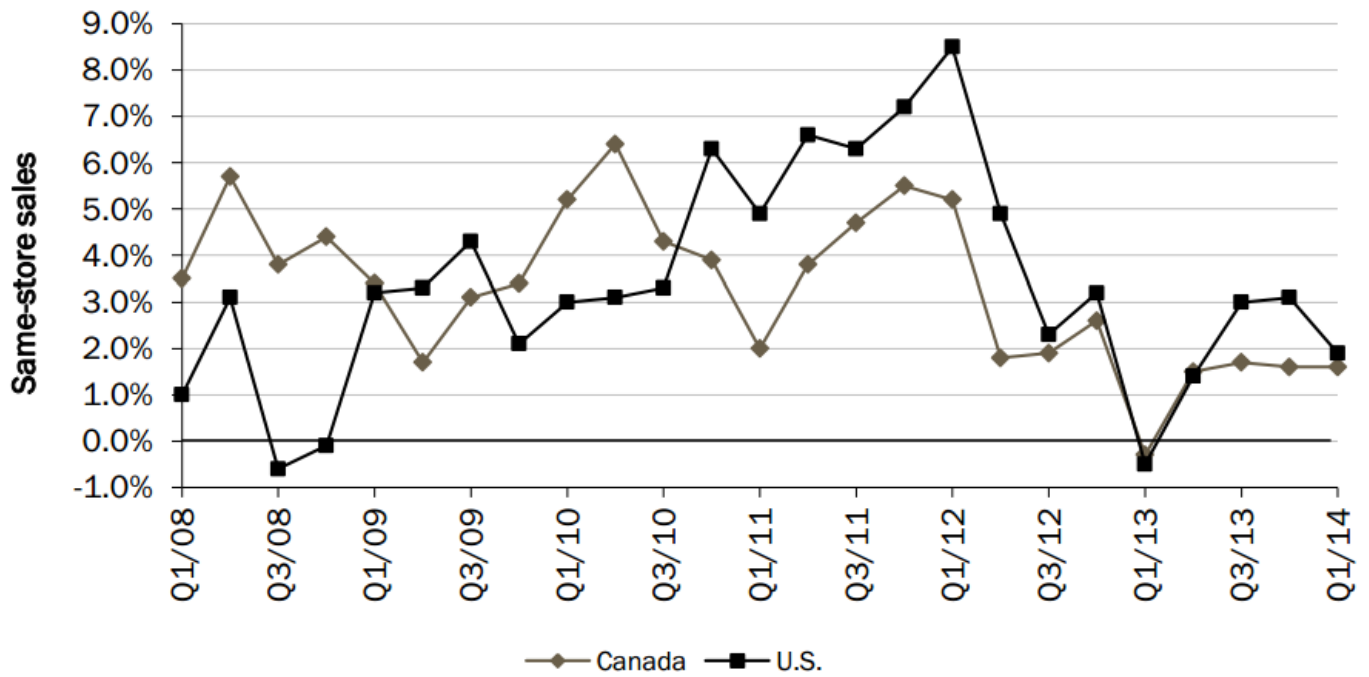


Source: Company reports, Canaccord Genuity research

**Task Title:** Identify Peak Production Periods of Energy

**Answer Key**

**Task 1:**     Q2/10

**Task 2:**     Best Sales:  6.5%  Worst Sales:  -0.8% = 7.3% (this could vary by 0.3 to 0.6 %...check their work to see what they decided were the best and worst sale percentages and that it is just not a mistake in using negative integers)

**Task 3:**     US Store (between Q1 2012 and Q1 2013) had a peak sale percent of 8.5% and a low sale percent of -0.5%therefore the total percent sales difference was 9.0% (see explanation for Task 2 answer in case of variance)

**Task 4:**     Q1/12 (The US Store had 8.5% and the Canadian store had 5.2% for a combined sale of 13.7%; Q4/11 had the next best with 7.1% and 5.6% for a combined sale of 12.7%)

**Task 5:**     Canadian Store – 2008 = 3.5% and 2014 = 1.7% $\therefore$ the difference is 1.8% (answers could vary 3% for either answer)

US Store – 2008 = 1% and 2014 = 1.9% $\therefore$ the difference is 0.9%

Task Title: Identify peak production periods by interpreting a line graph

| | Performance Descriptors | Needs Work | Completes task with support from practitioner | Completes task independently |
|---|---|---|---|---|
| C4.2 | • calculates using numbers expressed as whole numbers, fractions, decimals, percentages and integers | | | |
| | • makes estimates | | | |
| | • interprets rates (e.g. crime rates) and ratios (e.g. shots-on-net to goals) | | | |
| | • chooses and performs required operation(s); may make inferences to identify required operation(s) | | | |
| | • selects appropriate steps to solutions | | | |
| | • recognizes patterns and begins to identify trends in data (e.g. population, crime, demographic, inventory, injury) | | | |
| | • uses strategies to check accuracy | | | |
| A2.2 | • performs limited searches using one or two search criteria | | | |
| | • locates information in simple graphs and maps | | | |
| | • uses layout to locate information | | | |
| | • makes connections between parts of documents | | | |
| | • makes low-level inferences | | | |

**This task:**    was successfully completed___          needs to be tried again___

| Learner Comments |
|---|
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_____                    _____

**Instructor (print)**                                                    **Learner Signature**

## Skill Building Activities

**Links to online resources:**

- http://www.skillsyouneed.com/num/graphs-charts.html - information on the types of charts and graphs there are, how to read and understand the data presented on charts and graphs
- http://cemc2.math.uwaterloo.ca/mathfrog/main.shtml - links for Grades 4,5 & 6 math activity sheets including information on graphing – reading and interpreting, completing and creating different line graphs
- http://www.mathgoodies.com/lessons/graphs/line.html - learning activities based on line graphs; given graphs and asked specific questions to determine the information from the data given
- https://www.youtube.com/watch?v=n2YkbdNORp8 –  1.39 minute video on line graphs

**LearningHUB online courses available:**

- **Reading & Writing, Independent Study (Assigned by practitioner after assessment)** :
  - Reading Level 1, Assignment 3 (Reference and Technical Material 1);
  - Reading Level 2, Assignment 3 (Letters and Reports 2);
  - Reading Level 3 Assignment (Reading Strategies 3+ Reading Reports 3);
  - Document Use Level 1, Assignment 2 (Data Collection and Reading Graphical Data 1);
  - Document Use Level 2, Assignment 2 (Computing Graphical Data 2);
  - Document Use Level 3, Assignment 1 (Forms 3 + Complex Charts and Graphs 3), Assignment 2 (Charting and Graphing 3), Assignment 3 (Constructing Charts and Graphs 3), and Assignment 4 (Control Charts 3).

- **Math, Independent Study (Assigned by practitioner after assessment):**
  - PLATO 303 Data Analysis
  - PLATO 401 Measurement
  - PLATO 402 Geometry – Basic Skills 1 & 2

- **Independent Study Short Courses (Moodle)**
  - Apprenticeship Math

- **Live Classes (SABA)**
  - Understanding Algebraic Graphing

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