

# Scale Practice Activities 比例实践活动

English Name 英文名字: \_\_\_\_\_ Grade and Class 年级班级: \_\_\_\_\_ - \_\_\_\_\_

On a map you will be given a scale. You will need to calculate the actual size or distance between objects rather than the size of the map reduction.

通常一幅地图会给出所用的比例, 而你要计算的是实际大小和距离而不是地图上的大小。

There are three different types of scales given on a map.  
在地图上有3种表示比例的方法。

### 1. Written Scale 文字比例

1cm = 100km

### 2. Representative Fraction 数字比例

1: 1,000,000

### 3. Graphic Scales 图表比例



to determine the actual size rewrite the scale formula as follows.  
计算实际大小方式如下:

$$\text{Actual Size} = \text{Scale} \times \text{Model Size}$$

$$\text{实际大小} = \text{比例} \times \text{模型大小}$$

### Example 例

The scale of a map is 1cm is equal to 50km. You measure the distance between two points and the measurement on the map is 2.5 cm. What is the actual distance between the two points?

一幅地图比例是1cm相当于实际的50km.在地图上你测量两点之间距离的结果是2.5cm,那么该两点之间的实际距离是多少?

1. What city is the furthest North? How far is it from the next closest city?

哪个城市位于最北? 离它最近的城市有多远?

2. If you took a plane from Ottawa to Thunder Bay, then to Churchill, and finally to Alert, how far would you have flown?

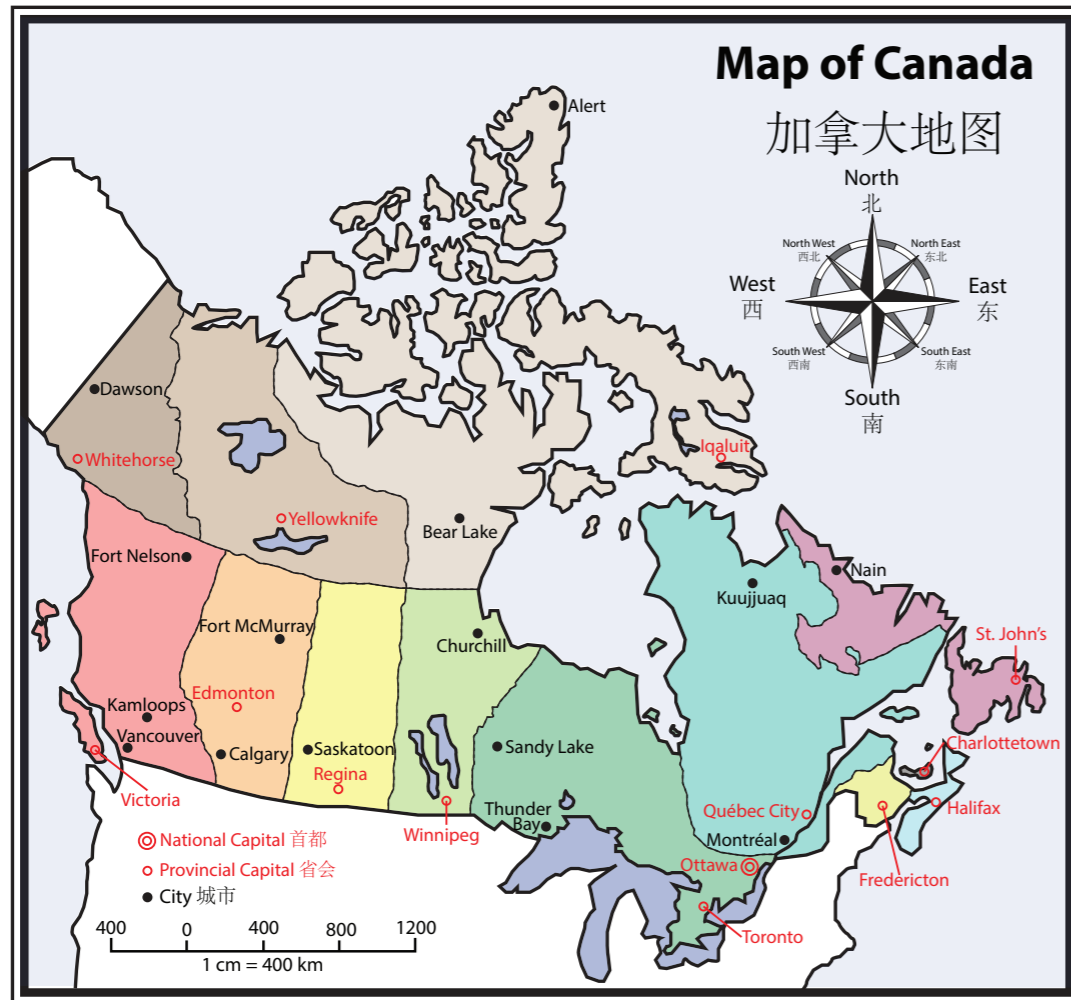
如果你坐飞机从 Ottawa到 Thunder Bay, 然后再到 Churchill, 最后到 Alert, 那么你总共飞了多远?

If each time the plane lands it takes half an hour to refuel, and the plane travels at 280 Kilometers per hour, how long would the trip take?

如果每次飞机降落需要半个小时补给燃料, 每小时飞行速度是280千米的话, 那么这次旅行需要多长时间?

Use a ruler to measure the distance between the indicated cities on the chart. Record the distance at the reduced scale of the map. Then using math calculate how far apart the actually cities are. Measure to the nearest Millimeter. Make sure you measure from the center of one city marker to the center of the other city marker.

使用直尺测量下图城市之间的距离，并把所测量的结果记录入下表，然后根据比例计算公式计算出实际距离。测量结果保留到毫米。测量时注意从一个城市城标的正中心到另一个城市城标的正中心。



	Measurement on Map	Distance
Churchill ⇒ Sandy Lake	1.5 cm	1.5 cm X 400 km/cm 600 km
Vancouver ⇒ Fort Nelson		
Ottawa ⇒ Calgary		
Whitehorse ⇒ Yellowknife		
Thunder Bay ⇒ Iqaluit		
Victoria ⇒ St. John's		
Toronto ⇒ Kamloops		
Edmonton ⇒ Vancouver		
Fort McMurray ⇒ Dawson		
Nain ⇒ Kuujuuaq		
Québec City ⇒ Halifax		
Montréal ⇒ Charlottetown		
Fredericton ⇒ Winnipeg		