

Name: _____

Date: _____

BLM 8-7

Section 8.2 Math Link

This worksheet will help you with the Math Link on page 299.

The temperature of still, dry air decreases by about 6°C for each kilometre increase in altitude. A weather balloon was launched from The Pas, Manitoba, on a still, dry day.

- 1. a)** Is a decrease of temperature expressed as a positive value or a negative value? _____
 - b)** What is the temperature change for each of the following distances above ground?
1 km: _____ 2 km: _____ 3 km: _____ 4 km: _____ 11 km: _____
 - c)** What is the approximate temperature 11 km above ground if the ground temperature is 4°C ? _____
- 2.** Calculate the following if the balloon descends from 11 km to 5 km.
 - a)** What is the change in altitude? _____
 - b)** About how much is the temperature change? _____
 - 3.** Sketch the balloon's movements. Label the different heights and air temperatures.