

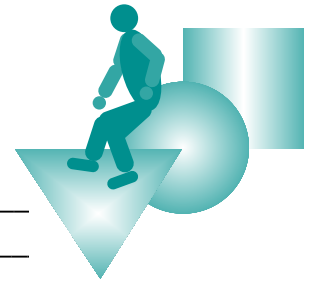
# GAUGE YOUR GAIT

## Student Activity 2B Data Page



### Team members:

Timekeeper \_\_\_\_\_  
 Reader \_\_\_\_\_  
 Measure Master \_\_\_\_\_  
 Walker \_\_\_\_\_



### Gauge Your Gait Group Data Table

Distance (meters)	Time (seconds)	Total Steps Taken	Cadence (steps/min)	Velocity (m/sec)	Measured Stride Length (m/stride)	Calculated Stride Length (m/stride)

**Calculations:** Be sure to show your work and include units in your answer.

1. **Cadence:** \_\_\_\_\_ Cadence (steps/min) =  $\frac{\text{steps counted} \times 60 \text{ sec/min}}{\text{time (seconds)}}$



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. **Velocity:** \_\_\_\_\_ Velocity (m/sec) =  $\frac{\text{distance(meters)}}{\text{time (seconds)}}$



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

3. **Stride length :** \_\_\_\_\_ Stride length(m/stride)=  $\frac{\text{velocity (m/sec)} \times 60 \text{ sec/min} \times 2 \text{ steps/stride}}{\text{cadence (steps/min)}}$



\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

### Processing Out:

1. How does the **measured Stride Length** compare to the **calculated Stride Length**? \_\_\_\_\_

# GAUGE YOUR GAIT

Student Activity 2B continued

Data Page

## Graphical Analysis



When called upon, each group reporter tells the class the **stride length**, **cadence**, and **velocity**. Each reporter writes the information on the class data table.

### Gauge Your Gait Class Data Table

Group Name/Number	Cadence (Steps/sec)	Velocity (m/sec)	Stride Length (measured) (m/stride)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
Average			

1. Using class data, you will construct 2 graphs. The first graph will compare **stride length** and **cadence**. Be sure to give your graph a title and label both the x and y axis. Don't forget to include the units on your graph.
2. In the second graph you will compare **cadence** and **velocity**.



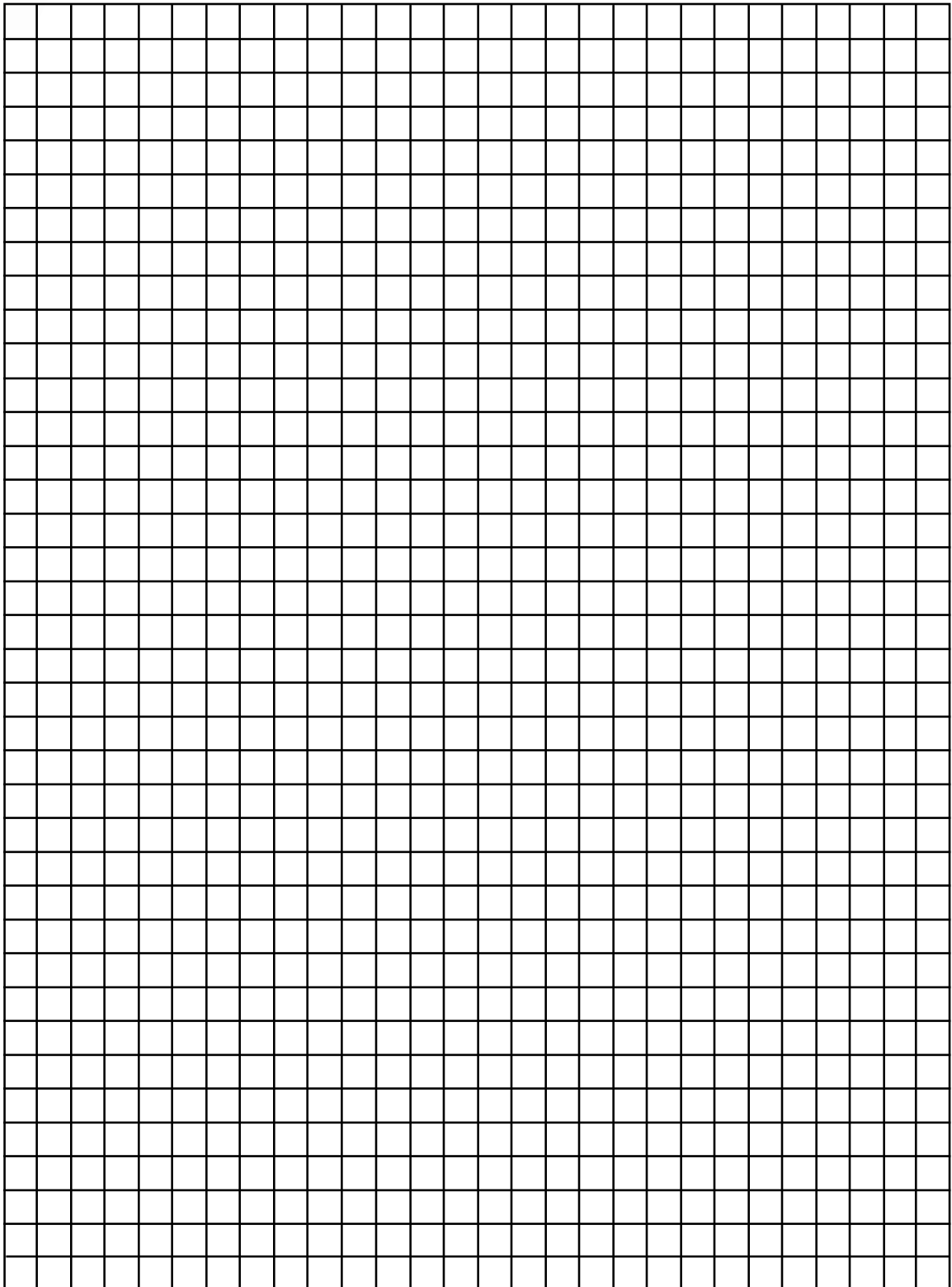
LESSON 2  
ACTIVITY 2B

MO-BILITY



Graph Title \_\_\_\_\_

\_\_\_\_\_  
(Axis label)



\_\_\_\_\_  
(Axis label)