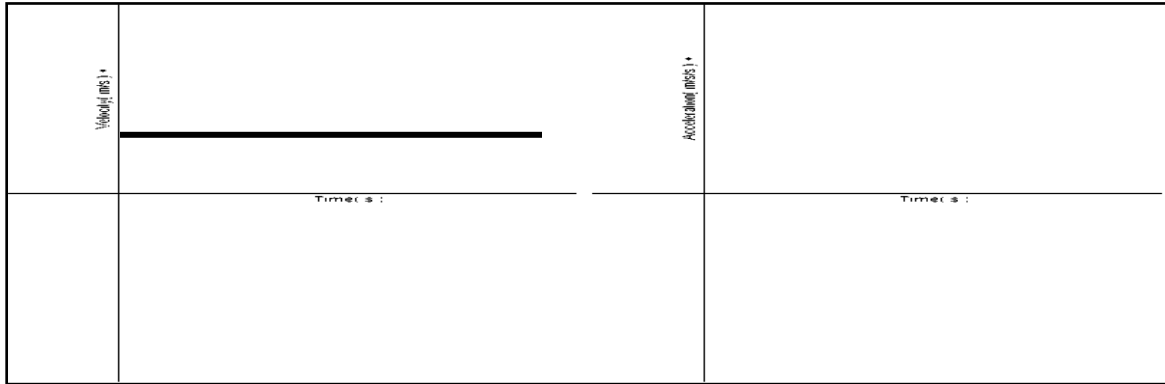
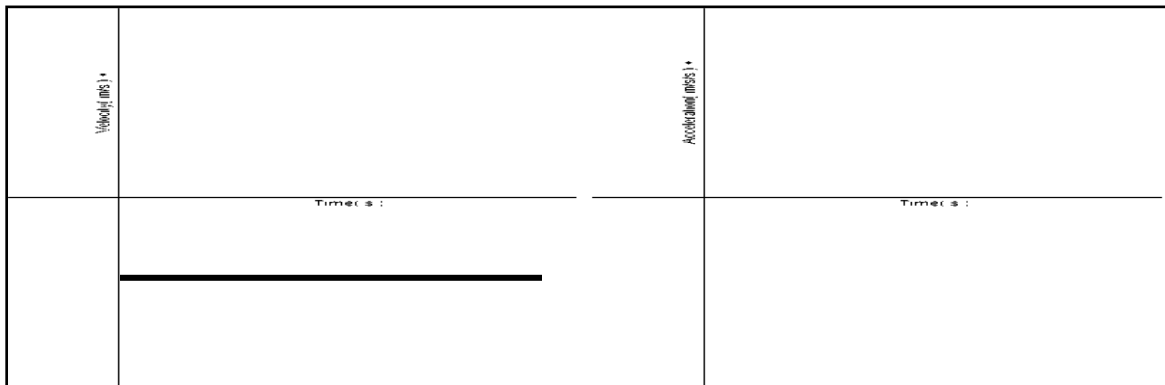


----- Review -----

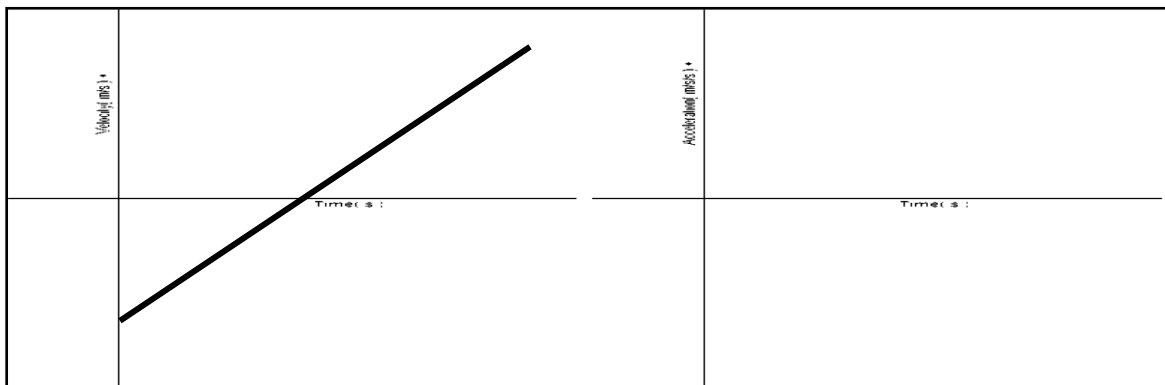
1. Draw what a-t graph you would expect from a cart that is moving as shown.

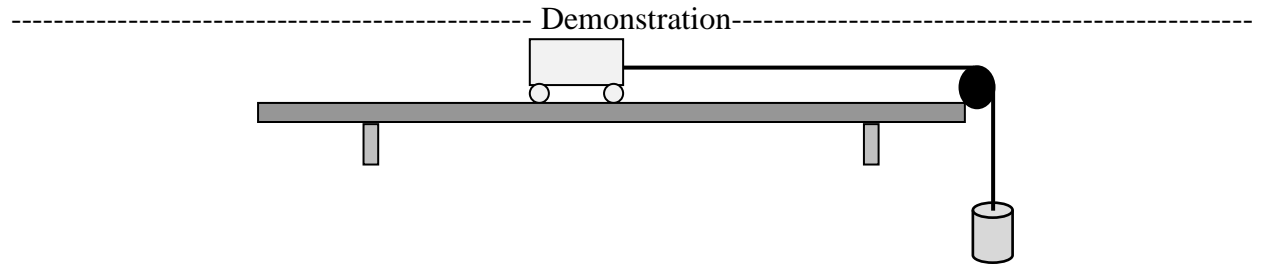


2. Draw what a-t graph you would expect from a cart that is moving as shown.



3. Draw what a-t graph you would expect from a cart that is moving as shown.





The weight of the mass on the end of the string will provide a force to the cart.

----- Predictions -----
Predict the graphs of the carts motion.

Velocity (m/s)	
Acceleration (m/s ²)	
Force (N)	

What direction do you think the force was actioning on the cart?

----- Partner Discussion -----

----- Class Discussion -----

----- Physics Speaks -----

----- Results -----

Record the graphs of the cart's motion.

Velocity (m/s)	
Acceleration (m/s/s)	
Force (N)	

The velocity of the cart was _____

The acceleration of the cart was _____

The force on the cart was _____

----- Predictions -----

Predict the graphs of the cart's motion.

Velocity(m/s) •	
Acceleration(m/s/s) •	
Force(N) •	

What direction do you think the force was actioning on the cart?

----- Partner Discussion -----

----- Class Discussion -----

----- Physics Speaks -----

----- Results -----

Record the graphs of the cart's motion.

Velocity(m/s) •	
Acceleration(m/s/s) •	
Force(N) •	

The velocity of the cart was _____

The acceleration of the cart was _____

The force on the cart was _____

What have you noticed about the acceleration as compared to the force?

----- Extend -----

How do you think the a-t and F-t graphs will compare?

Record the results from the demonstration.

Acceleration(m/s/s) •	
Force(N) •	Time(s)
	Time(s)

How did the shapes of the a-t and F-t graphs compare with each other?

What do you think is ALWAYS true about the shape of the F-t graph as compared to the shape of the a-t graph? _____
