

Unit 4: Designing Budgets

MEL4E

Lesson Outline

BIG PICTURE

Students will:





- Refer to and expand on the bulletin board/word wall developed in unit 3 to support the concepts of this unit.
- Identify the difference between discretionary and non-discretionary spending
- Design and adjust budgets

Day	Lesson Title	Math Learning Goals	Expectations
1	I Must Pay, I Could Pay <i>(lesson included)</i>	<ul style="list-style-type: none"> • Establish a definition of discretionary and non-discretionary spending using the items on the bulletin board as a starting point. • Expand the bulletin board to include expenses not related to accommodations and classify these as discretionary and non-discretionary. • Create a graphic organizer to classify discretionary and non-discretionary expenses as fixed or variable expenses. 	PF. 2.1, PF. 2.2
2	What Do You Think: Must or Could? <i>(lesson included)</i>	<ul style="list-style-type: none"> • Analyze case studies to determine which items are contextually discretionary vs. non-discretionary. • Defend their understanding of the terms to prove or refute generalizations. 	PF. 2.1, PF. 2.2
3	What is a Budget? <i>(lesson included)</i>	<ul style="list-style-type: none"> • Prepare a placemat on the concept of budget. • Consolidate with a class Frayer Model of a budget. • Brainstorm connections between the graphic organizer (Day 1) and the Frayer model. • Design a budget template. 	PF. 2.3, PF. 2.4
4	More on Budgets <i>(lesson included)</i>	<ul style="list-style-type: none"> • Analyse (e.g. use case studies, Jigsaw groupings) a variety of budgets set in context in various phases of a person's life, (e.g. single, married, with children, retired) and various sources/levels of income (e.g. employment, welfare, unemployment) • Modify budget template based on analysis. 	PF. 2.3, PF. 2.4
5	Paying for Accommodation <i>(lesson included)</i>	<ul style="list-style-type: none"> • Identify and describe the factors to be considered in determining the affordability of accommodation in the local community. • Discuss the need to consider a monthly payment for owning that includes mortgage payment, property taxes, and house insurance. • Estimate monthly payments by type of owned accommodation within the local community (Refer to data on the bulletin board.). • Discuss the proportion of the monthly budget that should be allocated to accommodation. 	PF. 2.5
6	Preparing Budgets <i>(lesson included)</i>	<ul style="list-style-type: none"> • Prepare monthly budgets based on given case studies with and without technology. • Explore the proportions of each item in the budget. 	PF. 2.4
7	That Changes It <i>(lesson included)</i>	<ul style="list-style-type: none"> • Adjust monthly budgets based on changes of circumstance for the case studies with and without technology. 	PF. 2.6
8 - 12	Career Search Culminating Task for Units 2,3,4 <i>(included)</i>	<ul style="list-style-type: none"> • Investigate a career of choice. • Estimate likely net income from the career based on tax and other deductions. • Develop a detailed monthly budget with rationale. (may be able to connect to Unit 1 for part of the rationale.) 	

Unit 4: Day 1: I Must Pay, I Could Pay		MEL4E
Minds On: 15	<p>Learning Goals: Students will:</p> <ul style="list-style-type: none"> Establish a definition of discretionary and non-discretionary spending using the items on the bulletin board and their own placemats as a starting point. Expand the bulletin board to include expenses not related to accommodations and classify these as discretionary and non-discretionary. Create a graphic organizer to classify discretionary and non-discretionary expenses as fixed or variable expenses. 	<p>Materials</p> <ul style="list-style-type: none"> BLM 4.1.1 BLM 4.1.2 Graph paper
Action: 50		
Consolidate: 10		
Total=75 min		
Assessment Opportunities		
Minds On...	<p>Small Group → Discussion Place expenses from the Unit 3 bulletin board on recipe cards for students to manipulate. Ask students to classify the costs into two categories. Set a time frame for their discussion (e.g. in 5 years, 10 years, etc. from now)</p> <p>Whole Class → Discussion Ask students to share their criteria for placing the costs into the two categories. The goal is for their two categories to resemble costs that are ‘a need’ and those that are ‘a want’. If no group has organized their costs this way than ask groups to share how they organized it. Establish terminology of discretionary and non-discretionary expenses, as well as fixed versus a variable cost.</p>	<p>Word Wall Discretionary expense Non-discretionary expense Fixed Cost Variable Cost</p>
Action!	<p>Whole Class → Brainstorm Students brainstorm where they hope to be (in pre-determined time frame) in terms of personal finance. Lead students to discuss items that fit under the financial categories of Leisure, Learning, Luxury, and Lifestyle, and whether they would be a discretionary or non-discretionary expense.</p> <p>Individual → Activity Individually, students complete BLM 4.1.1 to outline (in writing and/or sketches) major personal financial goals in the designated time frame. This Personal Financial Goals sheet is to be placed in the course portfolio for reflection at the end of the unit.</p> <p>Learning skills (Works Independently)/observation/mental note: Circulate while students complete the BLM and take note of their independent work habits.</p> <p>Whole Class → 4 Corners Activity Ask students to choose the financial goal category that is most important to them, and go to that corner of the room. Record on the board the tally of numbers in each corner. Ask a sample of students to explain their personal category choice.</p> <p>Pairs → Discussion Students review their personal financial goals BLM 4.1.1 to determine which items are <i>Needs</i> versus <i>Wants</i>, and record these on BLM 4.1.2.</p> <p>Mathematical Process Focus: Reflecting - Students will Reflect on their personal financial goals to determine how important they are.</p>	
Consolidate Debrief	<p>Whole Class → Sharing. Ask each group to share an item from each category and explain their choice. Reinforce the concept of discretionary versus non-discretionary expenses. Highlight any observations in regard to their selection of lifestyle and the type of expense.</p>	
Exploration Application	<p>Home Activity or Further Classroom Consolidation Create a bar or circle graph of the data collected during the four corners activity.</p>	

Name: _____

Date: _____

<p>LEISURE</p> 	<p>LEARNING</p> 
<p>LUXURY</p> 	<p>LIFESTYLE</p> 

Me in

Years

Unit 4: Day 2: What Do You Think: Must or Could?		MEL4E
Minds On: 5	Learning Goal: Students will: <ul style="list-style-type: none"> Analyze case studies to determine which items are contextually discretionary vs. non-discretionary Defend their understanding of the terms to prove or refute generalizations 	Materials <ul style="list-style-type: none"> Chart paper Sticky notes Markers Highlighters BLM 4.2.1 BLM 4.2.2
Action: 45		
Consolidate:25		
Total=75 min		
Assessment Opportunities		
Minds On...	Whole Class → Wall Graphic Organizer Write the Titles “Non-Discretionary Spending (A <i>Need</i> or a <i>Must Have</i>)” and “Discretionary Spending (A <i>Want</i> or a <i>Could Have</i>)” on chart paper, and divide the charts into 2 columns with the headings <i>Fixed</i> and <i>Variable</i> , and post them. Instruct students to select five expenses from Unit 4 Day 1’s graphic organizer (BLM 4.1.1), and post them with sticky notes on the appropriate piece of chart paper under the appropriate heading, according to whether the expense is a Fixed or Variable cost.	If any disagreements arise, save these for consolidation.
Action!	Pairs → Identify and Classify Assign each pair of students one of the case studies from BLM 4.2.1. Instruct students to highlight each expense as they read the case study. They should then identify expenditures in the case study and classify them as Non-Discretionary or Discretionary. Learning Skills(Teamwork)/observation/rubric: Circulate while students work in pairs and use the ministry learning skills rubric to assess their teamwork. Small Groups → Comparing Notes Arrange pairs that share the same case study to compare notes. Ask them to come up with a consensus in their group and record on chart paper the expenses for each category. Small Groups → Presentation Each group presents a summary of their case study, a classification of the expenditures for their case study, and justifies their reasoning. Mathematical Process Focus: Connect – students will connect information given in their case study to their own life to classify and justify each expense.	
Consolidate Debrief	Whole Class → Debate Acknowledge any discrepancies students had when they were classifying their own needs and wants. Divide the students into 2 groups (need, want). Students should then debate controversial items like transportation, clothing, or items from the case studies that generated different categorization. As a class create list of items that are clearly needs and wants, or those which can be either, on the template provided (BLM 4.2.2) and record their reasons for choices. Students should then reassess the placement of their sticky notes from the Minds On activity.	
Exploration Application	Home Activity or Further Classroom Consolidation Write a journal entry to answer the following question: <i>When does a need become a want and when does a want become a need?</i>	

BLM 4.2.1 Expenditure Case Study A:

MEL4E

Single with Dependent(s)

Jan is a 28 year old single mom with a six year old daughter. She is currently attending school to obtain her high school diploma. Jan works at a part-time job two evenings a week and all day Sunday. She also receives mother's allowance so that she can finish school. Jan and her daughter live in a small two bedroom subsidized housing apartment where utilities are included in her rent.

Jan goes to school when her child (Jenna) is also at school, so she has no daycare expenses on weekdays. Jan's sister looks after Jenna for free when Jan works. Jan pays her sister or another sitter when she goes out in the evenings or on weekends with her friends. Sometimes Jan hires a babysitter so that she is able to focus on her studies to complete assignments or to study for upcoming exams (at the library). Jan had to pay \$50 for an annual membership to the library where she can use their computers to do research.

Jan can walk to her school from home, and her daughter is bussed to school. Jan can also walk to a local convenience store, but must take the bus to do other grocery shopping and marketing. Jan often takes a taxi back from marketing if she is tired or has a lot to carry.

Jan has to work hard to make ends meet so she usually shops for clothing for herself and her daughter at second-hand stores. When Jan really wants clothing for a special occasion she goes to her mother's to use the family sewing machine to make the item herself.

Although Jan must be very careful about her spending, she buys coffee each day on her way to school. She always brings her lunch from home since she likes to work on homework and eat at the same time. In case of an emergency, Jan tries to put aside \$20 a week as savings for a rainy day.

In the table below list all expenditure items from this case study and then determine whether items are discretionary or non-discretionary spending and explain why. *The first expenditure is completed for you.*

Expenditure Items	Non-Discretionary (Needs or Must Haves)	Discretionary (Wants or Could Haves)
Apartment Rent	ND since must have a place to live.	

BLM 4.2.1: Expenditure Case Study B:

MEL4E Single, No Dependents

Dharka is a 22 year old single male who has completed high school and is attending community college in a city that is 100 km from his parents' home. Dharka currently has no dependents.

Dharka received an OSAP loan of \$6800 to attend college and his parent's give him an allowance of \$100 per week while he is attending school. Dharka works in the summers to earn money to help pay for his education. Last summer Dharka saved \$3250 from his summer job. His tuition fees are \$3000 for the school year and his residence/dining hall fees are \$5200. Books and other supplies cost \$950.

Dharka can walk to all classes, the library and to the dining hall from his residence building.

Dharka is a very conscientious student who works in the campus library most evenings and on weekends. However, Dharka misses his mother's traditional cooking and his younger brothers and sisters, so he tries to go home for one weekend each month. The return bus ticket costs him \$38.00 (student rate). Dharka has an aunt and an uncle who live just outside of the city where he goes to school. He visits them at least once a week to share a meal and to get his laundry done at the same time. Dharka must take a cab to visit these relatives since the city bus does not travel there.

Dharka is also an active member of the Environmental Team at his college. He donates \$10 each week to help to publicize ways that students can help the environment while they are at the college. Dharka is a real music fan and he likes to purchase traditional music from his parents' homeland whenever he finds CD's on sale.

In the table below list all expenditure items from this case study and then determine whether items are discretionary or non-discretionary spending and explain why. *The first expenditure is completed for you.*

Expenditure Items	Non-Discretionary (Needs or Must Haves)	Discretionary (Wants or Could Haves)
<i>Tuition</i>	<i>ND since must pay to attend school.</i>	

BLM4.2.1: Expenditure Case Study C:

MEL4E Couple, No Dependents

Ling and Lyle have decided to move in together. They have been dating since high school and after two years of working and living at home they have decided they have enough money and solid enough jobs to take the next step.

Lyle works as a plumber's apprentice. He generally works 40 hours a week, making about \$16.00 an hour. Lyle has two more years to go to complete his apprenticeship and then he will be a ticketed plumber earning anywhere from \$60 000 to \$90 000 per year. Lyle still has 4 six week college sessions to complete over the next two years. Each 6 week in-school session costs him \$800 for the course instruction and materials. Ling is a registered massage therapist who has just completed her two year training program. She has just taken a job working in a holistic healing clinic. Ling has a student loan of \$7800 to pay off now that she is working.

Ling and Lyle have selected a small one bedroom apartment that has a reasonable rent. Utilities are not included in the cost of rent. They both agree that they will have high speed internet and cable television hook-ups from the time they move in together. Parents and relatives have provided all the basic furnishings they require, so the couple spends their own money decorating the apartment. They both belong to a gym where they work out and swim a few times a week. Because Ling and Lyle are so busy with their work schedules they like to eat out or order out two or three times a week. The couple has also purchased a new car. They chose their new car because the government was offering a rebate since the car is very fuel efficient. Ling uses the car to drive to work, although public transportation is available. Lyle has a company van to get him to various job sites.

Ling and Lyle have plans to marry right after Lyle finishes his apprenticeship. Ling wants to be married on a Caribbean Island so the couple is saving each month to be able to have their wedding and honeymoon at the same place.

In the table below list all expenditure items from this case study and then determine whether items are discretionary or non-discretionary spending and explain why. *The first expenditure is completed for you.*

Expenditure Items	Non-Discretionary (Needs or Must Haves)	Discretionary (Wants or Could Haves)
<i>Apartment decorations</i>	.	<i>D since these are not required.</i>

BLM4.2.1: Expenditure Case Study D:

MEL4E Couple with Dependents

Nash and Nina have been married now for 10 years. They have 3 children, a girl aged 9 and twin boys aged 4. Nash is a diesel mechanic for a trucking firm and Nina works at a restaurant in the evenings only to save babysitting costs.

Nash and Nina never seem to have enough money to cover all of their expenses each month, although Nash makes good money and often is asked to work overtime on weekends when he is paid double time. Nina would like to go back to school to earn more money in a daytime job, but wants to wait until the twins are older and there is more money in the bank.

Nash and Nina own their house, a 'fixer-upper' they purchased 5 years ago. So far they have only had the money to pay for the mortgage, the insurance, and the repairs that can't wait, like re-shingling the roof, digging a new well and replacing the furnace that quit two winters ago.

The car the family owns is an old one, but Nash is mechanically inclined enough to keep it running well enough to use to get both adults to their jobs. They would never trust it anymore to take a driving vacation, so family holidays are restricted to camping at nearby parks in the summer.

The children all wear glasses and need braces. Neither parent has an extended health plan that will cover these expenses. All of the children play organized after-school sports, an expense their parents feel is justified to keep them from becoming 'couch potatoes'.

Nash and Nina are so anxious to re-insulate their home and add new siding to decrease heating and cooling expenses that they are considering taking out a home improvement loan.

In the table below list all expenditure items from this case study and then determine whether items are discretionary or non-discretionary spending and explain why. *The first expenditure is completed for you.*

Expenditure Items	Non-Discretionary (Needs or Must Haves)	Discretionary (Wants or Could Haves)
<i>Mortgage payment</i>	<i>ND – family must have a safe, inexpensive place to live</i>	

BLM4.2.1: Expenditure Case Study E:

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Single with Exceptional Circumstances

Gina has had a rough life. She was involved in a fatal car crash that killed her parents and her older brother. It also left her with serious back problems at 14 years old. Gina is now 18 and has completed secondary school so she has moved out of her foster home to live on her own.

Gina receives a small disability pension, a Canada Pension Allowance, because of her deceased parents and a \$150 000 insurance payment that she will receive when she turns 19 years old.

Gina is planning to buy a duplex with her insurance inheritance. She hopes that if she rents out the other half she will have some income, since she is unlikely ever to be pain free enough to work more than part-time hours at minimum wage at her reception job at a local hotel.

Gina visits a chiropractor at least 3 times a week. She also belongs to a pool where she attends aqua fitness classes every week day. Gina is considering trying acupuncture to help to ease her back pain. She takes muscle relaxants and pain medication daily to help her to manage her pain. Gina does not have a medical plan so she must pay for all of these expenses from her pensions and part-time job income.

Gina wants to buy an electric bed with a built-in massage pad to help her to cope with her back pain. She is also considering paying someone to clean her house, cut the grass and shovel snow when she purchases her duplex. She feels that her back problems will not permit her to attend to all of the upkeep required in owning and maintaining a property.

Gina is frugal when it comes to shopping. She likes to take the time to search for great bargains in groceries, clothing and household items. Gina feels these are areas she has the time for, to keep these expenses to a minimum. She never splurges in these areas of spending.

In the table below list all expenditure items from this case study and then determine whether items are discretionary or non-discretionary spending and explain why. *The first expenditure is completed for you.*

Expenditure Items	Non-Discretionary (Needs or Must Haves)	Discretionary (Wants or Could Haves)
<i>Chiropractor fees</i>	<i>ND – to cope with pain</i>	

Unit 4: Day 3: What is a Budget?		MEL4E
Minds On: 20	<p>Learning Goals: Students will:</p> <ul style="list-style-type: none"> • Prepare a place mat on the concept of budget. • Consolidate with a class Frayer Model of a budget. • Brainstorm connections between the graphic organizer (Day 1) and the Frayer model. • Design a budget template. 	<p>Materials</p> <ul style="list-style-type: none"> • Chart paper • Envelopes with budget items on index cards. • tape • BLM 4.3.1 • BLM 4.3.2 • BLM 4.3.3
Action: 40		
Consolidate: 15		
Total=75 min		
Assessment Opportunities		
Minds On...	<p>Small Groups → Placemat</p> <p>In groups, have students create a placemat on chart paper with the question “What is a budget?” in the centre of each. They should write individual answers first silently and then summarize the group’s ideas in the centre under the question.</p> <p>Whole Class → Sharing</p> <p>Have groups share their ideas found in the placemat activity and use this opportunity to review terminology and add new terms to the Word Wall.</p> <p>Post the student’s placemats in the classroom for reference.</p>	<p><u>Word Wall</u></p> <p>Budget Income Expense Surplus Shortage</p>
Action!	<p>Small Groups → Classification</p> <p>Write the following headings on chart paper and post these on a wall in the classroom: Income, Non-Discretionary Expenses and Discretionary Expenses</p> <p>Prepare envelopes with budget items on index cards (see BLM 4.3.1 for sample budget items - one per index card, including a variety from each category: Income, Non-Discretionary Expenses and Discretionary Expenses.).</p> <p>Distribute the envelopes to groups and instruct them to categorize and tape each item under one of the above headings on the classroom wall.</p> <p>Reasoning & Proving/oral questioning/mental note: Ask groups why they have categorized one or two items and assess their reasoning skills to ensure that students understand the new terms being used.</p> <p>Whole Class → Sharing</p> <p>Ask for justification for some items from each group. Add to the three categories any items from the Wall Graphic Organizer established on Day 2 that have not already been presented.</p> <p>As a class design a possible budget template. Emphasize that the template is to be used as a basis for the class, but in fact, budgets are tailored to meet individual needs and wants. Refer to BLM 4.3.2 for a sample budget template.</p> <p>Mathematical Process Focus: Connecting – students will connect previous lessons and personal life experiences to give input into the class budget template.</p>	
Consolidate Debrief	<p>Whole Class → Sharing</p> <p>Complete a Definition Chart for <i>Budget</i>, BLM4.3.3. Refer to BLM4.3.3 (teacher’s notes) for possible statements.</p>	
Exploration Application	<p>Home Activity or Further Classroom Consolidation</p> <p>Find another budget template (e.g. from the internet, a family member or a family friend) and compare the template to the one we created in class today.</p>	

Distribute envelopes containing sample budget items, one per index card, including a variety from each category: Income, Non-Discretionary Expenses and Discretionary Expenses. Small groups categorize and place each item on a large budget template on the classroom wall.

Discuss items from the large budget template. Ask for justification for some items from each group. Collaborate on a budget template with common budget items.

Sample Budget Items**Income**

Employment income
Investment income
Government assistance

Tax credit
Interest income
Investment income

Other income

Expenses

Rent
Cable TV
Retirement savings
Water
Mortgage
Regular savings
Gift fund
Property tax
Day care
Public transportation
Insurance
License fees

Telephone
Debt payments
Electricity/heat
Car payment
Income tax
Car repairs
Gas/oil
Parking
Eating out
Groceries
Vacations
Clothing

Home repairs
Furniture
Medical/prescriptions
Dental
Recreation
Entertainment
Health Club
membership
Personal care
Charitable donations
Gifts

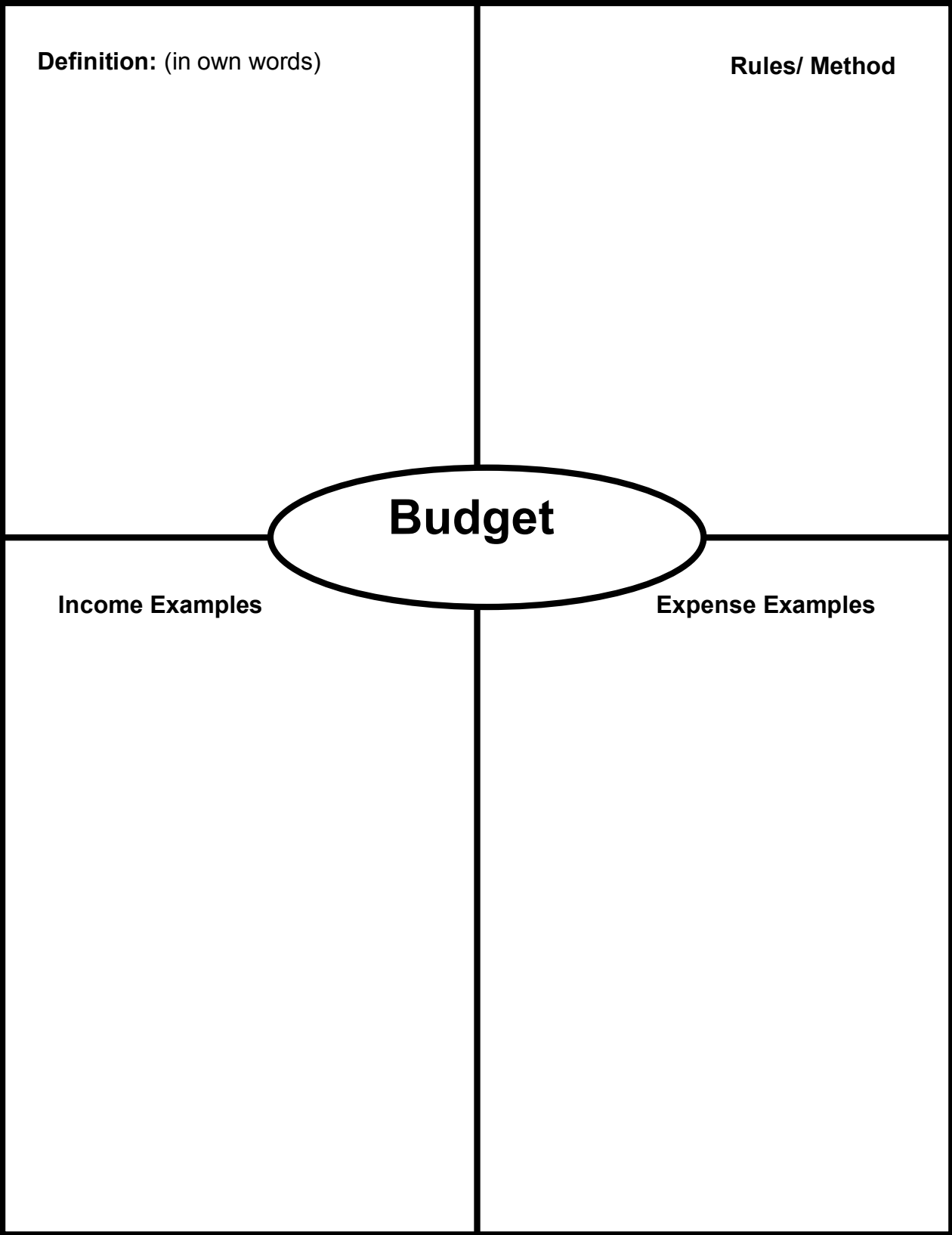
BLM 4.3.2: Budget Template (sample)

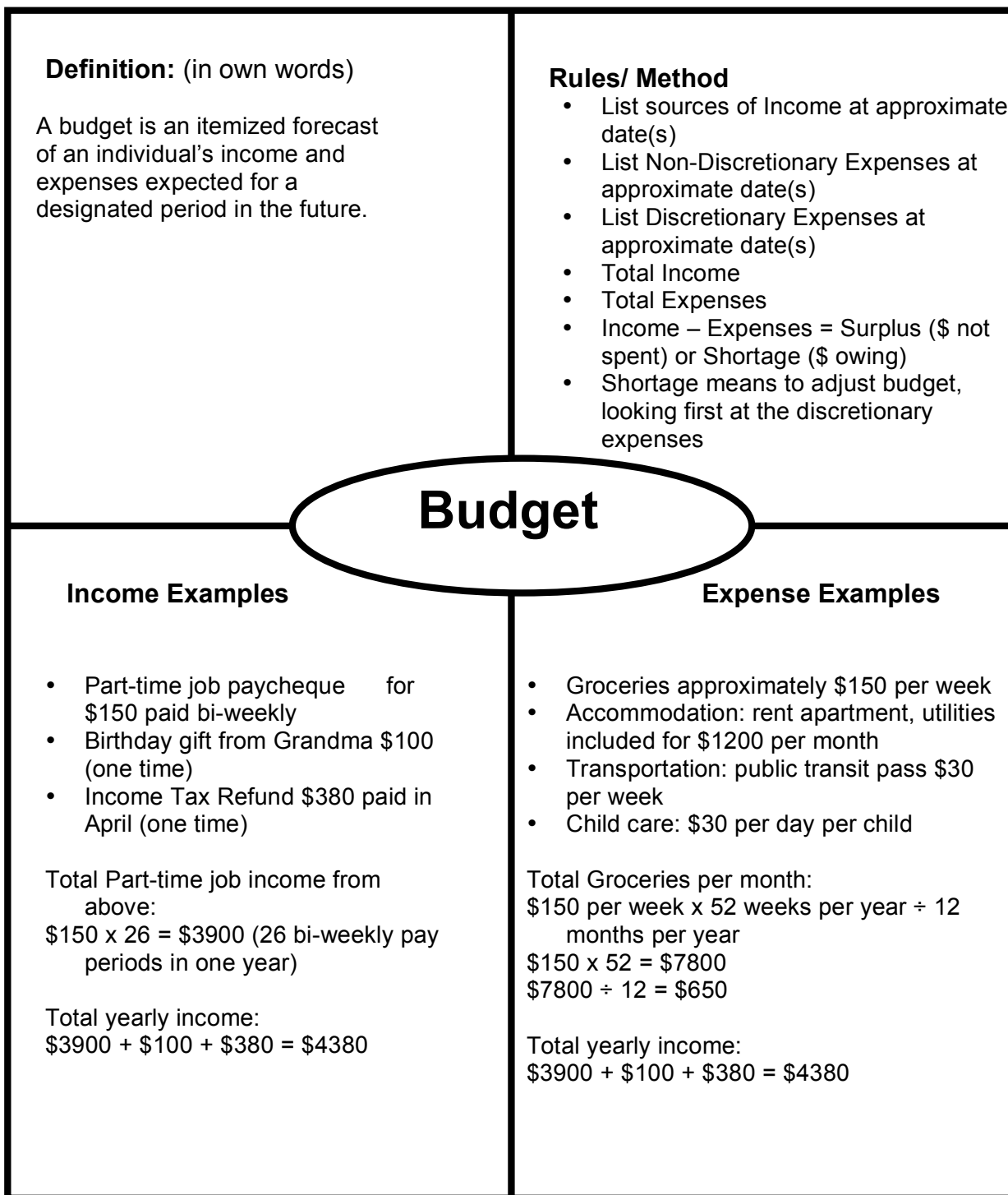
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Income	January	February	March	April	May	June	July	August	September	October	November	December	Total
Employment Income													
Interest/Dividends													
Other													
TOTAL Income													
Non-Discretionary Expenses	January	February	March	April	May	June	July	August	September	October	November	December	Total
Mortgage/Rent													
Utilities													
Telephone													
Groceries													
Child care													
Pet care													
Clothing													
Transportation													
Gas/fuel													
Insurance													
Health club dues													
Life insurance													
Medicine													
Veterinarian													
Discretionary Expenses													
Entertainment													
Dining Out													
Vacation													
Subscriptions													
Other													
TOTAL Expenses													
Surplus/Shortage													

BLM 4.3.3: Definition Chart

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Unit 4: Day 4: More on Budgets		MEL4E
Minds On: 5	Learning Goals: Students will: <ul style="list-style-type: none"> Analyse (e.g. use case studies, Jigsaw groupings) a variety of budgets set in context in various phases of a person's life, (e.g. single, married, with children, retired) and various sources/levels of income (e.g. employment, welfare, unemployment) Modify budget template based on analysis. 	Materials <ul style="list-style-type: none"> Highlighters Budget Created on day 3 BLM 4.4.1
Action: 55		
Consolidate: 15		
Total=75 min		
Assessment Opportunities		
Minds On...	Whole Class → Discussion Discuss how various phases in a person's life will affect their budget. The Class Budget Template created on Day 3 will strengthen the idea that a budget is personalized.	
Action!	Whole Class → Activity Instructions Create and copy of a blank budget template. Explain the Jigsaw activity to the class. Expert Groups → Jigsaw Place students into expert groups and give each group one of the Personal Profiles on BLM 4.4.1. Expert groups should read the profile provided, identifying and highlighting important information. Expert groups then analyse the Personal Profile, to fill in the budget template by creating categories for expenses and income for the profile and the amounts for each category. Expectations/Observation/anecdotal comments - Circulate to assist expert groups with clarification of Personal Profile and give feedback to groups as they work through their assigned profile. Numbered Heads → Jigsaw Use numbered heads to form new groups. Students share with their new group the categories filled in on their budget template. Small groups will discuss and share with the class common and unique categories used in their Personal Profile. As the groups present, list the common and unique categories that are generated. Mathematical Process Focus: Problem Solving – students will problem solve to determine the categories for their personal profile's budget.	
Consolidate Debrief	Whole Class → Discussion Revise the Class Budget Template according to common and uncommon categories presented by the small groups. This updated Class Budget Template will be used for the remaining unit lessons.	
<i>Concept Practice</i>	Home Activity or Further Classroom Consolidation Complete practice problems involving percent and proportions as assigned.	

BLM4.4.1: Budget Profile A

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In your small group, read the profile below.

Personal Profile: Judy

Judy is a single woman, 25 years old. Her take home pay is \$2314.92/month. She also earns \$48 interest per month on her savings account. Judy rents a 1-bedroom apartment for \$825/month. She does not own a car and uses public transportation to travel to and from work. Judy also has a student loan for which she repays \$258/month.



1. Use one highlighter to identify all sources of **income**.
Write in all income amounts on the Class Budget Template.

Total the **income** for each month.
2. Use a different coloured highlighter to identify all sources of **expense**.
Write in all expense amounts on the Class Budget Template.
Estimate other possible expenses for this Profile (e.g. everyone needs to eat food; estimate an amount for Groceries &/or Eating Out).

Total the **expenses** for each month.
3. Subtract the Total Expenses from the Total Income for each month.
A Surplus is when your Income minus Expenses = a positive number.
A Shortage is when your Income minus Expenses = a negative number.
Calculate the **Surplus/Shortage** amounts on the Class Budget Template.



BLM4.4.1: Budget Profile B

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In your small group, read the profile below.

Personal Profile: John

John is a 35 year old, divorced man with one child (who lives with his mom). His take home pay is \$4123 per month. He pays \$1200 per month in child support to his ex-wife. He owns a 2-storey home and his monthly mortgage payments are \$475 every 2 weeks. His car expenses total \$145 monthly and his car insurance costs him \$113 every month. His house insurance is \$47.36 monthly. John also has an outstanding credit line of \$8500. The only amount due on this account is the interest of about \$55 monthly. However John is trying to pay off the credit line within the next 2 years, so he pays off as much of this loan as he can afford each month.



1. Use one highlighter to identify all sources of **income**.
Write in all income amounts on the Class Budget Template.

Total the **income** for each month.

2. Use a different highlighter to identify all sources of **expense**.
Write in all expense amounts on the Class Budget Template.

Total the **expenses** for each month.

3. Subtract the Total Expenses from the Total Income for each month.
A Surplus is when your Income minus Expenses = a positive number.
A Shortage is when your Income minus Expenses = a negative number.
Write in all Surplus/Shortage amounts on the Class Budget Template.



BLM4.4.1: Budget Profile C

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In your small group, read the profile below.

Personal Profile: Dave and Anna

Dave and Anna are married with 2 young children (ages 5 and 7 years old). Their combined take home pay is \$900 per week. They own a town house with a bi-weekly mortgage of \$675. Property taxes are \$1800 annually. Their car expenses are \$160 monthly and their car insurance costs \$128 for 2 cars every month. House insurance is currently \$35 monthly. Dave and Anna save into an RESP for the children (\$200 every month).



1. Use one highlighter to identify all sources of **income**.
Write in all income amounts on the Class Budget Template.

Total the **income** for each month.

2. Use a different highlighter to identify all sources of **expense**.
Write in all expense amounts on the Class Budget Template.

Total the **expenses** for each month.

3. Subtract the Total Expenses from the Total Income for each month.
A Surplus is when your Income minus Expenses = a positive number.
A Shortage is when your Income minus Expenses = a negative number.
Write in all Surplus/Shortage amounts on the Class Budget Template.



BLM4.4.1: Budget Profile D

MEL4E



In your small group, read the profile below.

Personal Profile: Jacob

Jacob is 68 years old and retired. From the government he receives a Canada Pension Plan payment of \$848/month and he also receives an Old Age Security payment of \$484/month. Jacob owns his home now but he must pay property tax of \$3000 annually. Jacob's wife died last year and Jacob is still paying off the loan needed to pay legal fees and burial fees. For these Jacob must pay \$100/month for 6 more payments. Jacob enjoys golfing (annual club member of \$500) and bowling (annual league membership of \$100). Jacob usually eats out four nights a week.



1. Use one highlighter to identify all sources of **income**.
Write in all income amounts on the Class Budget Template.

Total the **income** for each month.

2. Use a different highlighter to identify all sources of **expense**.
Write in all expense amounts on the Class Budget Template.

Total the **expenses** for each month.

3. Subtract the Total Expenses from the Total Income for each month.
A Surplus is when your $\text{Income} - \text{Expenses} = \text{a positive number}$.
A Shortage is when your $\text{Income} - \text{Expenses} = \text{a negative number}$.
Write in all Surplus/Shortage amounts on the Class Budget Template.



Unit 4: Day 5: Paying for Accommodation		MEL4E
Minds On: 10	<p>Learning Goal: Students will</p> <ul style="list-style-type: none"> Identify and describe the factors to be considered in determining the affordability of accommodation in the local community. Discuss the need to consider a monthly payment for owning that includes mortgage payment, property taxes and house insurance. Estimate monthly payments by type of owned accommodation within the local community (refer to data on the bulletin board). Discuss the proportion of the monthly budget that should be allocated to accommodation. 	<ul style="list-style-type: none"> BLM 4.5.1, 4.5.2, 4.5.3, 4.5.4 Guest speaker from local Real Estate Board Local Home Buyer's guides TVM Solver or Online Mortgage calculator
Action: 35		
Consolidate:30		
Total=75 min		
Assessment Opportunities		
Minds On...	<p>Whole Class → Brainstorm</p> <p>Pose the question: "What factors should be considered in determining the cost of accommodation in this community?" See BLM 4.5.1 for possible responses.</p> <p>In respect to these factors, brainstorm possible questions to ask the guest speaker.</p> <p><i>Eg. What is the percentage of income that can be borrowed from a lending institution for a mortgage? What are some onetime costs when purchasing a home? What are some ongoing expenses when you purchase a home? What is the average price of a single family, multiple family, condominium, etc., accommodations in the local community?</i></p> <p>Students should record possible questions for use during the presentation.</p>	<p>If a guest speaker is not an option review MLS listings at http://www.mls.ca (see Guest Speaker Notes on BLM 4.5.1) and/or pick up class set of local Home Buyers Guides</p>
Action!	<p>Whole Class → Guest Speaker Presentation</p> <p>Handout BLM 4.5.2 & BLM 4.5.3 and instruct students record information from the presentation given on the two handouts.</p> <p>Introduce the guest speaker to the class. He/she should discuss the factors (other than mortgage costs) that should be considered when a person is determining the monthly costs of owning a home in the local community. Ensure students ask questions from the brainstorming session and record answers on their handouts.</p>	
Consolidate Debrief	<p>Pairs → Discussion</p> <p>Have students compare what they have written on BLM 4.5.2 & BLM 4.5.3 and fill in any information that they are missing.</p> <p>Expectations/Observation/Checklist – Circulate while students share their answers and check to make sure they have filled in the correct answers to the bottom half of the handout.</p> <p>Whole Class → Demonstration</p> <p>Demonstrate how to find the mortgage payments using an online Mortgage Calculator or the TVM Solver by creating and completing 1 or 2 examples.</p> <p>Mathematical Process Focus: Selecting Tools & Strategies – students will select appropriate tools to complete calculations regarding mortgages.</p> <p>Pairs → Practice</p> <p>Handout BLM 4.5.4 and have students complete the questions in pairs using the TVM solver or online mortgage calculator.</p>	
Practice	<p>Home Activity or Further Classroom Consolidation</p> <p>Finish the mortgage calculation worksheet if not completed in class.</p> <p>Create a First Time Homebuyer's Checklist using the knowledge gained from today's guest speaker.</p>	

Factors to Consider when buying a house

- Location
- Nearby schools
- Services provided (street lamps, sidewalk cleaning & plowing, public transit, public parks)
- Amount of competition for homes (are there high rental costs or high rental occupancy rates?)
- Job availability (more jobs available – higher accommodation costs)
- Proximity to amenities (shopping, daycare, churches, etc.)
- Reputation of community as good/bad place to live
- Nearby major transportation arteries such as highways and airports
- Availability of hospitals, colleges/universities and cultural venues like museums and theatres, etc.

Guest Speaker Notes

Most local Real Estate Boards have staff willing to speak to a Grade 12 class about the costs involved in buying a first home. Bringing a realtor into a classroom could also work as long as the realtor is willing to talk about home ownership in general, rather than trying to advertise his/her real estate agency. Another useful teaching resource is a little book titled “How to Buy Your First Home”. It is produced by the Ontario Real Estate Board and is available free of charge from their office at 99 Duncan Mill Rd, Don Mills, ON. Tel: (416)445-9910 or Fax: (416)445-2644.

Many local real estate websites require visitors to provide home phone numbers and email addresses to have query replies sent to them. These will cause difficulties since information is not immediately available and realtors will not appreciate answering class queries.

Try <http://www.mls.ca> for more easily accessible and readily available data for virtually all Ontario communities. Students only need to select a community, a housing type, maximum price range and required home features to access actual real estate listings in their community.

Students should be expected to use the mortgage calculator feature and predetermined amortization period and current interest rates to generate approximate mortgage payments. Numerous other online mortgage calculators can be found by typing “mortgage calculator” in the key word search bar.

Students can use these online mortgage calculators to calculate the actual amount paid for a home over the entire amortization period, determine total interest paid and explore how changing frequency or amount of mortgage payments can substantially reduce the total cost of owning a home.

NB. 30% is maximum amount of gross family income that is accepted by lenders for mortgage costs (Ontario Real Estate Association).

**BLM 4.5.2:
Home Buying Additional Costs Checklist**

MEL4E

Additional Cost Item	One-time cost	Ongoing Cost	Approximate Amount

*Costs of buying a home	=	One time costs <ul style="list-style-type: none"> ▪ Down payment ▪ Legal fees ▪ Inspection fees ▪ Taxes 	+	Monthly costs <ul style="list-style-type: none"> ▪ Mortgage ▪ Utilities ▪ Maintenance ▪ Insurance ▪ Property taxes
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* Adapted from How to Buy Your First Home, pg. 23, Ontario Real Estate Association

The maximum percentage of gross income that can go to mortgage costs is _____%.

If a family's total gross income is \$90 000 then their gross monthly income is:

_____. Therefore, their monthly mortgage payment can be no more than _____.

Average Accommodation Costs in
 (name of local community)

Type of Home	General Description	Low Price	High Price	Average Price
Single family	Bungalow, 2 bedrooms, built in 1960's, downtown area			
Single family	Bungalow, 3+ bedrooms, brand new, subdivision			
Multi-family	Townhouse			
Multi-family	Duplex			
Single family	2 story, 3 bedrooms downtown			
Single family	2 story, 3 bedrooms, subdivision			
Condominium				

BLM 4.5.4: Mortgage Calculation Worksheet MEL4E

Jen and Jon have a combined gross family income of \$80 000. They want to buy a duplex that lists at \$112 000.

- a) What is the maximum monthly mortgage payment they can afford?

- b) What is the monthly mortgage payment on this home assuming a 5.5% interest rate and a 25 year amortization period?

Extend your Learning

- c) What is the total amount paid into the mortgage at the end of the 25-year amortization period?

- d) How much interest did they pay on this home?

- e) How much money would Jen and John save if they chose a 15-year amortization period instead of 25 years?

BLM 4.5.4: Mortgage Calculation (Solutions)

MEL4E

Jen and Jon have a combined gross family income of \$80 000. They want to buy a duplex that lists at \$112 000.

- a) What is the maximum monthly mortgage payment they can afford?

$$\$80000.00 \times 0.3 = \$24000.00$$

$$\$24000.00 \div 12 = \$2000.00$$

This couple can afford monthly housing costs of up to \$2 000 per month.

- b) What is the monthly mortgage payment they would have to make on this home assuming a 5.5% interest rate and a 25 year amortization period?

The required mortgage payment is \$683.64 per month (TD Bank mortgage calculator).

Extend your Learning

- c) What is the total amount paid into the mortgage at the end of the 25 year amortization period?

$$\$683.64 \times 25 \text{ years} \times 12 \text{ payments / yr} = \$205092.00$$

The total paid for this home is \$205 092.00.

- d) How much interest did they pay on this home?

$$\$205092.00 - 112000.00 = \$93092.00$$

The amount of interest paid in total is \$ 93 092.00.

- e) How much money would Jen and John save if they chose a 15 year amortization period instead of 25 years?

New monthly payments -- \$911.46 (TD Bank mortgage calculator)

Total paid: \$911.46 × 15 years × 12 payments / year = \$164062.80

Interest Paid: \$164062.80 - 112000.00 = \$52062.80

Amt. Saved: \$93902.00 - 52062.80 = \$41029.20

Changing to a 15 year amortization period rather than a 25 year amortization period results in saving \$41 029.20 in interest on this particular mortgage.

Unit 4: Day 6: Preparing Budgets		MEL4E
Minds On: 5	Learning Goals: Students will: <ul style="list-style-type: none"> Prepare monthly budgets based on given case studies with and without technology. Explore the proportions of each item in the budget. 	Materials <ul style="list-style-type: none"> Highlighters BLM 4.6.1, 4.6.2 Computers MEL_U4L6XLS1 or MEL_U4L6QPW1
Action: 55		
Consolidate: 15		
Total=75 min		
Assessment Opportunities		
Minds On...	Whole Class → Discussion Take up responses to the Day 5 Home Activity. Have students add to their checklist any items that they did not have in theirs.	
Action!	Small Groups → Case Studies Arrange the class into 5 groups and give one of the 5 case studies given on BLM 4.6.1 to each group. Instruct students to read through their case study and highlight important information to help them create a budget for their case study. In their groups they should prepare a budget for their case study using the established budget template – each student should have their own copy of the budget. Learning Skills/Observation/Rubric – assess student’s learning skills using the learning skills rubric and record for future reference. Pairs → Activity Instruct groups to divide into pairs, and use an electronic spreadsheet MEL_U4L6XLS1 or MEL_U4L6QPW1 to input the values from their budget to check their values for Total Income, Total Expenses and Total Yearly Amounts. Ask students to access the second worksheet in the electronic spreadsheet file, to view graphs that correspond to their budget. Ensure that students save and print their file to be used for Day 7. Mathematical Process Focus: Selecting Tools & Computational Strategies – students will use a spreadsheet to complete a budget.	
Consolidate Debrief	Small Group → Analysis Each group is to complete the Budget Analysis Worksheet BLM 4.6.2 to explore the proportions of each item in the budget.	
Exploration Application	Home Activity or Further Classroom Consolidation Write a journal entry as follows: Describe two unexpected events that could change the budget of the person in your case study.	

BLM4.6.1: Budget Case Study A

MEL4E

Read the case study below:

Jan is a 28 year-old single mom with a 6 year-old daughter, Jenna. She is currently attending school to obtain her high school diploma. Jan works at a part-time job making \$10.45/hr two evenings a week and all day Sunday. Jan generally works 16 hours every week while she is in school. During the summer, Jan keeps her part-time job on weekends and works full-time making \$12.27/hr for 40 hours a week. She also receives the Canadian Child Tax Benefit, \$275/mth. Jan receives a GST tax credit of \$150 quarterly. Jan and her daughter live in a small, two bedroom, subsidized housing apartment, for \$700/mth where utilities are included in her rent. Jan's parents often help to support her by contributing groceries and home cooked meals.

Jan goes to school when Jenna is also at school, so she has no daycare expenses on weekdays. Jan's sister babysits for free when Jan works. Jan pays her sister or another sitter when she goes out in the evenings or on weekends with her friends. Sometimes Jan hires a babysitter so that she is able to focus on her studies to complete assignments or to study for upcoming exams (at the library). It is normal for Jan to pay for 3 hours of babysitting each week (\$5.00/hr). Jan had to pay \$50 for an annual membership to the library where she can use their computers to do research.

Jan can walk to her school from home and her daughter is bussed to school. Jan can also walk to a local convenience store, but must take the bus to work and do other grocery shopping.

Jan has to work hard to make ends meet so she usually shops for clothing for herself and her daughter at second-hand stores. She tries to keep her clothing budget to \$35.00 per month. When Jan really wants clothing for a special occasion she goes to her mother's to use the family sewing machine to make the item herself.

Although Jan must be very careful about her spending, she buys coffee each day on her way to school. She always brings her lunch from home since she likes to work on homework and eat at the same time. In case of an emergency, Jan tries to put aside \$20 a week as savings for a rainy day.

Highlight important information you can use to create a budget.

Use the Budget Template to fill in appropriate dollar amounts.

Estimate other income and expenses that could be assumed from this case study.

BLM4.6.1: Budget Case Study B

MEL4E

Read the case study below:

Dharka is a 22 year-old single male who is attending community college in a city that is 100 km from his parents' home.

Dharka received an OSAP loan of \$6800 to attend college and his parents give him an allowance of \$100 per week while he is attending school. Dharka works in the summer to earn money to help pay for his education. Last summer Dharka saved \$3250 from his summer job. His tuition fees are \$3000 for the school year and his residence/dining hall fees are \$5200. Books and other supplies cost \$950.

Dharka can walk to all classes, the library and to the dining hall from his residence building.

Dharka is a very conscientious student who works in the campus library most evenings and on weekends. However, Dharka misses his mother's traditional cooking and his younger brothers and sisters so Dharka tries to go home for one weekend each month. The return bus ticket costs him \$38.00 (student rate). Dharka has an aunt and uncle who live just outside of the city where he goes to school. He visits them at least once a week to share a meal and to get his laundry done at the same time. Dharka must take a cab to visit these relatives since the city bus does not travel there. The taxi ride there and back costs \$17.00.

Dharka is also an active member of the Environmental Team at his college. He donates \$10 each week to help to publicize ways that students can help the environment while they are at the college. Dharka is a real music fan and he likes to purchase traditional music from his parents' homeland whenever he finds CDs on sale so he tries to budget some money each week to build his music collection.

Highlight important information you can use to create a budget.

Use your Budget Template to fill in appropriate dollar amounts.

Estimate other income and expenses that could be assumed from this case study.

BLM4.6.1: Budget Case Study C

MEL4E

Read the case study below:

Jacob is 68 years old and retired. He receives Canada Pension Plan payment \$848/mth and he also receives Old Age Security \$484/mth.

Jacob owns his home but must pay property tax of \$3000 annually. Jacob hires a landscape company to mow his lawn and tend to his late wife's gardens. He pays them \$100 each week from May to September. Jacob also hires a neighborhood teenager to shovel his driveway in the winter months, paying \$30 each time.

Jacob's wife died last year and Jacob is still paying off the loan he needed to cover legal fees and burial fees. Jacob pays \$100/mth for 6 more payments. Since his wife's death Jacob receives a Survivor Benefit of \$100/mth.

Jacob enjoys golfing (annual club member of \$500) and bowling (annual league membership of \$100). Jacob usually eats out four nights a week spending at least \$50.00 at restaurants weekly. He regularly plays cards with his neighborhood, spending approximately \$50 each weekend.

Jacob's children live nearby. Jacob tries to keep his late wife's tradition of spoiling the grandchildren. He tries to spend around \$100 for each birthday. Jacob currently has seven grandchildren. Three of these grandchildren live overseas, so Jacob spends a considerable amount of money on long distance phone calls.

Jacob owns two dogs, Goldie and Ben, who are great company. Ben is an older dog, whose teeth are not healthy. The veterinarian has told Jacob that Ben will soon need to have his teeth pulled. This procedure will cost approximately \$500, not including possible boarding costs. Monthly feeding costs and vet bills usually run about \$60.00 each month.

Highlight important information you can use to create a budget.

Use your Budget Template to fill in appropriate dollar amounts.

Estimate other income and expenses that could be assumed from this case study.

BLM4.6.1: Budget Case Study D

MEL4E

Read the case study below:

Nash and Nina have been married now for 10 years. They have 3 children, a girl aged 9 and twin boys aged 4. Nash is a diesel mechanic for a trucking firm making \$45 000 per year and Nina works at a restaurant making \$8.75/hr for 4 hours a night during the week, plus tips.

Nash and Nina never seem to have enough money to cover all of their expenses each month, although Nash makes good money and often is asked to work overtime on weekends when he is paid double time. Nina would like to go back to school to earn more money in a daytime job, but wants to wait until the twins are older and there is more money in the bank.

Nash and Nina own their house, a 'fixer-up' they purchased 5 years ago. So far they have only had the money to pay for the mortgage and house insurance, \$800 bi-weekly, and the repairs that can't wait, like re-shingling the roof, digging a new well and replacing the furnace that quit two winters ago.

The car the family owns is an old one, but Nash is mechanically inclined enough to keep it running so both adults can get to their jobs. They would never trust it anymore to travel a far distance, so family holidays are restricted to camping at nearby parks in the summer.

The children all wear glasses and their daughter needs a retainer (\$450). Neither parent has an extended health plan that will cover these expenses. All of the children play organized after-school sports; an expense that their parents feel is justified to keep them from becoming 'couch potatoes'. The children play soccer (\$200 per child each season) and are enrolled in swimming lessons year-round, paying \$75 for the family for each 12-week session.

Nash and Nina are so anxious to re-insulate their home and add new siding to decrease heating and cooling expenses that they are considering taking out a home improvement loan. They expect that they will need to borrow at least \$25000.00 for renovations.

Highlight important information you can use to create a budget.

Use your Budget Template to fill in appropriate dollar amounts.

Estimate other income and expenses that could be assumed from this case study.

BLM4.6.1: Budget Case Study E

MEL4E

Read the Case Study below:

Gina has had a rough life. She was involved in a fatal car crash that killed her parents and her older brother. It also left her with serious back problems at 14. Gina is now 18 and has completed high school and has moved out of her foster home to live on her own.

Gina receives \$950/mth from the Ontario Disability Support Program. Because her parents are deceased, she will receive a \$150 000 insurance payment when she turns 19 years old in July.

Gina is planning to buy a duplex with her insurance inheritance. She hopes that if she rents out the other half she will have some income since she is unlikely ever to be pain free enough to work.

Gina visits a chiropractor at least 3 times a week, which costs her \$25 per visit. She also belongs to a pool where she attends aqua fitness classes every weekday. Her membership at the pool is paid by the Ontario Disability Support Program. Gina is also considering acupuncture to help ease her back pain. Gina takes muscle relaxants and pain medication daily to help her to manage her pain. Gina gets an allowance of \$250/mth for medicine related to her injury.

Gina wants to buy an electric bed with a built in massage pad to help her to cope with her back pain. She is also considering paying someone to clean her house, cut the grass and shovel snow when she purchases her duplex. She feels that her back problems will not permit her to attend to all of the upkeep required in owning and maintaining a property.

Gina is frugal when it comes to shopping. She likes to take the time to search for great bargains in groceries, clothing and household items. She never splurges in these areas of spending. Gina tries to budget \$70.00 per week for groceries, \$40.00 per month for clothing and \$60.00 each month for household and miscellaneous items. Gina likes to rent at least 2 movies as her entertainment each week.

Highlight important information you can use to create a budget.

Use your Budget Template to fill in appropriate dollar amounts.

Estimate other income and expenses that could be assumed from this case study.

BLM4.6.2: Budget Analysis Worksheet

MEL4E

Name: _____

Open the electronic spreadsheet.

Please type only in the light shaded areas. Type your dollar amounts for each item into the budget in the spreadsheet.

Check your values for Total Income, Total Expenses and Surplus/Shortage. Adjust any values if necessary.

Record your Total amounts here:

MEL4E Budget	
Case Study Name:	
TOTAL Income	\$ _____
TOTAL Expenses	\$ _____
Surplus/Shortage	\$ _____

Go to the "Analysis of Budget" tab in the electronic spreadsheet file.
Answer the following questions:

Monthly Income vs. Expenses

Which month has the most income? _____

Which month has the least income? _____

Which month has the most expenses? _____

Which month has the least expenses? _____


Proportions of Total Expenses

Which item has the greatest percentage? _____

Which item has the least? _____

Does accommodation meet the suggested 25-32% range? _____

Name three expenses that could be eliminated if you didn't have enough income.

Unit 4: Day 7: That changes it		MEL4E
Minds On: 15	<p>Learning Goal: Students will:</p> <ul style="list-style-type: none"> Adjust monthly budgets based on changes of circumstance for the case studies with technology. 	<p>Materials</p> <ul style="list-style-type: none"> Chart Paper BLM 4.7.1 BLM 4.7.2 Computers MEL_U4L6XLS1 or MEL_U4L6QPW1
Action: 45		
Consolidate:15		
Total=75 min		
Assessment Opportunities		
Minds On...	<p>Small Group → Brainstorm Arrange students in groups and have them brainstorm unexpected events that could alter a budget. (e.g. car accident, job loss, decrease in work hours).</p> <p>Whole Class → Sharing Using chart paper to record answer, have groups share events and post the results for future reference.</p>	
Action!	<p>Individual → Journal Give one Unexpected Event Card (BLM 4.7.1) to each student and instruct them to respond in their Journals to the following questions:</p> <ul style="list-style-type: none"> How would you feel if this unexpected event happened to you? What items does this unexpected event affect in the budget? <p>Encourage students to think of multiple consequences of and solutions to the unexpected event. (e.g., car accident – could buy another vehicle or use public transportation)</p> <p>Individual → Performance Task Instruct students to adjust the Excel or Quarto Pro budgets created last day, according to their unexpected event. Remind them that they must ensure they have a balanced budget. Students should print a copy of the adjusted budget for assessment.</p> <p>Curriculum Expectations/Performance Task/Anecdotal: Collect the unadjusted and adjusted budgets from students and assess their ability to adjust to unexpected situations.</p> <p>Mathematical Process Focus: Problem Solving – students will problem solve in order to create a balanced budget based on new circumstances.</p>	
Consolidate Debrief	<p>Whole Class → Sharing Have students share their unexpected event with the class and indicate the effect on their budget. Ask students to volunteer other ideas of how to adjust the budget based on the event.</p> <p>Ask the class to reflect on the brainstorming session from the beginning of class, if most of the events given were negative and ask for more ideas to add to the chart paper of positive events (or visa versa). Discuss the effects that holiday spending and vacationing have on a person’s budget.</p> <p>Individual → Practise Handout BLM 4.7.2 and instruct students to complete the budgets based on their own spending for Part A and based on their dream vacation for part B.</p>	
<i>Practice Reflection</i>	<p>Home Activity or Further Classroom Consolidation Complete BLM 4.7.2.</p>	

<h3>You Won the Lottery!</h3> <p>Your winning ticket: \$5000 cash. You need to travel to Toronto to pick up the cheque.</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>	<h3>Car Accident</h3> <p>Car Insurance costs increase by \$50 per month. You need to either buy another vehicle or use public transportation.</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>
<h3>Wind Storm</h3> <p>The wind causes damage to your property. Shingles will need to be replaced (\$4000).</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>	<h3>Your Dog Died</h3> <p>Veterinary bill of \$300 for handling the cremation.</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>

<p>Grandma Dies</p> <p>Your elderly Grandma dies and leaves you \$10 000.</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>	<p>You Lose Your Job</p> <p>The factory where you earned \$15.00 per hour closes. You get a job at a fast food business making \$9.25 per hour.</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>
<p>Your Computer Stops Working</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>	<p>Your Mom Is Sick</p> <p>Mom is too sick to take care of herself. She needs nursing care. The cost of a nursing home room is \$22000 per year.</p> <p>How would you feel if this unexpected event happened to you?</p> <p>What item(s) does this unexpected event affect in the budget?</p>

BLM 4.7.2: Budgeting for the Fun Stuff (cont)

MEL4E


Part B: Budgeting for Vacation Expenses

Vacation Budget for _____ (place) _____ (date)	Budgeted Amount	Actual Amount Spent
Transportation: Air/Rail/Bus/Automobile/Other		
Accommodations		
_____ (place) _____ nts @ \$ _____ /nt		
_____ (place) _____ nts @ \$ _____ /nt		
_____ (place) _____ nts @ \$ _____ /nt		
_____ (place) _____ nts @ \$ _____ /nt		
_____ (place) _____ nts @ \$ _____ /nt		
Meals		
_____ breakfasts @ \$ _____ /person x _____ people		
_____ lunches @ \$ _____ /person x _____ people		
_____ dinners @ \$ _____ /person x _____ people		
Snacks		
Sightseeing and Attractions		
_____ @ \$ _____ /person x _____ people		
_____ @ \$ _____ /person x _____ people		
_____ @ \$ _____ /person x _____ people		
Activities (e.g. golfing, bowling)		
_____ @ \$ _____ /person x _____ people		
_____ @ \$ _____ /person x _____ people		
_____ @ \$ _____ /person x _____ people		
Souvenirs/Shopping		
Miscellaneous		
TOTAL		

Note that budgeted amounts will have to be adjusted if you overspend in any area(s).

Part C: Reflection

1. What is your total budgeted amount for holiday/vacation expenses?
2. Based on the budgeted amount for holiday/vacation expenses, how far in advance would you recommend that you start saving for these expenses? Explain your reasoning.
3. What will happen if you do not plan well in advance for your holiday/vacation spending?
4. Assume that you have to reduce your holiday/vacation budget by 20%. What is the dollar amount that you must cut from your initial budget plan?
5. Describe 3 ways that you might reduce your holiday/vacation spending.
6. Create a revised holiday/vacation budget worksheet to reflect this 20% reduction in spending.

Unit 4: Day 8: Career Search		MEL4E
Minds On: 15	Learning Goal: Students will <ul style="list-style-type: none"> Investigate a career of choice. 	Materials <ul style="list-style-type: none"> BLM 4.8.1 BLM 4.8.2 Computer Lab Data projector
Action: 50		
Consolidate:10		
Total=75 min		
Assessment Opportunities		
Minds On...	Whole Class → Exploration Using a data projector, take the class on a tour of the website www.ontariojobfutures.ca . Highlighting key aspects of the site (e.g. Overview of Ontario’s Employment Patterns, Occupational Job Family, etc.) Also take students on a tour of the following website to explore self employment options: http://www.jobsetc.ca/category_drilldown.jsp?crumb=1&crumb=36&category_id=109 Ask students to consider the likelihood of career changes and some of the reasons for career changes.	
Action!	Individual → Technology Research Handout BLM 4.8.1 and instruct students to fill in the chart by researching 3 careers they would be interested in pursuing over the next 5 – 10 years. Point out that they will need to write down the websites that they visited as they go. Remind students that the Average Annual Earnings in Ontario reported by Statistics Canada in 2000 was \$47 299. (See Unit 1 Day 1) Inform students that BLM 4.8.1 will be collected as part of their Summative Evaluation. Communicating/observation/anecdotal comments – circulate while students complete their charts and give students verbal feedback on their work. Mathematical Process Focus: Reflecting – students will reflect on their career choices.	
Consolidate Debrief	Whole Class → Discussion Ask samples of students to share a career choice and explain reason(s) for their choice. Poll students to determine how many career choices pay less than the Average Annual Ontario Income. Ask students to give possible reasons for why some careers pay less than the provincial average.	
<i>Reflection</i>	Home Activity or Further Classroom Consolidation Complete BLM 4.8.2. This will also be collected as part of your Summative evaluation at the end of this unit.	

BLM 4.8.1: When I Graduate, I Would Like to Be MEL4E

	Choice A	Choice B	Choice C
Occupation Title			
Occupational Grouping			
Main duties (list at least 3)			
Required Education/Training			
Employment Prospects (good, bad, growing, unsure, etc.)			
Characteristics of Occupation (full-time, part-time, self-employed, etc.)			
Main Industries			
Average Annual Income			
Is average annual income higher or lower than average Ontario income?			
Additional Information			

List all websites accessed to complete this chart

BLM4.8.2: Careers That Appeal to Me and Why? MEL4E

These are the careers that interest me the most:

I choose these careers for the following reasons:

1. _____
2. _____
3. _____
4. _____
5. _____

This is how happy I am with the level of expected income: (circle your choice)



BLM 4.9.1: Determining Likely Net Income

MEL4E

The annual income that you found for each career choice is not what an employee will actually have to spend. The deductions that may come off your pay cheque are shown below.

(Check off all those that apply to your selected career.)

Career Choice #1	Career Choice #2	Career Choice #3
Expected Annual Income	Expected Annual Income	Expected Annual Income
Check all Applicable Deductions from this Income <input type="checkbox"/> Income tax (both federal and provincial) <input type="checkbox"/> Employment Insurance Premiums <input type="checkbox"/> Canada Pension Plan Premiums <input type="checkbox"/> Union Dues <input type="checkbox"/> Health/Dental Benefits <input type="checkbox"/> Retirement Plan List any others <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	Check all Applicable Deductions from this Income <input type="checkbox"/> Income tax (both federal and provincial) <input type="checkbox"/> Employment Insurance Premiums <input type="checkbox"/> Canada Pension Plan Premiums <input type="checkbox"/> Union Dues <input type="checkbox"/> Health/Dental Benefits <input type="checkbox"/> Retirement Plan List any others <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____	Check all Applicable Deductions from this Income <input type="checkbox"/> Income tax (both federal and provincial) <input type="checkbox"/> Employment Insurance Premiums <input type="checkbox"/> Canada Pension Plan Premiums <input type="checkbox"/> Union Dues <input type="checkbox"/> Health/Dental Benefits <input type="checkbox"/> Retirement Plan List any others <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____

Follow the table below in order to calculate your take home pay.

Canada Pension Plan	4.95% of gross pay, up to a maximum of \$1831.50 per year		
Employment Insurance	1.98% of gross pay up to a maximum of \$772.20 per year.		
Income Level <i>** (after EI and CPP have been deducted)**</i>	Up to and including \$35 000	Next \$35 000 (up to and including \$70 000)	Next \$35,000 (up to and including \$105 000)
Percentage Deductions	21 %	31%	37%

BLM 4.9.1: Determining Likely Net Income (Cont) MEL4E

My 1st Career Choice is:

The expected gross annual income for this career is:

The approximate percentage of income tax that I will pay is:

My approximate take-home pay will be:

Calculations:

CPP Deductions:

EI Deductions:

Taxable Income:

Income Tax Deductions:

Net Income:

Monthly Net Income:

BLM 4.9.1: Determining Likely Net Income (Cont) MEL4E

My 2nd Career Choice is:

The expected gross annual income for this career is:

The approximate percentage of income tax that I will pay is:

My approximate take-home pay will be:

Calculations:

CPP Deductions:

EI Deductions:

Taxable Income:

Income Tax Deductions:

Net Income:

Monthly Net Income:

BLM 4.9.1: Determining Likely Net Income (Cont) MEL4E

My 3rd Career Choice is:

The expected gross annual income for this career is:

The approximate percentage of income tax that I will pay is:

My approximate take-home pay will be:

Calculations:

CPP Deductions:

EI Deductions:

Taxable Income:

Income Tax Deductions:

Net Income:

Monthly Net Income:

BLM 4.9.1: Determining Likely Net Income (Sample Solutions)

MEL4E

My chosen career pays approximately \$31,500 annually.

Calculate Deductions

CPP Deductions: $\$31500 \times 0.0495 = \1559.25

Since this is less than the maximum, CPP deductions are \$1559.25.

EI Deductions: $\$31500 \times 0.0198 = \623.70

This amount does not exceed the maximum so EI deductions will be \$623.70

Taxable Income: **Gross Income – CPP – EI = Taxable Income**

$$\$31500 - 1559.25 - 623.70 = \$29317.05$$

Income Tax Deductions: 21% on the first \$35000 of income:

$$\$31500 \times 0.21 = \$6615.00$$

Total Income Tax Payable is \$6615.00.

Net Income: **Gross Income – (CPP + EI + Income Tax) = Net Income**

$$\begin{aligned} & \$31500 - (1559.25 + 623.70 + 6615.00) \\ & = 31500 - 8797.95 \\ & = \$22702.05 \end{aligned}$$

Monthly Net Income: Net Annual Income \div 12 months/year

$$\$22702.05 \div 12 = \$1891.84 \text{ /month}$$

Therefore an annual income of \$31,500 results in a gross annual income of \$22,702.05 or approximately \$1891.84 each month in take-home pay.

BLM 4.9.1: Sample Calculations (continued)

MEL4E

My chosen career pays approximately \$44,000 annually.

Calculate Deductions

CPP Deductions: $\$44000 \times 0.0495 = \2178.00

Since this is more than the maximum, CPP deductions are \$1831.50.

EI Deductions: $\$44000 \times 0.0198 = \871.20

This amount exceeds the maximum, therefore EI deductions will be \$772.20

Taxable Income: **Gross Income – CPP – EI = Taxable Income**

$$\$44000 - 1831.50 - 772.20 = \$41396.30$$

Income Tax Deductions: 21% on the first \$35000 of income:

$$\$35000 \times 0.21 = \$7350.00$$

Balance of income: $\$41396.30 - 35000 = \6396.30

31% income tax on the next \$6396.30:

$$\$6396.30 \times 0.31 = \$1982.85$$

Total Income Tax Payable: $\$7350.00 + 1982.85 = \9332.85

Net Income: **Gross Income – (CPP + EI + Income Tax) = Net Income**

$$\begin{aligned} & \$44000 - (1831.50 + 772.20 + 9332.85) \\ & = 44000 - 11936.55 \\ & = \$32063.45 \end{aligned}$$

Monthly Net Income: Net Annual Income \div 12 months/year

$$\$32063.45 \div 12 = \$2671.95/\text{month}$$

Therefore an annual income of \$44,000 results in a gross annual income of \$32,063.45 or approximately \$2671.95 each month in take-home pay.

BLM 4.9.2: Ranking My Career Choices

MEL4E

	Occupation	Expected Net Income	Reason(s) for Ranking
Career Choice #1			
Career Choice #2			
Career Choice #3			

Unit 4: Day 10 to12: Culminating Task for Units 2,3,4		MEL4E
Minds On: 60	Learning Goal: Students will: <ul style="list-style-type: none"> Develop a detailed monthly budget with rationale. 	Materials <ul style="list-style-type: none"> Deck of cards BLM 4.10.1, 4.10.2, 4.10.3, 4.1.1, & 4.7.1 Class Budget Template Computers
Action: 90		
Consolidate:75		
Total=225 min		
Assessment Opportunities		
Minds On...	Whole Class → Guided Discussion Instruct students to add to their sticky note the gross and net income for each of their careers. Determine the range of net incomes for each of the groupings. and select one of these ranges to discuss the budget items that would e affected by the range of income.– give students a copy of the class budget template for reference. Small Groups → Placemat Arrange students in groups and have one student randomly select a card cut out from BLM 4.10.3. Each card gives one piece of information about a person that would have some affect on their budget. Groups should then complete a placemat by individually writing down the budget items that they think would be affected by the piece of information and then come to a consensus as a group in the centre of the placemat. Small Groups → Presentation Have groups present their conclusions to the class. Learning Skills/Presentation/Rubric – use the learning skills rubric to assess the groups during the presentations.	
Action!	Individual → Performance Task 1 Handout Budget Activity BLM 4.10.1 and assign each student a personal profile. (refer to BLM 4.10.3 for instructions on the random personal profile selector.) Instruct students to develop a detailed monthly budget based on their profile and submit a paper and electronic copy of a rough plan for their budget using the <i>Class Budget Template</i> created on day 4. Expectations/observation/anecdotal - Circulate and assist students with budget estimates and ensure students focus on budget items that fit their profile. Mathematical Process: Problem Solving – students will problem solve in order to complete a balanced budget for their profile, Individual → Adjusting Budget Activity Assign each student an Unexpected Event Card using BLM 4.7.1 and instruct students to adjust their budget accordingly.	
Consolidate Debrief	Whole Class → Presentation Students present the results of their Budget Activity with the class, choosing their presentation method. Evaluate the presentations using BLM 4.10.2	
<i>Reflection</i>	Home Activity or Further Classroom Consolidation Complete a new Personal Finance Goals Frayer Model (BLM 4.1.1). When completed, compare your new Frayer model to your original Frayer from Day 1. Write a journal to reflect on any changes, additions &/or omissions.	

BLM 4.10.1: Culminating Task: Budget

MEL4E

Name: _____

Overall Project Description:

For this culminating task you will:

- Develop a detailed monthly budget based on your given Personal Profile.
- Adjust this budget based on unexpected circumstances.
- Present your findings to the class.

Personal Profile

Select a random personal profile. Use the information given for your family situation, accommodation and transportation to develop **expenses** for your budget.

<h3>My Personal Profile</h3> <p>Family Situation: _____</p> <p>Accommodation: _____</p> <p>Transportation: _____</p>
<h3>Expenses</h3> <p>According to your Personal Profile, estimate amounts for the following budget items and any other items you feel need to be in your budget.</p> <ul style="list-style-type: none">• Accommodation (20 to 35% of net income): . \$ _____• Utilities (6 to 9%): \$ _____• Groceries (15-30%): \$ _____• Transportation (6 to 20%): \$ _____• Clothing (3 to 10%): \$ _____• Entertainment (2 to 6%): \$ _____• Savings (5 to 9%): \$ _____• _____ : \$ _____• _____ : \$ _____• _____ : \$ _____

Refer to the Career Research and Income Tax activities completed earlier in this unit to develop your **net income** for your budget.

<h3>Income</h3> <p>Career: _____</p> <p>Types of Deductions: _____</p> <p>Net income: \$ _____</p>
--

BLM 4.10.1: Culminating Task: Budget (continued) MEL4E

Budget

Create a **draft budget** using the Class Budget Template designed earlier in this unit. Calculate your *net income for each month*, your *net yearly income*, your *total monthly expenses for each month* and *total yearly expenses for each item*.

Total Yearly Income: \$ _____	Total Yearly Expenses: \$ _____
Surplus/Shortage: \$ _____	

Using a computer spreadsheet and the Class Budget Template, **draft an electronic version of your budget**. Check your calculations from your Class Budget Template with the electronic version.

Unexpected Event

Select one unexpected event, provided by your teacher.

Unexpected Event: _____

List all budget items affected by this unexpected event.

Budget Items affected	How is it affected (increase/decrease)?
• _____	_____
• _____	_____
• _____	_____
• _____	_____
• _____	_____

Adjust your budget so it stays balanced.

Presentation

You will present to the class the following information – use the next page to help you organize your presentation:

Personal profile – an overall picture of the person for whom you created the budget.

Career – a general description of the career chosen for this person including income level and possible deductions.

Budget – an overview of the total monthly income and expenses, including the total yearly income and total yearly expenses. Identify any surplus or shortage.

Unexpected Event – provide a general description of the unexpected event, including budget items affected and options to recover from this event.

Your rational – ensure that you justify all your budget changes from the unexpected event

You may choose your own presentation method. Some suggestions are listed below:

- Read aloud a written report
- Poster
- Electronic presentation (PowerPoint)
- Oral descriptions with supporting pictures
- Painting, sketch or music depicting the mood of the unexpected event
- Read aloud a letter written to a friend, family or diary telling of the unexpected event, including a response to this letter.
- Chart a list of affected budget items from the unexpected event and some options to recover

BLM 4.10.1: Culminating Task: Budget (continued) MEL4E

Presentation Guidelines

Personal Profile:

Detailed description of family situation:

Provide details such as spouse's name, age, kids' names and ages, how long together, how long as single parent, leisure interests, any diseases/disorders, etc.

Detailed description of accommodation:

Provide details such as where home is, distance from work, schools, shopping, age of home, size of home, state of repair, size of yard, etc.

Detailed description of transportation:

Provide details such as type & size of vehicle, its age and state of repair, gas mileage, distance traveled per week/month, etc.

Career:

Detailed description of career:

Provide details such as title of career, business you work for, amount of hours per week, type of pay, etc.

My expected Gross Income is: \$ _____

Calculated yearly Net Income is: \$ _____, Monthly Net Income
\$ _____

Budget:

Detailed description of your budget:

Provide details of income per month and expenses per month. Include both discretionary and non-discretionary expenses.

Unexpected Event:

Detailed description of your unexpected event:

Provide details of other budget items affected by this unexpected event. How did the unexpected event affect your budget surplus or shortage? And why did it affect it this way?

BLM 4.10.2: Culminating Task for Unit 2, 3, and 4 MEL4E

Mathematical Process/Curriculum Expectations	Below Level 1	Level 1	Level 2	Level 3	Level 4
Problem Solving Identifies dollar amounts for budget items based on Personal Profile PF 2.4	No evidence of researching dollar amount for budget items based on Personal Profile	Little evidence of researching dollar amount for budget items based on Personal Profile	Some evidence of researching dollar amount for budget items based on Personal Profile	Sufficient evidence of researching dollar amount for budget items based on Personal Profile	Full evidence of researching dollar amount for budget items based on Personal Profile
Tools & Strategies Calculates totals and balances budget PF 2.1, 2.4	No evidence of calculating totals or balancing budget	Little evidence of calculating totals or balancing budget	Some evidence of calculating totals and balancing budget	Sufficient evidence of calculating totals and balancing budget	Full evidence of calculating totals and balancing budget
Communicating Shares budget results with class PF 2.3, 2.4, 2.5	Not effective at sharing budget information with class	Limited effectiveness of sharing budget information with class	Some effectiveness of sharing budget information with class	Considerable effectiveness of sharing budget information with class	High degree of effectiveness of sharing budget information with class
Connecting, Reasoning & Proving Justify affected budget items from Unexpected Event PF 2.4, 2.6	No evidence of justifying affected budget items	Limited effectiveness of justifying affected budget items	Some effectiveness of justifying affected budget items	Considerable effectiveness of justifying affected budget items	High degree of effectiveness of justifying affected budget items

PF 2.1 Categorize personal expenses and non-discretionary or discretionary

PF 2.3 Read and interpret prepared individual or family budgets, identify and describe the key components of a budget, and describe how budgets can reflect personal values

PF 2.4 Design, with technology and without technology, explain, and justify a monthly budget suitable for an individual or family described in a given case study that provides the specifics of the situation

PF 2.5 Identify and describe factors to be considered in determining the affordability of accommodation in the local community

PF 2.6 Make adjustments to a budget to accommodate changes in circumstances, with technology

Minds On – Budget Descriptions for Brainstorming

Cut out the cards below and place them into a container for groups to select from. Each group will brainstorm budget items that are affected by the topic.

For example: Owning a car – I will need to pay for: gas, insurance, repairs, general maintenance, parking fees, etc.

Single	Own home	Own motorcycle or truck
Couple	Rent	Walks – owns no vehicles
Children	Own new vehicle	Uses public transportation
Retired	Own used older vehicle	Owens a pet

Random Personal Profile

The Culminating Task for Unit 4 includes developing a detailed budget with a rationale. The circumstances for which to base the budget will be determined randomly using a deck of playing cards.

You will need a regular deck of playing cards, Jokers included. Shuffle the cards well and let each student pick a card.

Family Situation

Spades – singles

Clubs – couple

Diamonds - couple with dependents

Hearts – single parent

Accommodation

Face Cards – own their home, condo, trailer, etc.

Number Cards – rent home or apartment

Transportation

Ace, 2,3,4,5 – own an automobile

6,7,8,9,10 – use public transit

Jack, Queen – have a motorcycle or truck

King - walk

Joker

Any student who picks a Joker has collected a **WILD CARD**. They will have the choice to create their own family situation, accommodation and transportation scenarios. However, the teacher must review and approve the choices before the student begins his/her monthly budget calculations.