



<b>Author(s): Ben Lindeman</b>			<b>Lesson Title: Shop ‘Til U Drop</b>			
<b>Grade Span</b>			<b>ICLE Application Model</b>			
<b>K-4</b>	<b>5-8 XX</b>	<b>9-12</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D XX</b>

## Instructional Focus:

**Reading:** Students read a variety of grade level materials, applying strategies appropriate to various situations.

**Number Operations and Concepts:** Students use number, number sense, and number relationships in a problem-solving situation.

**Geometry:** Students apply geometric concepts, properties, and relationships in a problem-solving situation.

**Measurement:** Students use a variety of tools and techniques of measurement in a problem-solving situation.

## Performance Task

For the next several days, you will be working on a project involving measurement and money. Imagine that your family has just moved into a new house and that you are going to have your own bedroom. You are going to design the set up of your very own bedroom. The bedroom is 9 feet long and 12 feet wide – quite large to have all to yourself. The bedroom has a closet, a window, and several wall plugs. Your wonderful Uncle Dan is giving you a budget of \$ 2500 – WOW! – to furnish and set up your room. Your job is to select everything that you need and want for your bedroom. BUT, you must work within your allotted amount of money. Your uncle is providing the money so he can put some constraints on you. He tells you that you must buy the following:

- A bed
- A desk (you’ll need that to do your homework)
- A light and a chair for the desk
- A dresser to store all your clothes
- Wall to wall floor covering – It can be a covering of your choice

Have fun buying any other accessories or luxury items that you want and that you can afford! Any money that you do not spend must be returned to Uncle Dan.

Use one catalog of your choice (Sears, Macys, J.C. Penny, etc.) to make all of your purchases.

While you are spending your money to furnish your room, you must keep a detailed record of your purchases. This means that you will have to keep track of all the money that you spend. An expense sheet is attached for you to use to make this task easier.

You will need to make a scale drawing of your room and the accessories that you put in your room. All measurements need to be in feet. Show any measurement conversions that you make.

Optional: If you prefer, you can make a three dimensional model of your room instead of a scale drawing. You can even paint or paper the walls and make curtains for the window if you want. Be as creative as you can! Has fun!!!! Shop and spend.

## ICLE Essential Skills

Perform *operations with signed* (positive and negative) **numbers**, including decimals, ratios, percents, and fractions. (m1)

Use the technique of **dimensional analysis** to convert units of measure including drawing to scale and applying ratios. Understand and use various techniques for estimating, making and converting measure; and using these to perform dimensional analysis.(m33)

Compute the **perimeter and area of two-dimensional figures**. (m13)

### Scoring Guide:

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| 4 | The student demonstrates a thorough understanding of the task. He/she creates a feasible design for the bedroom. The student works within the budget and spends most of the money. The student shows an understanding of scale by making a scale drawing or a three dimensional model that is accurate and neatly drawn or made. All measurements are correctly converted to feet. No errors occur in the computations. All of the constraints of the problem placed by Uncle Dan have been met. A detailed record of purchases is accurately kept and recorded on the expense sheet provided. |
| 3 | The student demonstrates only a partial understanding of the task. Although the design is acceptable, it does not show any originality on the part of the students. The students has some understanding of scale, but the scale drawing or three dimensional model is roughly made and lacks a high degree of neatness. Minor errors occur in the computations. All of the constraints of the problem placed by Uncle Dan may not have been met. The expense sheet is not well made out or is incomplete.  |
| 2 | The student demonstrates minimum understanding of the task. The design for the room shows little planning and has little appeal to the eye. The student scale drawing or three dimensional model contains errors, showing limited understanding of scale drawing. Several errors occur in the computation. The constraints of the problems made by Uncle Dan are ignored or given little attention. The expense sheet is incomplete and contains several errors.   |
| 1 | The student demonstrates little, if any, understanding of the problem. There basically is no planned design for the room. The scale drawing is crude and inaccurate, demonstrating little understanding of scale. Computation in the problem if rife with errors. Little, if any, attention is given to the constraints of the problem. The expense sheet has only a few entries.  |
| 0 | The student makes no attempt to complete the task or any work is irrelevant and meaningless.   |

## Keywords

<b>English Language Arts</b>	<b>Mathematics</b>	<b>Science</b>
<b>Reading</b> In context Integration	<b>Algebra</b> Budget Computation Cost Analysis	<b>Earth Science</b>
<b>Writing</b>	<b>Geometry</b> Area Calculators Geometry in Daily Life Positional Two-Dimensional	<b>Life Science</b>
<b>Communications</b>	<b>Statistics</b> Charts Measurement	<b>Chemistry</b>
<b>Literature</b>	<b>Calculus</b>	<b>Physics</b>
<b>Other</b>	<b>Trigonometry</b>	<b>Other</b>
	<b>Other</b> Scale Money Design	

