

October 20th

- Reminder and Challenge powerpoint
- Examples paper - do the Try on Your Own problems
- Quiz tomorrow on finding the best buy as well as another assignment.

Reasons to Not Pick the Best Price

Perhaps you do not need 4 litres of milk, or maybe you do not have adequate storage for a large container. Should the milk be spoiled before you use it all, then the lowest price is not in your best interest.

Another consideration is distance to the store. Perhaps a supermarket across town has a better price, but you would spend more in gas than you would save on buying a cheaper product. Small corner stores typically charge a little more for their products, but they are very convenient.

Another reason consumers purchase smaller items even though they might have a higher unit price is the amount of available money. Perhaps they just do not have enough cash at that moment to afford the larger item.

Unit Pricing

Example

A store offers one brand of rice in 3 different sizes:

- 500 grams for \$2.30 ✓
- 1.5 kg for \$6.50 = $1.5 \times 1000 = 1500 \text{ g}$.
- 3.2 kg for \$13.50 = $3.2 \times 1000 = 3200 \text{ g}$.

(55)
1000 grams
1 kilogram

Find the unit price per 500 gram for each size. Which size has the best price?

$$\begin{array}{r} \$ \\ \text{g} \end{array} \frac{6.50}{1500} = \frac{x}{500}$$

\$2.17

$$\begin{array}{r} \$ \\ \text{g} \end{array} \frac{13.50}{3200} = \frac{x}{500}$$

\$2.11

best buy!

Ricola (small) - \$2.50 - 19 pces

Ricola (family pack) - \$6.28 - 45 pces

* No grams

Quantity - Pieces

Dveck did

$\$2.50 \div 19 =$

13 cents
price for 1
0.1315789

Shortcut
told me that
\$2.50 pack
is cheaper

$\times 45$

 $= \underline{\underline{\$5.92}}$

per unit.

Big pack $\frac{\$6.28}{45} = 0.139555$

14 cents
per candy

Unit - smaller, used
to compare.

Ex. Deli meat is sold by the
unit. Unit is priced as
\$2.98 per 100g

Ex. gasoline Litre

Ex. chain and rope (imperial)
sold by the foot OR
meter (metric)

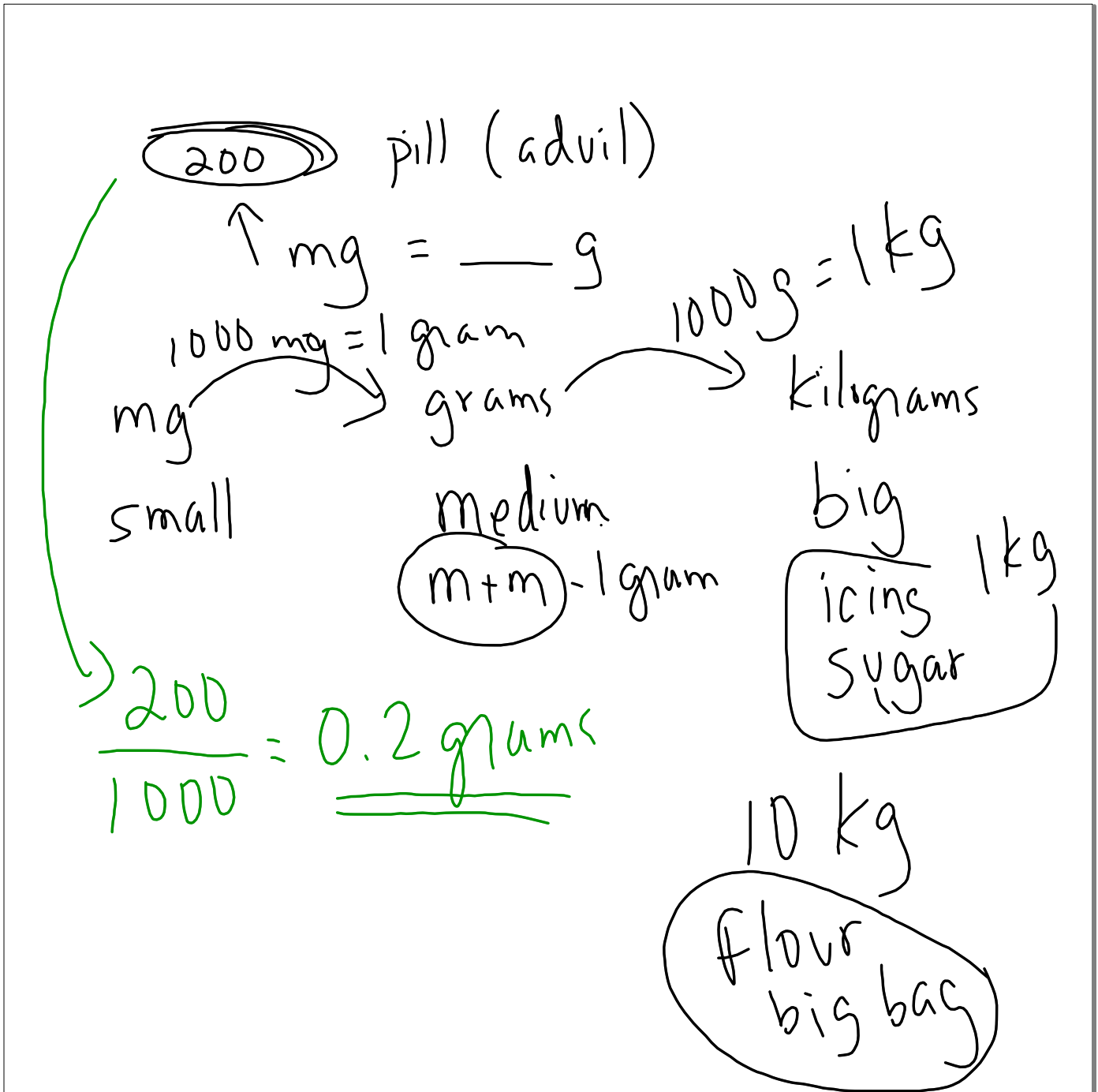
Ex. chocolate milk
mL OR Litre (metric)

small medium
gallon (imperial)

ice cream - 4L

- 1L

1000 mL = 1 Litre



Try on Your Own

1. Find the unit price of each item, as indicated.

a) 355 mL soda costing \$1.25, unit is 100 mL

Labels given solve

$$\begin{array}{r} \$ \\ \text{mL} \end{array} \begin{array}{r} \$ \\ \text{mL} \end{array} \frac{1.25}{355} = \frac{x}{100}$$

used for comparison purposes

$$100 \times 1.25 \div 355 = \underline{\underline{\$0.35 \text{ per } 100 \text{ mL}}}$$

b) 3.5 kg sugar costs \$5.30, unit is 1 kg

c) 1.5 kg sliced meat costs \$11.25, unit is 100 g

2. Use unit pricing to compare two products and find the best buy.

a) 6 cans of 355 mL diet soda for \$2.85 or a 2 L bottle costing \$2.10. Use a unit of 100 mL

6 cans

$$\begin{array}{r} \$ \\ \text{mL} \end{array} \frac{2.85}{2130} = \frac{x}{100}$$

\$0.13/100 mL

2L = 2000 mL

big bottle

$$\begin{array}{r} \$ \\ \text{mL} \end{array} \frac{2.10}{2000} = \frac{x}{100}$$

best buy

\$0.11/100 mL

b) 1 kg jar of peanut butter for \$3.95 or a 5 kg jar for \$18.95. The unit is 1 kg.

3. Give two reasons why someone might not purchase a larger item, knowing the unit price is lower.

ex. pop? 2L goes flat, you pour it out.

ex. some food will go bad before it is used. Ex. 4L of milk

4. Find the unit price for each item, as indicated. Show your calculations.

a) 2 L milk costs \$3.15, unit is 100 mL

$\times 1000$
2000 mL

$$\frac{\$ 3.15}{2000 \text{ mL}} = \frac{x}{100 \text{ mL}}$$

$x = 0.1575$

$\$0.16$ per 100 mL

b) 1.5 kg meat costs \$12.75, unit is 100 g

$\times 1000 = \text{g}$
1.5

$$\frac{\$ 12.75}{1500 \text{ g}} = \frac{x}{100 \text{ g}}$$

$\$0.85 / 100 \text{ g}$

c) 22 kg of potatoes for \$10.99, unit is 500 g

d) 130 mL toothpaste costs \$1.78, unit is 50 mL

5. Use unit pricing to compare prices and find the best buy. Show your work, and state which one is the better buy.

3 x 4
= 12 quarts

- a) 3 gallons of oil for \$19.89 or 1 quart of oil for \$1.79. Use 1 quart as the unit. Note: there are 4 quarts in a gallon.

$$\begin{array}{r}
 \$ \quad 19.89 \\
 \hline
 \text{quart} \quad 12 \\
 \times \quad \$1.66/\text{quart} \\
 \hline
 \end{array}
 =
 \begin{array}{r}
 \times \quad 1.6575 \\
 \hline
 \text{quart} \quad 1
 \end{array}$$

$$\begin{array}{r}
 \$ \quad 1.79 \\
 \hline
 \text{quart} \quad 1
 \end{array}
 \text{ done!}$$

- b) 10 pounds of flour for \$11.85 or 2 pounds for \$2.98. Use 1 pound as the unit.

- c) 12 cans of soda with 355 mL per can for \$4.80 or two 2 L bottles for \$4.15. Use a unit of 100 mL

Metric

$$1000g = 1kg$$

$$1000mL = 1L$$

$$1000m = 1km$$

Imperial

$$1 \text{ gallon} = 4 \text{ quarts}$$

$$1 \text{ quart} = 2 \text{ pints}$$