



# Geography of Canada

## Unit #1: Scale

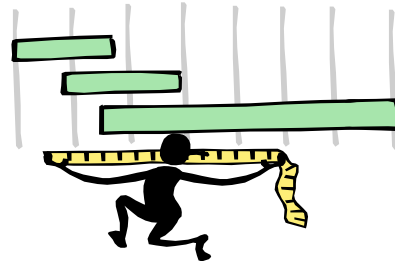
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### Scale

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- Shows the relationship between the distance on a map and the actual distance on the earth's surface
- A small distance on a map represents a much larger distance on the earth's surface
- Scale can be represented in three ways.

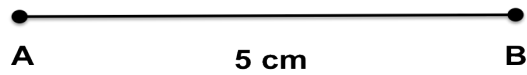




## Direct Statement

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- Uses words to describe scale
- Example: 1 cm represents 10 km



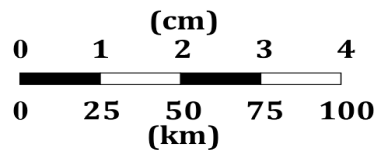
- Distance:  $1 \text{ cm represents } 10 \text{ km}$   
 $(5 \times 1) \text{ cm} = (5 \times 10) \text{ km}$   
 $5 \text{ cm} = 50 \text{ km}$



## Linear Scale

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- A line divided into units of distance commonly found on most maps



- Therefore:  $1 \text{ cm represents } 25 \text{ km}$



## Representative Fraction

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- Scale that is represented as a fraction or ratio

Example: RF  $\rightarrow$  1 : 50,000

First Term	Second Term
•Always one centimetre on the map	•Represents the distance on the earth's surface
•Represents the distance on the map	

- Both are measured in centimetres
- Therefore:  
1 cm on the map represents 50,000 cm on the earth's surface



## Scale Conversion

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- Converting centimetres to kilometres

$$1 \text{ cm} = 50,000 \text{ cm}$$

$$1 \text{ cm} = (50,000 / 100,000)$$

$$1 \text{ cm} = 0.5 \text{ km}$$

- Converting kilometres to centimetres

$$1 \text{ km} = 2.5 \text{ cm}$$

$$1 \text{ km} = (2.5 \times 100,000)$$

$$1 \text{ km} = 250,000 \text{ cm}$$

**!! Remember that 1 km = 100,000 cm !!**