5.8.A.1.a Observe, describe, and compare the motions of objects using position, speed, velocity, and direction

Dance Challenge

Name: _____

Learning Goal: I will calculate and compare speed by measuring a series of dance movements in a dance phrase that I choreograph.

Step 1: Use your meter stick to create a tape line 10 meters long. It should be a straight line. Use a piece of tape to mark the beginning and end of your track.
Step 2: Choreograph (plan) a short dance phrase to music in class. Describe and sequence the dance movements in your dance below so you ensure you do it the same way in each trial.
Step 3: Record the time and distance it takes you to dance in your in your data table.
Step 3: Calculate the speed for each trial and the average speed.

Data:
Describe the steps in your dance (this is your procedure so make sure to include detail):

_____
_____
_____
_____
_____

Table 1: Table of Times to Travel Entire 10 m Distance

Trial	Time (s)	Calculated Speed
1		
2		
3		
4		
Average		

Challenge: Change your velocity!

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Questions:

1. Why is it critical to describe your dance in detail for ensure validity in your experiment?

   _____

   _____

2. Explain the difference between speed and velocity

   _____

   _____

3. Were your results accurate? _____ Why or why not?

   _____

   _____

   _____

   _____

4. What could you have changed in this experiment to get more accurate results?

   _____

   _____

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5. How could you change your dance to maintain speed but alter velocity?

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6. Explain how your dance connected to science using 5 words from the slide on the computer screen:

   _____

   _____

   _____

   _____

   _____

   _____

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