

At-Home Learning for Thursday, 3/19, to Friday, 4/3

The weeks during which we are “sheltering-in-place” to slow the spread of the novel coronavirus are an opportunity for us to:

1. Learn about an area of “applied” science that is critical to human society in ways we often take for granted: the field of public health.
2. Continue our current work on understanding the gas laws and the kinetic theory of matter.
3. Review content we covered earlier in the year

Doing the work correctly and completely can have three important results:

- Deepen your knowledge of an area of science that is more important to understand now than any other time in human history
- Improve your mastery (and grades) on previous skills and topics
- Prepare you for the final exam currently scheduled for the end of May

The best way to stay on top of work for our class is to use what is posted in google classroom. The topics we will be covering are listed below. Links will be provided through google classroom as we progress through the schedule. Class “office hours” will be emailed and posted on google classroom. At the beginning of each session an invitation a video conference will be emailed/posted so you can join so that we can check in, go over content, and answer questions.

- I. Public Health
 - A. What is public health? Thursday, 3/19
 - B. Risk, and how to use a risk matrix Thursday, 3/19
 - C. Infectious diseases - How do we control them? Thursday, 3/19
 - D. Outbreak investigation - a step-by-step approach Friday, 3/20
 - E. The novel coronavirus and “flattening the curve” Friday, 3/20
 - F. Possible careers in public health Friday, 3/20
- II. The Gas Laws and Kinetic Theory of Matter
 - A. What is Pressure? Monday, 3/23
 - B. The Gas Laws Monday, 3/23
 - C. States of Matter Tuesday, 3/24
 - D. Phase Changes Tuesday, 3/24
 - E. Forms of Matter Wednesday, 3/25
 - F. Atomic Theory and Notation Wednesday, 3/25
 - G. Introduction to the Periodic Table Thursday, 3/26
 - H. Compounds and Chemical Formula Friday, 3/27
- III. Review
 - A. Modeling Motion Monday, 3/30
 - B. Newton’s 1st Law and Force Diagrams Monday, 3/30
 - C. Newton’s 2nd Law and $F=ma$ Tuesday, 3/31
 - D. Newton’s 3rd Law and $P=mv$ Tuesday, 3/31
 - E. Projectile Motion Wednesday, 4/3
 - F. Orbital Motion Wednesday, 4/3
 - G. Energy Forms, Transfers, and Transformations Thursday, 4/2
 - H. Energy Calculations Thursday, 4/2
 - I. Thermal Energy, Temperature, and Specific Heat Friday, 4/3