The Unit Organizer

NAME _____
DATE _____

4 BIGGER PICTURE

how particles move

2 **LAST UNIT** /Experience
Unit 6.1: Newton's Three Laws of Motion

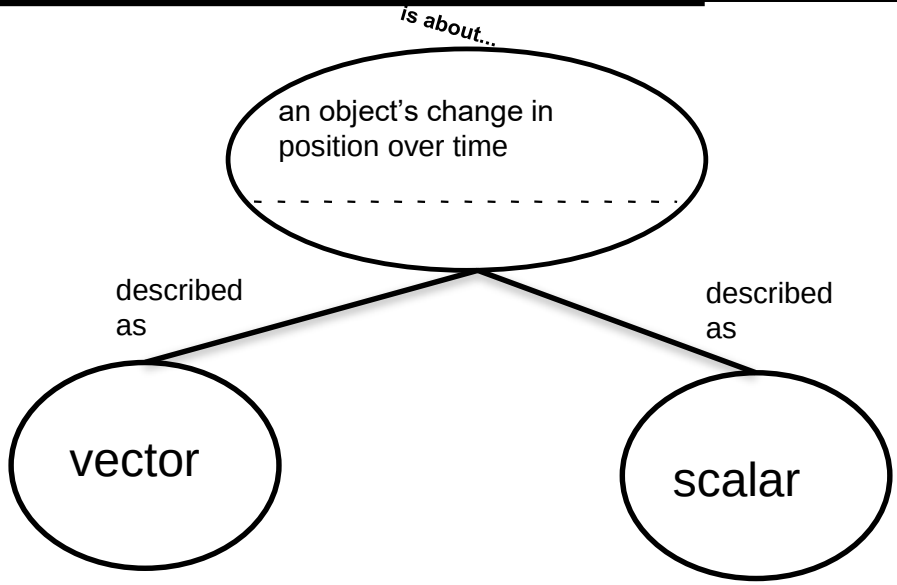
1 **CURRENT UNIT**
Unit 6.2: Motion

3 **NEXT UNIT** /Experience
Unit 7: Energy

8 **UNIT SCHEDULE**

	Pre-Test
	Motion Stations
	Sphero Motion Lab
	Write a story for a Graph
	Graph the Story
	Around the World Graph Project
	Post-Test
	Reflection

5 **UNIT MAP**



7 **UNIT SELF-TEST QUESTIONS**

How can one predict an object's continued motion, changes in motion, or stability?
A motorcycle accelerates from a stop at a rate of 4 m/s^2 for 20 seconds. It then continues at a constant speed for 40 seconds. Create a graph to plot the speed vs. time of the motorcycle. What is the motorcycle's speed at 15 seconds? At 45 seconds?
Why is the total velocity of a roller coaster zero at the end of the ride? How does its speed vary with its location?
What are the differences between vector and scalar quantities?
When a force is applied to an object in a direction perpendicular to its motion, what are the effects on its speed and direction?

6 **UNIT RELATIONSHIPS**

Analyze Distinguish
Predict Construct
Apply Solve
Create Use

The Unit Organizer

NAME _____
DATE _____

Unit 6.2: Motion

⑨ **Expanded Unit Map**

is about...

an objects change in position over time

described as

described as

vector

has

scalar

like

acceleration

which is a

change

in

velocity

like

direction

also called

displacement

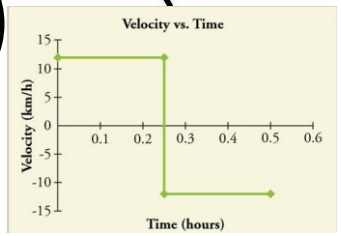
defined as

a=v/t

defined as

v=x/t

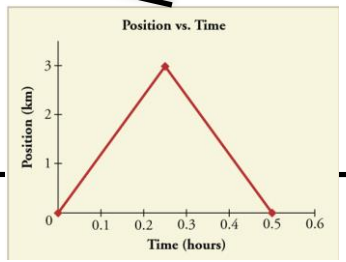
on a



defined as a

change in position

on a



which has

no direction

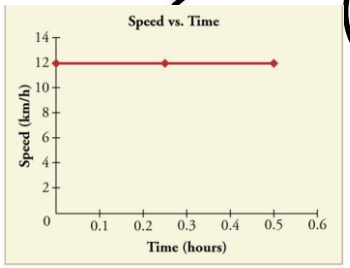
for example

speed

defined as

s=d/t

on a



⑩ **NEW UNIT SELF-TEST QUESTIONS**