How to describe the world around you 1

Phones away - I see them, I take them

Get your folder with your notes.

Talk quietly and wait for further instructions.

Agenda:

- Newtons Laws
- Describing Motion
- Acceleration
- Forces

A	Bell work
C	1
H	Ask Group
I	Individiual
E	Phone Away - Working
V	Put on your student pants
E	Follow instructions

Issac Newton (the guy that had an apple fall on his head), came up with 3 laws of motion.

Law 1 - Inertia - objects at rest tend to stay at rest, objects in motion tend to stay in motion.

Law 2 - Forces - Force equals mass times acceleration, $F = m \times a$.

Law 3 - Collisions - For every action there is an equal and opposite reaction.

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
E	Headphones away
V	Enhance knowledge
E	Review notes

Law 1 - Inertia - what objects do when they are alone.

Law 2 - Forces - how to change an objects motion.

Law 3 - Collisions - when things interact, both are effected equally.

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
E	Headphones away
V	Enhance knowledge
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Newton's Laws - Picture time! 4

With the space in your notes, draw a picture that represents the law to you.

A	Collaborative Groups
C	1
H	Ask group, then teacher
I	Equal participation
E	Headphones out
V	Mutual growth
E	Plan, divide, and conquer

Describing Motion

Position - where something is.

Speed - how fast something is going.

Velocity - how fast something is going AND the direction it is going.

Acceleration - change in velocity.

A	Lecture / Notes
C	0
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Describing Motion - Pictures 6

Draw a picture for each word.

A	Collaborative Groups
C	1
H	Ask group, then teacher
I	Equal participation
E	Headphones out
V	Mutual growth
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Velocity is made up of both speed and direction.

Since there are two parts to velocity, then a change in velocity happens if either part changes.

There are two ways that something can accelerate:

- Change speed
- Change direction

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
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Color your map

Go back to the map you drew on the first page of your trip to school.

Color the sections where you were changing speed with one color.

Color the sections where you were changing direction with another color.

A	Collaborative Groups
C	1
H	Ask group, then teacher
I	Equal participation
E	Headphones out
V	Mutual growth
E	Plan, divide, and conquer

Forces

A force is a shove.

Anything that causes something to move is a force.

If you want to move something, you have to apply a force.

A greater force makes a greater change in motion.

A	Lecture / Notes
C	0
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Net Force

A net force is what happens if you add all of the forces together.

Each force is like an arrow.

If you add all of the arrows together, you get the net force.

A	Lecture / Notes
C	0
H	Raise your hand
I	Engage and ask questions
E	Headphones away
V	Enhance knowledge
E	Review notes

Drawing Forces 11

Copy Mr. Hicks' picture of himself standing and not moving.

Draw a picture and label the forces.

A	Collaborative Groups
C	1
H	Ask group, then teacher
I	Equal participation
E	Headphones out
V	Mutual growth
E	Plan, divide, and conquer