Section 4—Consumer Issues and Education
Title of Lesson/Subject: Unit Pricing
Prepared by: Brenda Loney
Contact Information
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Time Allotment: 30-45 minutes

Grade Level or Target Audience: Grades 7-10

ND Standards Competencies:
3. The student demonstrates analytical and computational skills for personal and business applications.
   By the end of Grade 12 or at exit, the student demonstrates the ability to:
   a) Apply basic accounting and financial concepts to business and personal applications.
   b) Use a variety of tools to record analyze, interpret, and communicate financial information.

5. The student demonstrates problem-solving and decision-making skills using appropriate resources.
   By the end of Grade 12 or at exit, the student demonstrates the ability to:
   a) Solve problems with increased levels of independence.
   b) Communicate and interpret appropriate directions.
   c) Use technological resources to synthesize information when solving problems.

8. The student develops and uses consumer economic skills.
   By the end of Grade 12 or at exit, the student demonstrates the ability to:
   a) Apply economic concepts as they relate to wants and needs.
   b) Manage money and credit
   c) Recognize value and its relationship to price.

11. The student demonstrates effective use of the Internet and other electronic resources.
    By the end of Grade 12 or at exit, the student demonstrates the ability to:
    a) Use a variety of search software programs that find information on a wide range of topics, products, etc.
    b) Evaluate and cite web sites in research.

Key Economic Concepts: Consumer Issue of Unit Pricing

Brief Description:
Use Internet to obtain information on Unit Pricing to complete Unit Pricing Notes, then implement skills to complete Unit Pricing Worksheet.

Learner Objectives:
1) Students will access the Internet to explore the website: http://www.fmi.org/consumer/unit/
2) Students will complete the Unit Pricing Notes by obtaining website information
3) Students will complete the Worksheet by calculating Unit Prices
**Introduction:**
We are all consumers. There are many decisions for us to make every day when we buy and spend. We constantly have to be on the lookout for scams and theft. We have to decide if we are getting the most for our money. One way to be a smart consumer is to know if you are getting a good deal. Being able to calculate Unit Prices can help you save money.

**Materials Needed:** Computers with Internet connection, Notes (+ key), and Worksheet (+key)

**Lesson Outline:**
Introduction, followed by Objectives, access Internet to complete Notes (using given website), present Worksheet, allow students time to complete Worksheet on calculating Unit Prices

**Resources:**
Internet site [http://www.fmi.org/consumer/unit/](http://www.fmi.org/consumer/unit/), Notes (+ key), and Worksheet (+ key)

**Activities:**
Students will use the Internet to complete the Unit Prices Notes, then complete the Unit Prices Worksheet

**Application/Assignment:** Unit Prices Worksheet

**Evaluation Plan:** Check Notes and Worksheet for completion and accuracy
Looking for the best buys? Use unit pricing . . .

Finding the best buys at the supermarket takes some know how. You must consider quality, nutrition, convenience, family tastes, storage space and economy when shopping for food. Unit pricing will help you know which product is most economical.

What is Unit Pricing?

Unit pricing is a tool for comparing prices. While the package price tells you how much you pay for a food item, the unit price tells you the price of each "unit" in a package.

A unit can be an ounce, a pound, a quart, a square foot or an individual piece in a package. For example, the unit price shows you the cost of each ounce in a can of soup. The package price just tells you the price of the whole can. Unit pricing helps you compare costs of different brands and various sizes without doing arithmetic.

Why Use Unit Pricing?

Using unit pricing can be a great money saver. It is a good way to help stretch your food dollar. By using unit pricing, you can easily compare the cost of any brand and any package size. But remember, compare only similar items.

For example, comparing the unit prices of a carton of orange juice, bottled apple juice and a can of fruit punch tells you which is least expensive, because all are liquid, ready-to-drink beverages. However comparing unit prices of canned, frozen and powdered drinks is misleading, because you add water to frozen concentrates and powdered mixes.

Comparing unit prices of canned drinks to unit prices of frozen concentrates doesn't tell you how much each prepared serving costs. In addition, unit pricing will not help you compare nutritional value or other factors you wish to consider, such as convenience and personal tastes.
By using unit pricing, you don’t have to shop with a calculator or do math to find the most economical buys. Unit pricing will save you time because the math is already done. You can compare costs at a glance.

**How to Use Unit Pricing . . .**

Practice looking for and using unit pricing. Compare products by measuring what you pay per unit instead of price per package when you are comparing products.

Retailers give unit prices in several different ways:

<table>
<thead>
<tr>
<th>Unit of Measure</th>
<th>Product Types</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ounce</td>
<td>solids - meats, poultry, produce, canned and packaged goods, frozen foods</td>
</tr>
<tr>
<td>Pound (weight)</td>
<td></td>
</tr>
<tr>
<td>Fluid Ounce</td>
<td></td>
</tr>
<tr>
<td>Pint</td>
<td>liquids - milk, juices, soft drinks, oils, syrups</td>
</tr>
<tr>
<td>Quart</td>
<td></td>
</tr>
<tr>
<td>Gallon (volume)</td>
<td></td>
</tr>
<tr>
<td>Count (number of individual items grouped in the package)</td>
<td>napkins, soap pads, facial tissues, tea bags</td>
</tr>
<tr>
<td>Square Feet (area = length x width)</td>
<td>wax paper, aluminum foil, paper towels</td>
</tr>
</tbody>
</table>

**More About Unit Pricing . . .**

You sometimes find unit price information stamped directly on the package label, especially for foods with varying package weights, such as meats, poultry, bundled produce and some snacks and baked goods. Thus, each label gives you total weight of the package’s contents, price per pound (unit price) and price you pay for the whole package (retail price).

Here’s an example of a ground beef label:

<table>
<thead>
<tr>
<th>Ground Beef</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.49</td>
</tr>
<tr>
<td>2.10</td>
</tr>
<tr>
<td>$3.13</td>
</tr>
<tr>
<td>price per pound</td>
</tr>
<tr>
<td>price for each pound</td>
</tr>
</tbody>
</table>

Remember, "2.10" on this label doesn't mean two pounds and ten ounces. The number represents two pounds plus 10 percent of another pound, or two pounds and 1.6 ounces. Since 16 ounces equals a pound, 10 percent of a pound is 1.6 ounces.
This table gives you other examples:

<table>
<thead>
<tr>
<th>Decimal Pounds</th>
<th>Pounds</th>
<th>Approximate Equivalent Ounces</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>1</td>
<td>+ 0</td>
</tr>
<tr>
<td>1.03</td>
<td>1</td>
<td>+ 1/2</td>
</tr>
<tr>
<td>1.05</td>
<td>1</td>
<td>+ 3/4</td>
</tr>
<tr>
<td>1.06</td>
<td>1</td>
<td>+ 1</td>
</tr>
<tr>
<td>1.31</td>
<td>1</td>
<td>+ 5</td>
</tr>
<tr>
<td>1.56</td>
<td>1</td>
<td>+ 9</td>
</tr>
<tr>
<td>1.81</td>
<td>1</td>
<td>+ 13</td>
</tr>
</tbody>
</table>

Where to Find Unit Pricing . . .

Many supermarkets voluntarily provide unit pricing as a consumer service. A few cities, counties and states require unit pricing, though unit pricing is not required by federal law.

In stores providing unit pricing, look for special shelf tags below each product. Various supermarkets use slightly different styles of unit price tags, but the information basically remains the same.

Check this sample:

Remember These Tips to Help You Save . . .

In the supermarket, biggest isn't always best! Larger sizes are usually more economical than smaller sizes, but not always. Again, consider quality, nutrition, convenience, family tastes, economy and storage space.
Store brands often cost less but can match the quality of name brands. Sometimes, however, a name brand carries a reduced or sale price and can cost less than the store brands.

So use unit pricing to compare costs. Then choose the size and brand which best suit your needs.

**Test Yourself and Find the Best Buys . . .**

Which is the best buy, example A or B?

**A.**

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.32</td>
<td>$1.76 per pound</td>
</tr>
</tbody>
</table>

12 oz. DEF corn flakes
24 0-12345-67891 12-987654

**B.**

<table>
<thead>
<tr>
<th>Retail Price</th>
<th>Unit Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1.49</td>
<td>$1.49 per pound</td>
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16 oz. ABC corn flakes
24 0-98765-43219 12-123456

If you picked example A, you may have overlooked some important information.

Example A weighs 12 ounces, while example B is heavier with 16 ounces. Unit pricing helps you compare products in different size packages.

Item A's price tag is $1.32, while Item B is priced higher at $1.49. But the unit price, or price per pound, for example A is higher at $1.76 per pound, than is the unit price for example B at $1.49 per pound.

Thus, the unit price helps you choose the best money value. When you compare pounds to pounds and quarts to quarts, the item with the lowest unit price is the most economical buy.
Unit Pricing Notes

Use the following website to complete the notes:
http://www.fmi.org/consumer/unit/

Looking for the best buys? Use unit pricing . . .

Finding the best buys at the supermarket takes some know how. You must consider ________, ________, ________, ________ and ________ when shopping for food. Unit pricing will help you know which product is most ______________.

What is Unit Pricing?

Unit pricing is a ________ for comparing __________. While the package price tells you how much you pay for a food item, the unit price tells you _____________________________.

A unit can be an __________, a __________, a __________, a __________ or an __________ ________ in a package. For example, the unit price shows you the cost of each __________ in a can of soup. The package price just tells you the price of the whole ____. Unit pricing helps you compare costs of different ________ and various ________ without doing arithmetic.

Why Use Unit Pricing?

Using unit pricing can be a ________ ________ ________. It is a good way to help stretch your food __________. By using unit pricing, you can easily compare the cost of any ________ and any package ____. But remember, compare only similar items. For example, comparing the unit prices of a carton of ________, bottled ________ and a can of ________ tells you which is least expensive, because all are liquid, ready-to-drink beverages. However comparing unit prices of canned, frozen and powdered drinks is __________, because you add water to frozen concentrates and powdered mixes.

Comparing ________ of canned drinks to ________ of frozen concentrates doesn’t tell you how much each prepared ________ costs. In addition, unit pricing will not help you compare ________, ________ or other factors you wish to consider, such as ________ and ________.
By using unit pricing, you don't have to shop with a _________ or do _____ to find the most economical buys. Unit pricing will save you _____ because the math is already done. You can compare costs at a glance.

*How to Use Unit Pricing . . .*

Practice looking for and using unit pricing. Compare _________ by measuring what you pay per unit instead of price per package when you are comparing products.

**Retailers give unit prices in several different ways:**

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<td>liquids - milk, juices, soft drinks, oils, syrups</td>
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<td>Quart</td>
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You sometimes find unit price information stamped directly on the _________ ________, especially for foods with varying package _________, such as meats, poultry, bundled produce and some snacks and baked goods. Thus, each _________ gives you total _________ of the package’s contents, _________ per pound (unit price) and price you _____ for the whole package (retail price).

**Here's an example of a ground beef label:**

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<tbody>
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<td>net weight/lbs.</td>
<td>total item price</td>
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price for each pound number of pounds in this package amount you pay if you choose this package

Remember, "2.10" on this label doesn't mean two pounds and ten ounces. The number represents ___________________________ of another pound, or two pounds and 1.6 ounces. Since 16 ounces equals a pound, 10 percent of a pound is 1.6 ounces.
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<td>1</td>
<td>+ ¾</td>
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__________ often cost less but can match the quality of ________ ________.

Sometimes, however, a name brand carries a ________ or ______ price and can cost less than the store brands.
So use unit pricing to _________ _______. Then choose the _____ and ________ which best suit your needs.

**Test Yourself and Find the Best Buys . . .**

Which is the best buy, example A or B?

**A.**

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If you picked example A, you may have overlooked some important information.

Example A weighs ___ ounces, while example B is heavier with ___ ounces. Unit pricing helps you compare products in different size packages.

Item A's price tag is $_____, while Item B is priced higher at $_____. But the unit price, or price per pound, for example A is higher at $_____ per pound, than is the unit price for example B at $_____ per pound.

Thus, the unit price helps you choose the best _________ ________. When you compare pounds to pounds and quarts to quarts, the item with the lowest unit price is the most ____________ ____.
Unit Prices Worksheet

Name_____________________

Directions: To compute unit prices, reduce the selling price to the lowest possible unit.
For example, if a product costs $1.00 and a package contains 8 ounces, the price per unit is $1.00 divided by 8 ounces, or 12.5 cents per ounce.

Calculate the following unit prices to the nearest penny:

1. a. The cost of gasoline is $15.50 to fill up a tank containing 13 gallons. What is the cost per gallon?

   b. There are 3.785 liters per gallon. You bought 33 liters of gasoline and paid $11.25. What is the price per gallon?

2. You are purchasing the following items. Calculate unit prices to the nearest penny:
   a. 6/$1.00
   b. 3/$1.09
   c. 5/$.99
   d. 6/$.89
   e. 4/$1.00
   f. 8/$3.99

3. Compute the following prices per ounce to the nearest penny:
   a. 8 oz./$1.49
   b. 12 oz./$1.33
   c. 5/$2.29
   d. 48 oz./$3.89
   e. 1 lb./$3.29
   f. 1 lb. 6 oz./$4.49
   g. 2 lbs. 12 ozs./$3.99
   h. 3 lbs. 6 oz./$4.99

4. After reading the following problems, which of the following cars should you buy?
   (Car A or Car B)
a. Car A uses regular gasoline at $1.21 a gallon and gets 19 miles per gallon (mpg) in town. Assume that you drive 100 miles a week, or 400 miles a month. What is your gas bill each month?

b. Car B uses premium unleaded gasoline at $1.41 a gallon and gets 24 mpg in town. If you drive 100 miles a week, 400 miles a month, what will be your gas bill each month?
Unit Prices Worksheet

Directions: To compute unit prices, reduce the selling price to the lowest possible unit.
For example, if a product costs $1.00 and a package contains 8 ounces, the price per unit is $1.00 divided by 8 ounces, or 12.5 cents per ounce.

Calculate the following unit prices to the nearest penny:

1. a. The cost of gasoline is $15.50 to fill up a tank containing 13 gallons. What is the cost per gallon? $1.19
   b. There are 3.785 liters per gallon. You bought 33 liters of gasoline and paid $11.25. What is the price per gallon? $1.29

2. You are purchasing the following items. Calculate unit prices to the nearest penny:
   a. 6/$1.00
      17 cents
   b. 3/$1.09
      36 cents
   c. 5/$.99
      20 cents
   d. 6/$.89
      15 cents
   e. 4/$1.00
      25 cents
   f. 8/$3.99
      50 cents

3. Compute the following prices per ounce to the nearest penny:
   a. 8 oz./$1.49
      19 cents
   b. 12 oz./$1.33
      11 cents
   c. 5/$2.29
      7 cents
   d. 48 oz./$3.89
      8 cents
   e. 1 lb./$3.29
      21 cents
   f. 1 lb. 6 oz./$4.49
      20 cents
   g. 2 lbs. 12 ozs./$3.99
      9 cents
   h. 3 lbs. 6 oz./$4.99
      9 cents

4. After reading the following problems, which of the following cars should you buy?
   (Car A or Car B) **Car B**
a. Car A uses regular gasoline at $1.21 a gallon and gets 19 miles per gallon (mpg) in town. Assume that you drive 100 miles a week, or 400 miles month. What is your gas bill each month? $25.47

b. Car B uses premium unleaded gasoline at $1.41 a gallon and gets 24 mpg in town. If you drive 100 miles a week, 400 miles a month, what will be your gas bill each month? $23.50