OPTION 1: The Scenic Route
DISTANCE: 40 Km TIME: 41 min


OPTION 2: Going to Work
DISTANCE: $\mathbf{4 0 . 2} \mathbf{~ K m} \quad$ TIME: 32 min


## TASK: Travelling to and from NGDHS

Route Details:

| Option | Distance (Km) | Time (min) |
| :---: | :---: | :---: |
| 1 | 40 | 41 |
| 2 | 40.2 | 32 |

1-DISCUSS: Describe (and show, if necessary) to your group how you would use the map's scale to determine the distances, as shown in the chart, travelled for each route.

2-ON WHITEBOARD:
Over the course of a school year, Mr. Stewart takes Option 1 just as much as Option 2; that is, he takes the 32 min route in the morning and the more scenic route home after work.
a) What is Mr. Stewart's daily, mean speed going to and from work?
b) How many Km does Mr. Stewart travel over the course of one school year? How much time, in hours, does he spend on the road? (180 days in a school year)

3-ON WHITEBOARD:
a) Mr. Stewart's car consumes 7.8 L of gas per 100 Km (this is called the vehicle's fuel efficiency). How many litres of fuel (projected amount) will he use over the course of the school year?

The average, monthly gas prices over the course of September 2015 through May 2016, which Mr. Stewart has been paying, are as follows:

| Month | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Price <br> (cents/L) | 99.5 | 97.2 | 98.4 | 90.3 | 83.5 | 76.6 | 90.3 | 97.2 | 99.5 |

b) Over the course of the school year, how much will it cost (projected cost, in dollars) him in fuel to drive to and from work?
c) Mr. Stewart's car has a tank with a volume of 48.5 L . How far can he drive on a single tank of gas?

## FOLLOW-UP PRACTICE:

Complete pp.493-95 \#1, 2, 3ace, 4ace, 10 (a, b, OR c)

