

Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Who Will Meet Their Targets?

Transportation accounts for more than 27% of Canada's total greenhouse gas emissions. One way of reducing greenhouse gas emissions is to develop cars with better fuel economy. Such cars would travel farther using less gas, resulting in fewer emissions.



1. In 2002, passenger vehicles in Canada emitted 242 grams of carbon dioxide per kilometre (g of CO<sub>2</sub>/km). The government wants this emission standard reduced by 7.56 g of CO<sub>2</sub>/km per year until 2010.
  - a) What total reduction will this create between 2002 and 2010?
  - b) What is the proposed emission standard for 2010, rounded to the nearest whole number? Use your answer to complete the data for Canada in the table below.
2. Governments in Australia, China, the European Union, Japan, and the United States also intend to decrease fuel emissions from passenger vehicles. The table shows how much carbon dioxide was emitted by passenger vehicles per kilometre travelled in 2002.
  - a) Develop a linear line graph to show the projected reduction by the target year. Use a different colour for each country or region.
  - b) Take a look at the slope or steepness of the line for each country or region. Which are more likely to meet their projected targets? Explain your thinking by referring to the graph.
  - c) Looking at the graph, do you think that Canada will likely reach its target? Explain.

	Proposed Emission Standard (g of CO <sub>2</sub> /km)	
	2002	Target Year
Canada	242	_____ (2010)
Australia	212	185 (2010)
China	210	170 (2008)
European Union	165	120 (2012)
Japan	132	130 (2010)
United States	258	250 (2007)