Date: _

The Language of Motion



Now create your own number line with 4 distinct times and positions (on a separate piece of paper). Create two questions about it (both time and displacement if you'd like) and get a partner to try to answer them.

4m+8+14+9=35m

Date: _

DISTANCE AND DISPLACEMENT ACTIVITY

In this activity, you will determine the position, distance, and displacement of a person walking.

What to do

1. Copy the following tables onto a separate piece of paper. Give each table a title.

Time (s)	Position (m)
0	5 m [E]
5	
10	
15	
20	

Time Interval (s)	Distance Travelled (m)	Displacement (m)
0 s- 5 s	15 m	15 m [E]
0 s- 10 s		
0 s- 15 s		
0 s- 20 s		

2. The illustration below shows a person walking toward the east, then the west, and then toward the east again. Use the illustration to help you complete the tables. The person walk east, then west, and then east again.



The person starts walking at t=0 s and finished walking at t= 20 s

What did you find out?

- a) Is the magnitude of the displacement always the same as the distance?
 b) Explain why or why not.
- 2. Under what conditions would the magnitude of the displacement be the same as the distance?
- 3. What is the total distance travelled for the time interval 10 s 20 s? What is the displacement?