



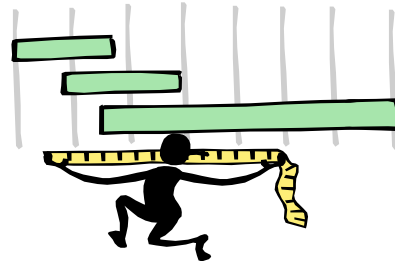
Geography of Canada

Unit #1: Scale



Scale

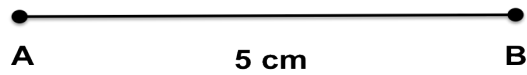
- Shows the relationship between the distance on a map and the actual distance on the earth's surface
- A small distance on a map represents a much larger distance on the earth's surface
- Scale can be represented in three ways.





Direct Statement

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

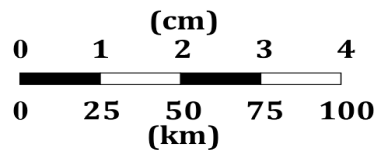


- Distance: $1 \text{ cm represents } 10 \text{ km}$
 $(5 \times 1) \text{ cm} = (5 \times 10) \text{ km}$
 $5 \text{ cm} = 50 \text{ km}$



Linear Scale

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



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



Representative Fraction

- Scale that is represented as a fraction or ratio

Example: RF → 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

- 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 !!