

WEEK OF: SEPTEMBER 7, 2020

CLASS: Physics 111 – C Block

TEACHER: Mrs. Burke

CONTACT INFO: Deborah.Burke@thedeltahighschool.com (contact via direct email, through Teams, and through Remind = dhsphy111c)

OBJECTIVES:

- Accuracy v precision
- Constraints of equipment in laboratory activities
- Influence of bias
- Ways to improve data consistency and trustworthiness

ZOOM LINKS:

Check TEAMS POSTS for link information (we will use Zoom if it is working, Teams if Zoom is unavailable).

YOUR ASYNCHRONOUS RESPONSIBILITIES BEFORE ZOOM LESSON #1:

- Complete the gravitational constant calculations from the first lab (20 timed drops) and post the values in the class spreadsheet in Teams

YOUR RESPONSIBILITIES AFTER ZOOM #1:

Have notes detailing the learning you've experienced toward meeting the objectives state above. Put these into your Teams > Class Notebook > Class Notes file.

YOUR ASYNCHRONOUS RESPONSIBILITIES AFTER ZOOM #1:

Solve the pendulum formula for the value of the gravitational constant (get "g" on one side of the 'equal sign' and everything else on the other.

YOUR ASYNCHRONOUS RESPONSIBILITIES BEFORE ZOOM LESSON #2:

- Build a pendulum using lab supplies (you may add string/dental floss if you wish and have that available)

YOUR RESPONSIBILITIES AFTER ZOOM #2:

Have notes detailing the learning you've experienced toward meeting the objectives state above. Put these into your Teams > Class Notebook > Class Notes file.

YOUR ASYNCHRONOUS RESPONSIBILITIES AFTER ZOOM #2:

- Pick up lab supplies from Delta High on Friday Sept. 11th
- Complete the "Pendulum Determination of Gravitational Constant" lab (20 swing data sets) and post the values in the class spreadsheet in Teams.
- Select outliers from your own data and highlight them on the spreadsheet = "Data Evaluations"

- Compare value of gravitation results from the two methods (drop v pendulum) and respond to the assignment “Gravitation determination: drop v pendulum” (available via Teams)

IDEAS FOR USING YOUR ASYNCHRONOUS TIME:

Lab activities: build K'nex pendulum, gather data, complete calculations, evaluate data, compare data sets (drop v pendulum), respond to assignment.

DUE DATES:

- Gravitation calculations from “drop” data Wednesday Sept. 9th by 9 pm.
- Pendulum calculations: Friday Sept. 11th by 9 pm.
- Data evaluations: Tuesday Sept. 16th by noon
- “Gravitation determination: drop v pendulum” response: Tuesday Sept. 16th by 1:00 pm

TEST DATES:

Synchronous quiz during session 2 (identifying proper equation format to solve for “g”)

OFFICE HOURS:

11:45-12:45: email, contact through Remind, message through Teams. Look in Teams Posts for link to video access.