

September 1, 2020

Measuring your Molecular Kinetic Energy

- How are you doing today?
- What are you looking forward to this week? This year?
- How did you feel about the summer homework? Easy? Challenging? Just Right?
- Is there anything in the summer homework that you need help with?

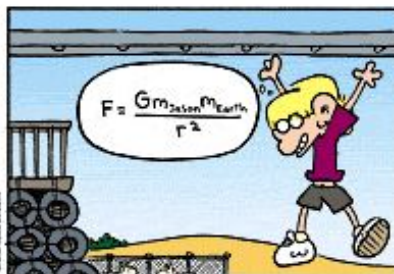
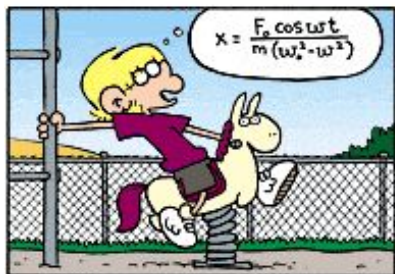
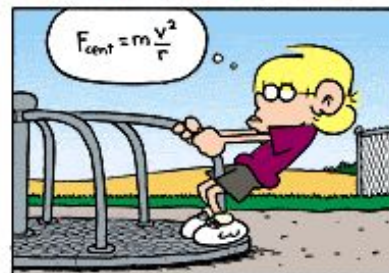
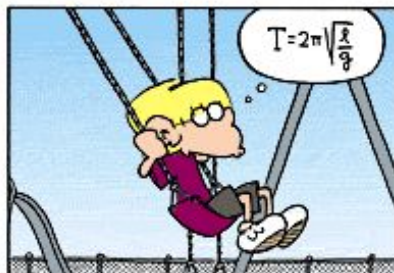
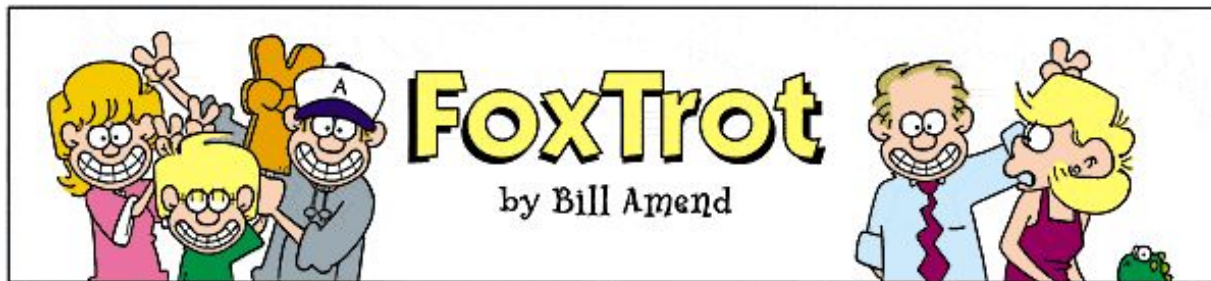
Entry: As private message to me in the chat (or an email) write the following

- The name that you would like to be called, your last name, and something (or things) that I should know about you
- What projects have you had in the past that you would like to revisit?
- What projects have you had in the past that you never want to do again?
- What projects have you seen others do that you REALLY wanted to do?
- I will be doing breakout groups today. Which 3 people would you like to be put with?

A Little About Me



Physics Physics Everywhere!



Some Quick Class Info

- Class Routines
- Homework/Problem Sets
- Late Work
- Material Distribution and Handling
- Lab Notebooks
- Syllabus
- Honors
- “Seating”
- Brownie Points
- Concept Map Portfolio

Class Routines

Still being established, but what to expect...

- Molecular Kinetic Energy
- Housekeeping
- Active Learning:
 - Discussion
 - Share outs
 - Virtual Gallery Walks
 - Developing and Delivering Arguments
 - Experimenting and Experiencing
- Flipped Classroom: Recorded Lectures (short!) to watch before synchronous class
- Learning Check ins:
 - Entry Questions
 - Lecture video exit tickets
 - Concept Map Portfolio (more on this in a minute)
 - Problem Sets
 - Physics Conversations (Logistics TBD)

Homework/Problem Sets

Every Week (after the first 2 weeks) you will get a problem set.

Problem Sets...

- Will be posted on Google Classroom and my DP on the Friday before they are due
- Are due the Friday after they are posted (translation: *You have 1 week to work on them*)
- Are to be turned in through Google Classroom.
 - You can print them out or work from the screen onto a separate piece of paper
 - You can scan your answers, take a picture, or directly edit the pdf.

Grading Overview

In my class you will be graded on the following as you progress through my course:

- your demonstrated understanding of the **CONTENT**
- your **EFFORT** in my class
- your **GROWTH** in both knowledge and effort

Grading - Content Knowledge

I will provide a list of content knowledge I expect you to learn throughout the semester. This will be a living document, and I will keep you updated on any changes.

You will have multiple opportunities to demonstrate your understanding, including:

- your problem sets
- concept map portfolio
- video lecture exit tickets
- check in conversations with me

*Note: you must be able to demonstrate understanding across these opportunities to be said to have mastered content knowledge.

Grading - Effort

Your effort in my class will be measured by your completion of assigned work and your participation in class.

Listed below are some of the ways that you can show your effort in my class:

- Turn in complete (not necessarily correct) problem sets
- Participate in Class Discussions (In distance learning verbally or written)
- Complete in class work
- Take notes AND share them with teacher
- Update Content Map Portfolio Regularly (with or without prompting)
- Watch recorded lectures
- Answer Exit Tickets completely (not necessarily correctly)

Grading - Growth

Your growth in my class will be measured by looking at how you as a learner have grown over the course of the semester.

Listed below are some of the ways that you can show growth as a learner in my class:

- correct problem sets and exit tickets
- growth in knowledge on problems sets/classwork compared to pre-assessments
- Concept Map growth
- Concept Map connections

Late Work and Corrections

Late work will be accepted up to the following dates:

- Work from weeks 1-6 - Oct. 9
- Work from weeks 6-12 - Nov. 20
- Work from weeks 12-15 - Dec. 18

Project work cannot be turned in late

ALL work can be corrected and turned in up to the gradebook closing day at the end of the semester.

Materials Distribution and Handling

Ms. Petrick and I will be distributing materials this Thursday September 3rd and Friday September 4th at lunch (12:20-1:10) and after school (3:30-6:00) in the patio area outside of the 12th grade art room (formerly known as forte apparel)

My materials are things you could readily get yourself (or may have at home). If you prefer to do that please get the things on this list no later than September 10th.

Let me know if you are choosing to get your own materials

Safety Note for my materials: DON'T EAT THEM!

Physics Notebooks

In your materials bag is a notebook. You are welcome to use this as your notebook or something else (your own notebook or a computer based one)

You will use this notebook to...

- Take notes on the video lectures and things we talk about in class
- Record your thoughts from group discussions
- Collect and record your findings and observations from our labs.

I will ask periodically to see your notebook. I will announce/assign the notebook check one week ahead of time and provide a checklist as to what should be in it.

Syllabus

- Please read your syllabus with your family.
- There is something I ask you to do in the syllabus. Please do it! It's important!
- After reading your syllabus, you and your guardian need to sign it and return the sign sheet to me through google classroom.
- Please let me know if you have any questions or concerns about the syllabus

Honors

In Physics Honors I will be asking the following things of you above and beyond our normal classwork:

- Per semester: a series of 3 readings and/or videos with a response questions, followed by a socratic seminar
- Extra Problems on Problem Sets (and Exams if we are in person)
- First Semester: Literature Review Paper
- Second Semester: Research Paper on Science Experiment

Ideally the Literature Review Paper would be the background information for the research paper and science experiment.

**Honors Meeting to Come, Honors Contracts on my DP
Please email them to me**

“Seating”

Although you will be doing most of the work in my class individually, I want you to work, and discuss in groups.

In my classroom, I would let you choose your own seats in my room for as long as it made sense and you could function

So virtually I will let you request your breakout room groups and do my best to put you with who you request.

If I find that is not working, we will try something else.

Brownie Points

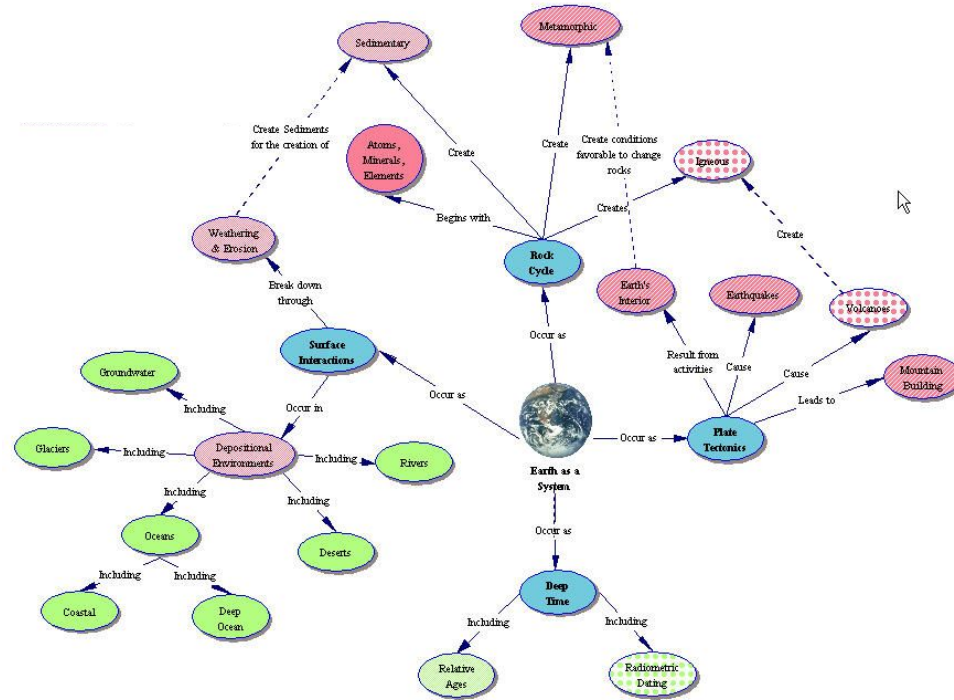
Mistakes and failures happen. In fact we often learn the most in those moments where we mess up.

I welcome you to find my science and math mistakes (grammar, spelling, wrong dates, and things along that vein don't count!).

If you point something out (could be in anything that I do or give to you that I produce) and you are correct, your class will get a Brownie Point.

When you class gets to 10 brownie points, you get brownies... I'm still working on how to make that happen during this DL time, but I'll make something work!

Eventual Goal... Connected Concept Maps



Your Choice of Platform

You can choose whether its hand drawn or on a platform like Miro board, Google Slides, etc.

Two things that must be possible with your platform:

1. You must take pictures, screenshots, or have some way of capturing how your concept map has changed over time (i.e. dated!). I will make sure to remind you to capture your map.
 - a. Example: I choose to hand draw my map and take a picture of it every time I add to it. I put those pictures in a Google Slideshow with dates that I took each picture.
2. I must be able to periodically (and possibly randomly) check your concept map.
 - a. Example: I share my google slideshow with Ms. Caroline

Why? This gives me data to give you grades for growth, effort, and content knowledge. Also I know if what I am teaching is actually helping you!

The Physics of Atoms Concept Map

Create a concept map for

Atoms and Molecules

Put in anything that you think you know.

Don't worry if you are not quite sure

Don't worry if it is correct

Remember getting wrong, making mistakes and failing give you great opportunities for learning and growth!

Use what you know from previous classes

Use what you know from the Feynman Lecture

Honor system, No Google (Why? Always ask why!)

Debriefing the Feynman Lecture - 20 minutes

- Each group member should share their words/concepts that they recognized and didn't recognize and their questions
- Pick 3 words/concepts as a group and 3 questions
- Work as a group to define/illustrate the words or concepts using words AND pictures. Use this [Jamboard](#). Your room # is your group #.

Again Honor system, No Google!

- You can use whatever makes sense to create your
- Pick a speaker to briefly present group work



Share Out

Speakers

Share your groups 3 words/concepts and 3 questions

Use your [Jamboard](#) to help you

Listeners

Be kind and attentive listeners

Ask any questions (constructive ones) in the chat box

Many Minds - 20 minutes

- Share your concept map with your group
- Discuss what similarities and differences you see in content and in how that content is arranged and connected.
- Work together to create a Group Concept map on this [Jamboard](#)

Virtual Gallery Walk

- Review your classmates group concept maps
- Use the sticky note feature to make comments, celebrate, and kindly question your fellow classmates concept maps.
- “Walk” through Again
- Add to the sticky notes that your classmates have left. Again make comments, celebrate, and kindly question. Also answer any questions that you can.
- Make note of things that you want to use to update your concept map

Update and Share Your Concept Map

- Make sure you capture your original concept map before you update it. I want to be able to see and give you credit for your learning today!
- Then update your concept map with anything new you learned today from the feynman debrief and the group concept map gallery walk.
- Capture this new concept map and add it to your portfolio (you should have two versions of your concept map now)
- Make sure you have shared your Concept Map with me by sending me a link or sharing it with me.