## **Unit 16 – Force and Motion(1)**

## Distance and displacement

## Activity 16.1

- Find a road map of Sri Lanka, drawn to scale and identify the scale.
- Place a thin thread along the main road and measure the length between two cities.
- Calculate the distance to travel from Colombo to Kandy, Galle, Matara, Kurunegala, Puttalam, Trincomalee and Jaffna.
- Measure the straight length from Colombo to each city mentioned, and calculate the straight distance.
- Tabulate the findings as below.

Two cities	Distance to travel between the two cities	Straight distance between the two cities
Colombo to Kandy		
Colombo to Galle		
Colombo to Matara		
Colombo to Kurunegala		
Colombo to Puttalam		
Colombo to Trincomalee		
Colombo to Jaffna		

	Distance is
	Displacement is

Let us consider a man travelling from P to R via Q by a motor vehicle as shown in Figure

What is the total distance travelled during this motion? **70 km** 

What is the displacement of the vehicle during this motion? 50 km towards north-east

