

Dr. Faletra Grade 6 Science

Weeks April, 25 – May, 27 2016

We will finish studying the chemistry of DNA and biological molecules.

We will review the instructional videos on electrophoresis, polymerase chain reaction, and the chemistry of organic molecule (parts 1 and 2) and water chemistry. There are instructional lessons on all of these in the life sciences and physical science sections on the school website.

We will need to know how to mix chemicals for these experiments and for this we will need to thoroughly understand moles and how chemicals form molecules. We will cover the periodic chart more thoroughly and the subject of how elements combine in relative proportions to form molecules. This is called stoichiometry.

We will watch two videos that are posted on the Instructional lessons in the physical sciences section: Periodic Chart and Mendeleev, and Stoichiometry.

We will end the year by each of you giving a 15 minute presentation on a famous scientist's discoveries and contributions to science and society. You will get to choose your scientist. We will begin the presentations next week...May 2nd.

I have begun a list of some ideas of people you can choose...

Ernest Rutherford
Enrico Fermi
Emmy Noether
Henrietta Leavitt
Marie Curie
Barbara McClintock
Richard Feynman
Henrik Lorentz
Max Planck
Niels Bohr
Werner Heisenberg
Louis de Broglie
Erwin Schrödinger
Paul Dirac
Ludwig Boltzman
Albert Einstein
David Hilbert
Hans Geiger
J.J. Thompson
Isaac Newton
James Maxwell
Michael Faraday

Grade 7
Dr. Faletra
Weeks May 2- end of year 2016

We continue studying the chemistry of DNA and biological molecules.

We will end the year with a series of presentations on cells and parts of cells called organelles

Cell structures in humans...choices for your presentation:

You will explain to the class in 15 minutes the Form and Function of one of the following:

Plasma cell membrane
Mitochondrion
Chloroplast
Red blood cell
Lymphocyte
Eosinophil
Basophil
Macrophage
Hepatocyte
Neuron
Retina
Nephron

You can use whatever presentation format you wish.

Grade 8
Dr. Faletra
Weeks April 20-May 20 2016

We compete in the Solar Sprint on June 1...your car needs to be done by May 10.

You will have a final exam and a paper on one of the following scientists:

Ernest Rutherford
Enrico Fermi
Emmy Noether
Henrietta Leavitt
Marie Curie
Barbara McClintock
Richard Feynman
Henrik Lorentz
Max Planck
Niels Bohr
Werner Heisenberg
Louis de Broglie
Erwin Schrödinger
Paul Dirac
Ludwig Boltzman
Albert Einstein
David Hilbert
Hans Geiger
J.J. Thompson
Isaac Newton
James Maxwell
Michael Faraday

The final exam work sheet is posted in the “Instructional Support” section of the school website with the title **Standard Final Test #1**