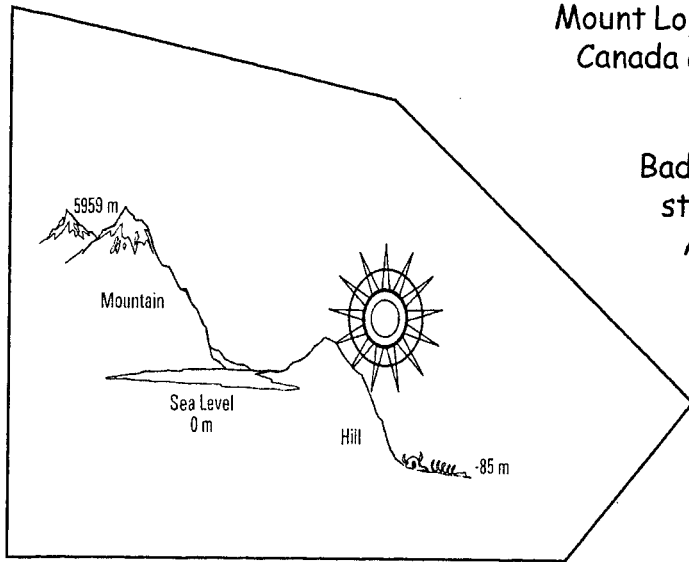




Name: _____

Elevations

Mount Logan, Yukon Territory is the highest mountain in Canada at 5959 m above sea level.



Badwater, in Death Valley National Park, in the state of California, is the lowest point in North America at 85 m below sea level.

All elevations on Earth are compared to sea level. Sea level is considered to be 0 metres. Heights above sea level can be written as positive integers and heights below sea level can be written as negative integers.

1. Express each of the following as an integer:

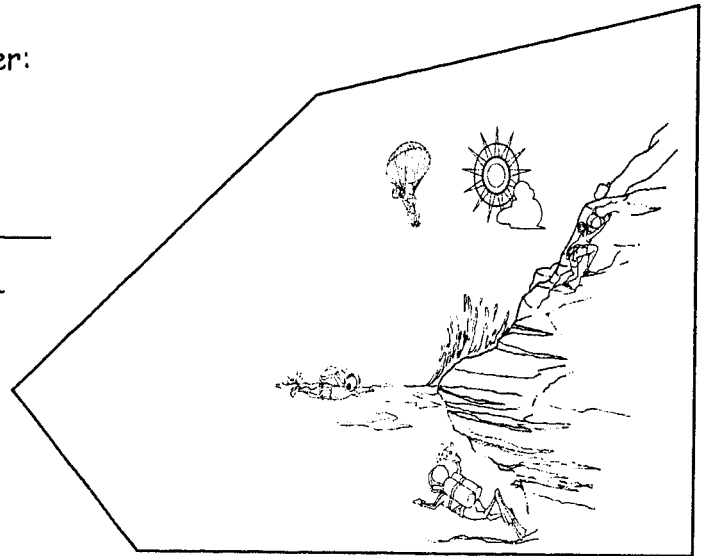
- 282 m below sea level _____
- 75 m above sea level _____
- the tower is 30 m above sea level _____
- a dive of 40 m below sea level _____

A climber is 150 m above sea level.

A swimmer is at sea level.

A diver is 20 m below sea level.

A parachutist is 250 m above sea level.



2. Use the information above to express the change in height as a positive or negative number:

- from diver to climber _____
- from diver to parachutist _____
- from swimmer to diver _____
- from parachutist to swimmer _____

Student Activity



3. Order the following elevations from least to greatest: _____

- a. Arctic Ocean (0 m)
- b. Lake Ontario (75 m)
- c. Mount Columbia (3700 m)
- d. Dead Sea (-400 m)
- e. Sea of Galilee (-210 m)
- f. Lac Lucerne (434 m)

Highest Elevations in Canada by Province		
Province	Name	Elevation
Newfoundland	Mount Caubvik	1 652 m
Prince Edward Island	Queen's County	142 m
Nova Scotia	Cape Breton Highlands	532 m
New Brunswick	Mount Carleton	817 m
Quebec	Mount D'Iberville	1 652 m
Ontario	Ishpatina Ridge	693 m
Manitoba	Baldy Mountain	832 m
Saskatchewan	Cypress Hills	1 468 m
Alberta	Mount Columbia	3 747 m
British Columbia	Fairweather Mt.	4 663 m
Yukon	Mount Logan	5 959 m
Northwest Territories	Unnamed Peak	2 773 m
Nunavut	Barbeau Park	2 616 m

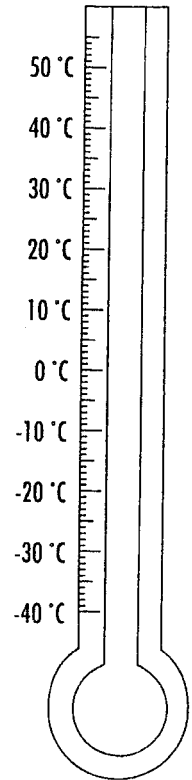
4. Express each change in altitude as a positive or negative number:
- a. From Mount Logan to Cape Breton Highlands _____
 - b. From the Unnamed Peak to Mount Caubvik _____
 - c. From Baldy Mountain to Cypress Hills _____
 - d. From Mount D'Iberville to Ishpatina Ridge _____
 - e. From Fairweather Mountain to Barbeau Park _____
 - f. From Queen's County to Mount Carleton _____
 - g. From the highest point in British Columbia to the highest point in Alberta _____



Temperature Changes

1. Fill in the table. Use the thermometer to help you.

	Starting Temperature	Change	New Temperature
a.	-6°C	10° drop	
b.	-32°C	8° rise	
c.	6°C	8° rise	
d.	-3°C	6° rise	
e.	-17°C	5° drop	
f.	-21°C	11° drop	
g.	-29°C	37° rise	
h.	25°C	37° drop	
i.	16°C	5° drop	
j.	-2°C	5° rise	



2. The chart below shows some temperature changes that occurred one day in a city in Canada.

Reported Temperatures			
Time	Temperature	Warmer/Colder?	Change in degrees
2:00 a.m.	-35°C	n/a	n/a
6:00 a.m.	-32°C		
10:00 a.m.			+10°C
2:00 p.m.	-20°C		
6:00 p.m.			-3°C
10:00 p.m.			-10°C

Student Activity



- a. Complete the chart on the previous page.
 - b. What is the difference in temperature from 6:00 a.m. to 6:00 p.m.? _____
 - c. In what month could these temperatures have been recorded? _____
3. Use the chart below.
- a. Which day was coldest? _____
 - b. Which night was warmest? _____
 - c. What is the greatest difference in high and low temperatures? _____

Date	High	Low
February 1	-2°C	-12°C
April 1	8°C	-3°C
June 1	22°C	8°C
September 1	18°C	3°C



Fun with Integers

1. Match each situation at the left with the integer that represents its opposite. Print the letters of the situations on the lines below to find the answer to this riddle:

What did Mr. and Mrs. Burger name their daughter?

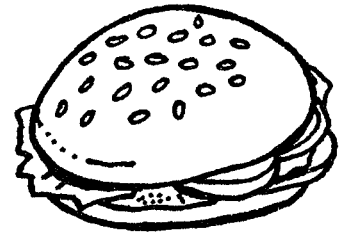
a b c d e

Situation

- a. 15 m above sea level
- b. 15 degrees below zero
- c. a gain of 50 kilograms
- d. a profit of \$150
- e. a drop of 50 metres

Opposite

- (T) -150
- (P) -15
- (T) -50
- (A) +15
- (Y) +50



2. Solve each of the following:

- a. What number is 5 less than 2? _____
- b. What number is 8 greater than -7? _____
- c. What number is 18 greater than -12? _____
- d. What number is 10 less than 5? _____
- e. What number is 6 greater than -9? _____
- f. What number is 15 less than 8? _____
- g. What number is 4 less than -3? _____
- h. What number is 12 less than 14? _____
- i. What number is 12 greater than -15? _____
- j. What number is 3 less than -5? _____

Student Activity



3. Solve each problem using integers.

- a. The elevator in a department store lists the floors as B2, B1, 1, 2 and 3. How could you use integers to label these floors?

- b. A boy rows upstream at a speed of 6 km per hour against a current of 3 km per hour. How could you use integers to represent these speeds? _____

What would be his actual speed? _____

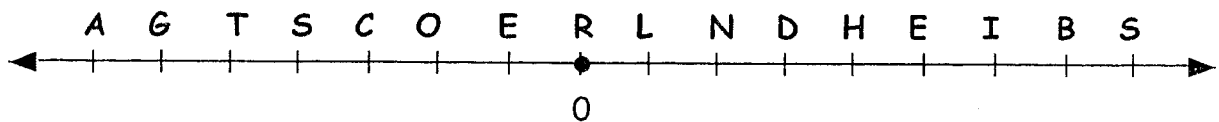
- c. An airplane traveling at a height of 1 300 m, makes a climb of 500 m, followed by a descent of 300 m.

How could you use integers to represent the flight of the airplane? _____

What is the airplane's altitude after the descent? _____

4. Use the number line to change the integers into words and answer this riddle.

What part of a fish weighs the most? _____



- a. -5, +4, -1

- b. 8, -3, -7, +1, +5, -4

