



<b>Overall expectations</b>	<p><b>A1</b> Collect, organize, represent, and make inferences from data using a variety of tools and strategies, and describe related applications;</p> <p><b>B2</b> Interpret, design, and adjust budgets for individuals and families described in case studies</p> <p><b>C1</b> determine and estimate measurements using the metric and imperial systems, and convert measures within and between systems;</p> <p><b>C2</b> apply measurement concepts and skills to solve problems in measurement and design, to construct scale drawings and scale models, and to budget for a household improvement;</p>
<b>Specific expectations</b>	<p><b>Reasoning with Data</b></p> <p><b>1.4</b> Represent categorical data by constructing graphs (e.g., bar graph, broken-line graph, circle graph) using a variety of tools (e.g., dynamic statistical software, graphing calculator, spreadsheet)</p> <p><b>1.5</b> Make inferences based on the graphical representation of data (e.g., an inference about a sample from the graphical representation of a population), and justify conclusions orally or in writing using convincing arguments</p> <p><b>1.6</b> Make and justify conclusions about a topic of personal interest by collecting, organizing (e.g., using spreadsheets), representing (e.g., using graphs), and making inferences from categorical data from primary sources (i.e., collected through measurement or observation) or secondary sources (e.g., electronic data from databases such as E-STAT, data from newspapers or magazines)</p> <p><b>2.6</b> Interpret information involving the use of probability and statistics in the media, and describe how probability and statistics can help in making informed decisions in a variety of situations</p> <p><b>2.6</b> make adjustments to a budget to accommodate changes in circumstances</p> <p><b>Personal Finance</b></p> <p><b>3.7</b> gather, interpret, and describe information about applications of the mathematics of personal finance in the workplace</p> <p><b>Measurement</b></p> <p><b>1.4</b> convert measures within systems</p> <p><b>1.5</b> convert measures between systems</p> <p><b>2.2</b> apply the concept of perimeter in familiar contexts</p> <p><b>2.4</b> solve problems involving the areas of rectangles, triangles, and circles, and of related composite shapes, in situations arising from real-world applications</p> <p><b>2.5</b> solve problems involving the volumes and surface areas of rectangular prisms, triangular prisms, and cylinders, and of related composite figures, in situations arising from real world applications</p> <p><b>2.8</b> investigate, plan, design, and prepare a budget for a household improvement</p>
<b>Catholic graduate expectations (if applicable)</b>	<p>Thinks reflectively and creatively to evaluate situations and solve problems.</p> <p>Thinks critically about the meaning and purpose of work.</p>
<b>Essential Skills and work habits</b>	<p><b>Reading Text</b> Understanding text in the form of sentences or paragraphs</p> <p><b>Numeracy</b> Use of numbers and quantities</p> <p><b>Writing</b> Completing solutions of multi-step problem-solving questions</p> <p><b>Continuous Learning</b> Ongoing process of learning and acquiring skills</p> <p><b>Thinking Skills</b> Cognitive ability, problem solving</p> <p><b>Initiative</b> Starts work with little or no prompting</p> <p><b>Work Habits</b> Punctual, time effective, and able to follow directions</p> <p><b>Organization</b> Written work is well laid out and neat</p> <p><b>Working Independently</b> Accomplishes tasks independently</p>

### Instructional/Assessment Strategies

#### Teacher's notes

- \* Providing applicable real life examples from the construction sectors can be beneficial for student learning.
- \* Constant diagnostic and formative feedback is important for consistent learning and student development (ie. through use of student worksheets).
- \* If the class is a split group (not all SHSM students) it may be advantageous to group the SHSM students together, however, this CLA has benefits for all MEL students, not just those enrolled in the SHSM program.

#### Context

This CLA is designed for students that plan on entering an apprenticeship or college in the construction sector. It gives the students some insight in the expense of owning a home.

#### Strategies

**Socratic Review of key concepts:** Teacher can begin each part of the activity with a reminder of pertinent definitions on the board, or a small example of the topic of the day

**Teacher modelling:** Using the Building Items.xls, teacher will demonstrate what is expected in the assignment. This will also be a way to review the concepts.

**Observation and Assessment:** when the assignment is handed out, the teacher will need to circulate and answer individual questions.

**Pen & Pencil Assessment:** Students can demonstrate their learning with the summative assignments.

### Assessment and Evaluation of Student Achievement

Strategies/Tasks	Purpose
1. <b>Part A: Graphing</b>	Formative Assessment (give constant feedback on Student Progress) Summative Assessment
2. <b>Part B: Taking Measurements</b>	Formative Assessment (give constant feedback on Student Progress) Summative Assessment
3. <b>Part C: Budgeting for your Patio or Deck</b>	Formative Assessment (give constant feedback on Student Progress) Summative Assessment
<b>Assessment tools</b> See attached files Adventures in Home Ownership Blueprint Blueprint Teacher Solutions Adventures in Home Ownership Teacher solutions <i>Building Items.xls</i> <i>Concrete.xls</i>	

### Additional Notes/Comments/Explanations

Pre-activity work can include worksheets that mimic the activity and can include topics covered here, especially:

- graphing
- area / perimeter / volume
- After tax costs
- Pythagorean theorem

### Resources

#### Authentic workplace materials

*Blueprint*

#### Human resources

Teacher, and possibly a classroom EA

#### Print

*The provided worksheets in the accompanying file*

### Accommodations

Individual Education Plans (IEP) should be followed at all times. Be sure to consult the SERT for additional information and suggestions;

- \* additional time may be needed for diagnostic, formative and summative assignments;
- \* the activities and lessons outlined in this CLA allow for flexibility in the delivery of the material. Alternating teaching strategies can help students who are not progressing at the appropriate level;
- \* if possible, more individual instruction time can be allotted to students in need;

### List of Attachments

*Adventures in Home Ownership*

*Adventures in Home Ownership Teacher Solutions*

*Blueprint*

*Blueprint Teacher Solutions*

*Building Items.xls*

*Concrete.xls*