**Weekly Homework Assignments:**

Each week you are expected to complete readings, work on presentations, and/or write a short answer response of an article read for discussion with the class. Listed below are the weekly assignments. This page will also be posted on my website in case you lose this one. It is your responsibility to know what the assignments are each week and to complete them!

**Online Resources:**

CK-12 has a **free** textbook that we will be using this school year. Most readings are short and come with additional videos, quizzes and more. You may be required to take notes on terms.

<http://www.ck12.org/biology/>

Website for weekly assignments. Bookmark this and the textbook so you will never miss an assignment!

[www.tceec.weebly.com](http://www.tceec.weebly.com)

**Readings and Homework:**

January 8 –

Readings: *Introduction to Biology*

[Characteristics of Life](http://www.ck12.org/biology/Characteristics-of-Life/lesson/Characteristics-of-Life/?referrer=featured_content) – List the 6 characteristics of life in your notes

[Cell Size and Shape - Advanced](http://www.ck12.org/biology/Cell-Size-and-Shape/lesson/Size-and-Shape-Advanced/?referrer=concept_details) – Take notes on vocabulary

[Discovery of Cells - Advanced](http://www.ck12.org/biology/Discovery-of-Cells/lesson/Discovery-of-Cells-Advanced/?referrer=featured_content)

[Microscopes in Biology](http://www.ck12.org/biology/Microscopes-in-Biology/lesson/Microscopes-Advanced/?referrer=featured_content) – Watch video on how to use microscopes

[Common Part of the Cell](http://www.ck12.org/biology/Common-Parts-of-the-Cell/lesson/Common-Parts-of-the-Cell/?referrer=concept_details)

[Common Parts of a Cell](http://www.ck12.org/biology/Common-Parts-of-a-Cell/lesson/Common-Parts-Advanced/?referrer=featured_content) – Take notes on vocabulary

[Prokaryotic and Eukaryotic Cells](http://www.ck12.org/biology/Prokaryotic-and-Eukaryotic-Cells/lesson/Prokaryotic-and-Eukaryotic-Cells/?referrer=concept_details) – Watch video on bacteria

[Viruses](http://www.ck12.org/biology/Viruses/lesson/Viruses/?referrer=featured_content)

HW: Briefly explain the 6 characteristics of life

\*If you own a microscope, please bring it to class next week for the prokaryote lab.

January 15 –

Readings: *Introduction to Biology: Protists*

[Prokaryote Evolution](http://www.ck12.org/biology/Prokaryote-Evolution/lesson/Prokaryote-Evolution/?referrer=featured_content)

[Prokaryote Classification](http://www.ck12.org/biology/Prokaryote-Classification/lesson/Prokaryote-Classification/?referrer=featured_content)

[Prokaryote Structure](http://www.ck12.org/biology/Prokaryote-Structure/lesson/Prokaryote-Structure/?referrer=featured_content)

[Prokaryote Metabolism](http://www.ck12.org/biology/Prokaryote-Structure/lesson/Prokaryote-Structure/?referrer=featured_content)

[Prokaryote Habitats](http://www.ck12.org/biology/Prokaryote-Habitats/lesson/Prokaryote-Habitats/?referrer=featured_content)

[Prokaryote Reproduction](http://www.ck12.org/biology/Prokaryote-Reproduction/lesson/Prokaryote-Reproduction/?referrer=featured_content) – Take notes on Vocab and answer the Review questions

[Bacteria and Humans](http://www.ck12.org/biology/Bacteria-and-Humans/lesson/Bacteria-and-Humans/?referrer=featured_content)

[Virus Characteristics](http://www.ck12.org/biology/Virus-Characteristics/lesson/Virus-Characteristics/?referrer=featured_content)

[Virus Structures](http://www.ck12.org/biology/Virus-Structures/lesson/Virus-Structures/?referrer=featured_content)

[Virus Classification](http://www.ck12.org/biology/Virus-Classification/lesson/Virus-Classification/?referrer=concept_details)

[Virus Replication](http://www.ck12.org/biology/Virus-Replication/lesson/Virus-Replication/?referrer=featured_content)

[Discovery and Origin of Viruses](http://www.ck12.org/biology/Discovery-and-Origin-of-Viruses/lesson/Discovery-and-Origin-of-Viruses/?referrer=featured_content)

[Viruses and Human Disease](http://www.ck12.org/biology/Viruses-and-Human-Disease/lesson/Viruses-and-Human-Disease/?referrer=featured_content)

[HIV](http://www.ck12.org/biology/HIV/lesson/HIV/?referrer=featured_content)

[Control of Viruses](http://www.ck12.org/biology/Control-of-Viruses/lesson/Control-of-Viruses/?referrer=featured_content)

[Viruses in Research and Medicine](http://www.ck12.org/biology/Viruses-in-Research-and-Medicine/lesson/Viruses-in-Research-and-Medicine/?referrer=featured_content)

[Prions and Viroids](http://www.ck12.org/biology/Prions-and-Viroids/rwa/Why-Not-To-Eat-Brains/?referrer=concept_details)

HW: Print off and complete the [Introduction to Cells](http://www.ck12.org/workbook/CK-12-Biology-Workbook/section/3.1/) worksheet.

January 22 –

HW: Complete the cell organelles packet – color the cells and their organelles, complete the organelle function table.

**QUIZ on Cell Organelles Structure and Function February 5th!**

January 29 -

Readings: *Chemistry of Life*

[Compounds and Mixtures](http://www.ck12.org/biology/Compounds-and-Mixtures/)

[Significance of Carbon](http://www.ck12.org/biology/Significance-of-Carbon/)

[Carbohydrates](http://www.ck12.org/biology/Carbohydrates/) – read and watch the [video](http://www.ck12.org/biology/Carbohydrates/lecture/Organic-Molecules-Carbohydrates/?referrer=featured_content)

[Lipids](http://www.ck12.org/biology/Lipids/) – read and watch the [video](http://www.ck12.org/biology/Lipids/lecture/Lipids/?referrer=featured_content)

[Proteins](http://www.ck12.org/biology/Proteins/) – read and watch the [video](http://www.ck12.org/biology/Proteins/lecture/Protein-Functions-in-the-Body/?referrer=featured_content)

[Nucleic Acids](http://www.ck12.org/biology/Nucleic-Acids/) – read and watch the [video](http://www.ck12.org/biology/Nucleic-Acids/lecture/DNA/?referrer=featured_content)

HW: Print off and complete the [Cell Organelles](http://www.ck12.org/workbook/CK-12-Biology-Workbook/section/3.2/) worksheet.

**Study** for Cell Organelles Structure and Function Quiz next week. NO NOTES!!!

February 5 –

HW: Print off and complete [Matter and Organic Compounds](https://d.docs.live.net/52c02806f4b57540/Lauren's%20Stuff/Business/Curriculum/HS%20Biology%20Planet%20Homeschool/Spring%202016/Feb%205/Matter-and-Organic-Compounds_s_v2_bei_s1.pdf) worksheet **DUE: February 12th**

February 12 –

Readings: Cell Membranes

[Phospholipid Bilayers](http://www.ck12.org/biology/Phospholipid-Bilayers/) – read, watch [video](http://www.ck12.org/biology/Phospholipid-Bilayers/lecture/The-Plasma-Membrane/?referrer=concept_details), and do [PLIX](http://www.ck12.org/assessment/tools/geometry-tool/plix.html?eId=SCI.BIO.225.1&questionId=5432fcc48e0e08081c0c39bb&artifactID=1899225&backUrl=http%3A//www.ck12.org/biology/Phospholipid-Bilayers/%3Freferrer%3Dconcept_details%26by%3Dck12%26difficulty%3Dall%23interactive) including the “Challenge Me”

[Membrane Proteins](http://www.ck12.org/biology/Membrane-Proteins/)

[Plasma Membrane](http://www.ck12.org/biology/The-Plasma-Membrane/)

[Fluid Mosaic Model](http://www.ck12.org/biology/The-Fluid-Mosaic-Model/)

[Passive Transport](http://www.ck12.org/biology/Passive-Transport/)

[Diffusion](http://www.ck12.org/biology/Diffusion/) – do [PLIX](http://www.ck12.org/assessment/tools/geometry-tool/plix.html?eId=SCI.BIO.228.1&questionId=55ce3088da2cfe15ae99f248&artifactID=2155313&backUrl=http%3A//www.ck12.org/biology/Diffusion/%23interactive)

[Osmosis](http://www.ck12.org/biology/Osmosis/) – do [PLIX](http://www.ck12.org/assessment/tools/geometry-tool/plix.html?eId=SCI.BIO.228.2&questionId=545c0391da2cfe41442fc7b9&artifactID=1896333&backUrl=http%3A//www.ck12.org/biology/Osmosis/%23interactive)

[Facilitated Diffusion](http://www.ck12.org/biology/Facilitated-Diffusion/) – watch the [videos](http://www.ck12.org/biology/Facilitated-Diffusion/)

[Active Transport](http://www.ck12.org/biology/Active-Transport/) – read and watch [video](http://www.ck12.org/biology/Active-Transport/lecture/Active-and-Passive-Transport/?referrer=featured_content)

[Electrochemical Gradient](http://www.ck12.org/biology/The-Electrochemical-Gradient/)

February 19 -

HW: [Osmosis at Home Experiment](https://d.docs.live.net/52c02806f4b57540/Lauren's%20Stuff/Business/Curriculum/HS%20Biology%20Planet%20Homeschool/Spring%202016/Feb%2019/Osmosis%20at%20Home%20Experiment.docx) DUE: March 4

March 4 –

Readings:

[Glucose and ATP](http://www.ck12.org/biology/Glucose-and-ATP/) – read and watch [video](http://www.ck12.org/biology/Glucose-and-ATP/lecture/ATP%3A-Adenosine-Triphosphate/?referrer=featured_content)

[The Photosynthesis Reaction](http://www.ck12.org/biology/The-Photosynthesis-Reaction/)

[Chloroplasts](http://www.ck12.org/biology/Chloroplasts/lesson/Chloroplasts/?referrer=concept_details)

[Light Reactions of Photosynthesis](http://www.ck12.org/biology/Light-Reactions-of-Photosynthesis/) – read and watch [video](http://www.ck12.org/biology/Light-Reactions-of-Photosynthesis/lecture/Photosynthesis-KA/?referrer=concept_details)

[Calvin Cycle](http://www.ck12.org/biology/Calvin-Cycle/) – read and watch [the video](http://www.ck12.org/biology/Calvin-Cycle/lecture/Photosynthesis%3A-Calvin-Cycle/?referrer=concept_details) on the Calvin Cycle

[Chemosynthesis](http://www.ck12.org/biology/Chemosynthesis/)

HW: Make a poster of the process of photosynthesis. Must include:

1. Chemical reaction equation
2. Electron Transport Chain
3. Light Reactions
4. Calvin Cycle
5. Waste products
6. Label where the reactions take place (chloroplasts, stroma, thylakoids, etc.)
7. Enzymes used
8. ATP production
9. Color!!

March 11 –

Readings:

[Cellular Respiration](http://www.ck12.org/biology/Cellular-Respiration/)

[Glycolysis](http://www.ck12.org/biology/Glycolysis/) – read and watch [video](http://www.ck12.org/biology/Glycolysis/lecture/Glycolysis-KA/?referrer=featured_content)

[Cellular Respiration Overview](http://www.ck12.org/biology/Cellular-Respiration-Overview/)

[Mitochondria in Cellular Respiration](http://www.ck12.org/biology/The-Mitochondria-in-Cellular-Respiration/)

[Krebs Cycle](http://www.ck12.org/biology/Krebs-Cycle/) – read and watch [video](http://www.ck12.org/biology/Krebs-Cycle/lecture/Krebs-Citric-Acid-Cycle/?referrer=featured_content)

[Electron Transport](http://www.ck12.org/biology/Electron-Transport/) – read and watch [video](http://www.ck12.org/biology/Electron-Transport/lecture/Electron-Transport-Chain/?referrer=featured_content)

HW: Make a poster of the process of cellular respiration. Must Include:

1. Chemical reaction equation
2. Glycolysis
3. Krebs Cycle
4. Electron Transport Chain
5. Waste products
6. Label where the reactions take place (mitochondria, cytoplasm, etc.)
7. Enzymes used
8. ATP production
9. Color!!

STUDY: QUIZ on PHOTOSYNTHESIS AND CELLULAR RESPIRATION on March 18th!!! No notes!!!!

March 18 –

Readings:

[Anaerobic vs. Aerobic Respiration](http://www.ck12.org/biology/Anaerobic-vs-Aerobic-Respiration/)

[Fermentation](http://www.ck12.org/biology/Fermentation/) – read and watch [video](http://www.ck12.org/biology/Fermentation/enrichment/Fermentation/?referrer=featured_content)

[Anaerobic and Aerobic Respiration](http://www.ck12.org/biology/Anaerobic-and-Aerobic-Respiration/)

[Anaerobic Respiration](http://www.ck12.org/biology/Anaerobic-Respiration/)

[Lactic Acid Fermentation](http://www.ck12.org/biology/Lactic-Acid-Fermentation/)

[Alcoholic Fermentation](http://www.ck12.org/biology/Alcoholic-Fermentation/)

HW: Photosynthesis at Home Experiment **DUE APRIL 1st** See website for handout.

March 25 – NO CLASS!

HW: Work on photosynthesis at home experiment **DUE APRIL 1st**!

April 1 –

Readings:

[DNA](http://www.ck12.org/biology/DNA/)

[DNA Structure and Function and Video](http://www.ck12.org/biology/DNA-Structure-and-Replication/)

[DNA Double Helix](http://www.ck12.org/biology/The-DNA-Double-Helix/)

[DNA Replication](http://www.ck12.org/biology/DNA-Replication/) – Take NOTES and VOCAB

[RNA](http://www.ck12.org/biology/RNA/)

[RNA Structure](http://www.ck12.org/biology/RNA-Structure-Advanced/)

[RNA Types](http://www.ck12.org/biology/RNA-Types/) – Take NOTES

[Transcription of DNA to RNA and Video](http://www.ck12.org/biology/Transcription-of-DNA-to-RNA/)

[Transcription](http://www.ck12.org/biology/Transcription/)

[Messenger RNA](http://www.ck12.org/biology/Messenger-RNA/)

[Genetic Code](http://www.ck12.org/biology/Genetic-Code/)

[Translation of RNA to Protein and Video](http://www.ck12.org/biology/Translation-of-RNA-to-Protein/)

[Mutations](http://www.ck12.org/biology/Mutations/)

[Mutation Types](http://www.ck12.org/biology/Mutation-Types/)

[Mutation Causes](http://www.ck12.org/biology/Mutation-Causes/)

[Mutation Effects](http://www.ck12.org/biology/Mutation-Effects/)

[DNA Repair](http://www.ck12.org/biology/DNA-Repair/)

[Mutation and Cancer](http://www.ck12.org/biology/Mutations-and-Cancer/)

April 8 –

Readings:

[Cell Cycle, Mitosis, and Meiosis and Video](http://www.ck12.org/biology/Cell-Cycle-Mitosis-and-Meiosis/)

[Prokaryotic Cell Division](http://www.ck12.org/biology/Prokaryotic-Cell-Division/)

[Eukaryotic Cell Division](http://www.ck12.org/biology/Eukaryotic-Cell-Division/)

[Cell Cycle and Video “Cancer”](http://www.ck12.org/biology/Cell-Cycle/)

[Cell Cycle Regulation](http://www.ck12.org/biology/Cell-Cycle-Regulation/)

[Cancer and the Cell Cycle](http://www.ck12.org/biology/Cancer-and-the-Cell-Cycle/)

[Chromosomes and Video](http://www.ck12.org/biology/Chromosomes/)

[Mitosis and Cytokinesis and Video](http://www.ck12.org/biology/Mitosis-and-Cytokinesis/)

[Asexual Reproduction vs. Sexual Reproduction and Video](http://www.ck12.org/biology/Asexual-vs.-Sexual-Reproduction/)

[Meiosis](http://www.ck12.org/biology/Meiosis/)

[Gametogenesis](http://www.ck12.org/biology/Genetic-Variation/)

[Genetic Variation](http://www.ck12.org/biology/Genetic-Variation/)

[Reproductive Life Cycles](http://www.ck12.org/biology/Reproductive-Life-Cycles/)

HW: Mitosis Worksheet (see handout on website)

April 15 -

Readings:

[Gregor Mendel and Genetics](http://www.ck12.org/biology/Gregor-Mendel-and-Genetics/)

[Mendel’s Pea Plants and do the Practice](http://www.ck12.org/biology/Mendels-Pea-Plants/)

[Mendel’s 1st Set of Experiments and do the Practice](http://www.ck12.org/biology/Mendels-First-Set-of-Experiments/)

[Theory of Heredity](http://www.ck12.org/biology/Theory-of-Heredity/)

[Mendel’s 2nd Set of Experiments and the Practice](http://www.ck12.org/biology/Mendels-Second-Set-of-Experiments/)

[Dihybrid Crosses (optional: watch Best in Show video)](http://www.ck12.org/biology/Dihybrid-Crosses/)

[Mendel’s Laws & Genetics](http://www.ck12.org/biology/Mendels-Laws-and-Genetics/)

[Probability and Inheritance and do the Practice](http://www.ck12.org/biology/Probability-and-Inheritance/)

[Punnett Squares and do the Practice](http://www.ck12.org/biology/Punnett-Squares/)

[Test cross](http://www.ck12.org/biology/Testcross/)

[Non-Mendelian Inheritance and do the Practice](http://www.ck12.org/biology/Non-Mendelian-Inheritance/)

HW: finish Punnett Square Worksheet (see handout on website)

April 22 –

HW: Finish Reebops activity started in class

April 29 –

Readings:

[Evolution of Eukaryotes](http://www.ck12.org/biology/Evolution-of-Eukaryotes/)

[Cladistics – Real World Application](http://www.ck12.org/biology/Cladistics/)

[Darwin’s Voyage of the Beagle](http://www.ck12.org/biology/Darwins-Voyage-of-the-Beagle/) ([optional Videos](http://www.ck12.org/biology/Darwins-Voyage-of-the-Beagle/lecture/Introduction-to-Evolution-and-Natural-Selection/?referrer=featured_content))

[Fossils](http://www.ck12.org/biology/Fossils/)

[Living Species](http://www.ck12.org/biology/Living-Species/)

[Biogeography](http://www.ck12.org/biology/Biogeography/)

[Hardy-Weinberg Theorem](http://www.ck12.org/biology/Hardy-Weinberg-Theorem/) (optional [Video](http://www.ck12.org/biology/Hardy-Weinberg-Theorem/lecture/Hardy-Weinberg-Principle/?referrer=featured_content))

[Forces of Evolution](http://www.ck12.org/biology/Forces-of-Evolution/)

[Natural Selection](http://www.ck12.org/biology/Natural-Selection/)

[Origin of Species](http://www.ck12.org/biology/Origin-of-Species/)

[Coevolution](http://www.ck12.org/biology/Coevolution/)

[Macroevolution](http://www.ck12.org/biology/Macroevolution/)

[Animal Evolution](http://www.ck12.org/biology/Animal-Evolution/) ([Video](http://www.ck12.org/biology/Animal-Evolution/enrichment/Evolution-in-a-Big-City/?referrer=featured_content))

HW: Create BINGO board(s) for next week’s class

Create a 5 x 5 square BINGO board with a FREE SPACE in the middle

You may use a template from the website

In the squares right down vocabulary words we have discussed this semester

You will be given a long list of vocab words to use

You may make as many boards as you wish

While playing BINGO, the definition (not the word!) will be called out so be sure you know the definition of the word!

Prizes will be awarded!