# La Porte J H $7^{\text {th }}$ Grade Pre-AP/GT Science Outreach Learning May 4 - May 8, 2020 

$7^{\text {th }}$ Grade Pre-AP/GT Science Week of May 4, 2020
Teacher/Team:
If there are any questions, please feel free to email me/us at:
deleonv@lpisd.org
Link to TEAMS Folder-- $-\rightarrow$
Log in to Office 365 to access TEAMS or click on the links to the right

Veronica DeLeon $/ 7^{\text {th }}$ Grade Science
Email: deleonv @lpisd.org

## Connect with me on Remind!

Text @deleonpap8 to 81010

You can now reach me on my Google number!

## 281-968-9025

Last week we learned about the difference between elements and compounds and identify metals, nonmetals, and metalloids on a periodic table!

## Objectives

Objective / I Can:

- Calculate average speed and recognize changes in motion on a graph.


## Activities

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\text { May the } 4^{\text {th }} \text { be with you! }
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Student Activities: Average Speed; Motion Graphs

## Activity 1-Average Speed



1) Video from Esdusmart-You do NOT need to log in to anything to view -
a. Edusmart - Average Speed \& Vocabulary
b. Extra explanation videos are posted at the end of the lesson in Extra Videos section

Average speed can be calculated by dividing the total distance the object travels by the total amount of time it takes to travel that distance.

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- While the speed of the object may vary during the total time it is moving, the average speed is the result of the total distance divided by the total time taken.
- Speed measurements contain a unit of distance divided by a unit of time. Examples of units of speed might include "meters per second" (m/s), "kilometers per hour" (km/h), or "miles per hour" (mph or mi/hr).
 Distance $=$ Speed $\times$ Time


Time $=\frac{\text { Distance }}{\text { Speed }}$


Speed $=\frac{\text { Distance }}{\text { Time }}$
2) Watch the Average Speed Video and then click on the Forms Link below to enter your answers about Average Speed for a grade! Be sure to click on YOUR correct class period!

5th Period - Average Speed Forms Link
7th Period - Average Speed Forms Link

ACTIVITY 2- Motion Graphs

1) Watch the following videos on Motion Graphs:

a. Motion Graphs https://drive.google.com/file/d/OBxOms4hIDvR3VVFXYnZJaUx2d2M/view
b. Distance - Time Graph video https://www.youtube.com/watch?v=IrHAnr9cYdQ\&feature=youtu.be
c. Doodle science - motion graphs https://www.youtube.com/watch?v=4il7f4xw0Bk\&feature=youtu.be

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2) Practice!
a. Play the Quizlet game for some extra practice! You can choose your activity (flash cards, gravity, match, etc.) https://quizlet.com/101647114/7th-grade-science-motion-speed-flash-cards/
b. This link has videos you can practice graphing! http://www.graphingstories.com/ Blank graphs are in the WEEK 7 folder or you can make your own or just watch. These are the videos to watch:


Height of Waist Bum Height Off Ground Elevation of Plane (Paper) Height (Ball Drop)<br>Elevation (Grass Hill)

3) Next, click on your class period link below to answer questions about Motion Graphs! I have also attached some power points in the WEEK 7 folder for reference if you need extra help! ©


## 5th Period - Motion Graphs Forms Link <br> 7th Period - Motion Graphs Forms Link

Be sure to click on your correct class period link!

## ACTIVITY 3 - Pre-AP/GT Extension Paper Airplane Challenge!

Step 1: Design your own paper airplane to compete in a contest for the fastest average speed and the slowest average speed! Your teacher will announce the winners in TEAMS!

You will need 1 sheet of paper ( $81 / 2 \times 11$ ) to create your paper airplane. Test out your design in an indoor area (if possible) to reduce the effects of wind/weather outside.

Check out how this guy makes world record paper airplanes! https://www.youtube.com/watch?v=3BNg4fDJC8A

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Measure how far your airplane travels (distance) and the time of flight, in order to calculate the average speed.

## Remember s=d/t



Step 2: Click HERE to enter your paper airplane's speed!


- Extra Videos
- These are pretty good! ©
- Speed and Calculating Average Speed - https://voutu.be/6esOuq2rvbw
- Calculating Speed - https://www.youtube.com/watch?v=JZD3WlqtRyo\#action=share
- They Might Be Giants - Calculating speed \& velocity w/ Marty Beller https://youtu.be/DRb5PSxJerM
- Brain pop - https://www.brainpop.com/math/algebra/distancerateandtime/
- Interactives/Activities
- Virtual Speed Lab http://www.glencoe.com/sites/common assets/science/virtual labs/E12/E12.html
- Virtual Car-https://houstonpbs.pbslearningmedia.org/resource/phy03.sci.phys.mfw.accel/virtual-car-velocity-and-acceleration/
- Moving man video(motion graphs) https://www.youtube.com/watch?v=rYbf -HIJNE
- Moving Man graphing simulation Phet - https://phet.colorado.edu/en/simulation/legacy/movingman
- Extra Practice
- Ducksters physics page-https://www.ducksters.com/science/physics/speed and velocity.php
- Ducksters quiz https://www.ducksters.com/science/quiz/speed and velocity questions.php

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