Name: _key_

Learning Goals:
1. I will be able to understand how to write a rate
2. I will understand how to write a unit rate
3. I will understand how to use rates and unit rates in word problems

Notes:

Terminology to Know:
1. Rate: _Comparison of things with two different units_ _5 laps/120 laps_
   a. Example: _Different units_

2. Unit Rate: _Comparison of things with different_ _units where the seconds rate._ _has been reduced so that_ _it is 1 unit ex) $8/hr._
   a. Example:

Learning Goal #1: Rates
1. Express each sentence as a rate:
   a. Steve likes to walk slowly. He usually walks 8 kilometres in 90 minutes.

   $8 km / 90 min$

   b. Emily likes to swim fast. She can swim 7 laps of the pool in 1.5 minutes

   $7 / 1.5 min$

   c. Gage has a very fast pitch. He can throw the ball 90 m in 4 seconds.

   $90 m / 4 s$

Learning Goal #2: Unit Rates
1. Mary cycled 35 kilometres in 2 hours. What was his speed? Show your work.

   $35 km/2h = 17.5 km/h$

2. Mrs. Arcuri's dog ran 10 blocks in 3 minutes. What is his speed? Show your work.
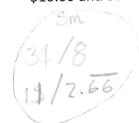
   $10 bl/3min = 3.33 bl/1m$

3. A container of yoghurt costs $5.00 for 400 grams. How much does 100 grams cost? Show your work.

   5/400g = 1.75$/100g$

4. A package of movies costs $48.00 and in the package there are 7 movies. What is the cost per movie? Show your work.

   48/7 movies = 6.85$/1 movie$

1. There are three different sizes to Summerland Sweets fruit candies. The smallest box costs $3.00 and contains 8 candies. The medium size box costs $6.00 and contains 15 candies. The largest box costs $10.00 and contains 24 candies. Which is the best deal? Show your work.

Sm
3/8
1$/2.66

M
6$/15
1$/2.5

Lg
10$/24.
1$/2.4

2. Mrs. Arcuri wants to find the best deal for her morning latte. The Beanery costs $4.50 for 10 oz. The Good Omen café costs $4.00 for 12 oz. And Tim Horton's costs $3.00 for 9 oz. Which is the best deal? Show your work.

$$\frac{\$4.50 \div 10}{10\,oz \div 10} = \frac{.45}{1\,oz}$$

$$\frac{\$4.00 \div 12}{12\,oz \div 12} = \frac{33¢}{1\,oz}$$

$$\frac{\$3.00 \div 9}{9\,oz \div 9} = \frac{33¢}{1\,oz}$$

Tim Horton's & Good Omen Cafe costs the Same

3. Save-On has 12 limes for $5.00. Superstore has 18 limes for $6.50. Costco has 30 limes for $8.00. Which is the best deal? Show your work.

$$\frac{\$5.00}{12\,limes} = \frac{.42¢}{1\,lime}$$

$$\frac{\$6.50}{18\,limes} = \frac{.36¢}{1\,lime}$$

$$\frac{\$8.00}{30\,limes} = \frac{27¢}{1\,lime}$$

4. Mrs. Arcuri drove to Merritt for a hockey tournament. She travelled 120 km in 2 hours. Mr. Arcuri then drove from Merritt to Kamloops. It was a 96 km trip and it took 1.5 hours. Who is the faster driver? Show your work.

$$\frac{120\,Km}{2\,hr} = \frac{60\,Km}{1\,hr}$$

$$\frac{96\,Km}{1.5\,hr} = \frac{64\,Km}{1\,hr}$$

Mr. Arcuri of course!
He is a speed demon.