This course is the first semester of high school Biology, one of the standard science courses that fulfill the district's A-G graduation requirements.

Content
Students will study the following topics:
- *The Science of Biology* (Chapter 1)
- *Chemistry of Life* (Chapter 2)
- *Cell Structure and Function* (Chapter 7)
- *Photosynthesis and Cellular Respiration* (Chapters 8 and 9)
- *Introduction to Genetics* (Chapter 11)
- *DNA and RNA* (Chapter 12)
- *Genetic Engineering* (Chapter 13)
- *The Human Genome* (Chapter 14)

The California Science Content Standards for high school Biology are covered in both this course and Biology B.

Text
*Biology*, Prentice Hall, 2007

Websites
Some coursework can be completed online. It is recommended that students who have internet access at home, use the course website at [http://sites.google.com/site/coasbioa](http://sites.google.com/site/coasbioa) to complete their coursework. Students can also access the site by clicking on the course textbook on the City of Angels Student Home Page at [http://coastudent.net](http://coastudent.net). The course website is the online version of this instructional guide; its content matches the content in this instructional guide except that it includes links to online activities and resources keyed to each lesson from the websites listed below. See your teacher for usernames and passwords.

1. [http://www.classzone.com](http://www.classzone.com) - Textbook companion website includes several resources for each chapter and section in the textbook including self-check tests, puzzles and games, and online lessons. (no password required.)
2. [http://www.sascurriculumpathways.com](http://www.sascurriculumpathways.com) - Interactive, online, personalized program provides supplementary lessons in all core subjects grades 8-14. Features teacher and student accounts. (Supplemental activities; username required)
3. [http://www.brightstorm.com](http://www.brightstorm.com) - This site streams over 2,000 video lectures by credentialed teachers on all key concepts in high school math and science. Written, oral, and visual explanations of each concept are provided as well as illustrations and demonstrations. Students will need an e-mail address to open up a free account.
4. [http://www.khanacademy.org](http://www.khanacademy.org) - The Khan Academy is a not-for-profit educational organization created by Salman Khan. With the stated mission "of providing a high quality education to anyone, anywhere", the Academy supplies a free online collection of just under 2,000 videos on mathematics, history, finance, physics, chemistry, astronomy, and economics. Recently featured on CNN, ABC, and the PBS Newshour. No password is required.

Evaluation
Homework=40%, Labs=30%, Tests=30%
ASSIGNMENTS FOR WEEK #1: The Nature of Life (Chapter 1)

Due: ___/___/___  Rec’d: ___/___/___  Evaluation: ____________________________________________
Comments: ____________________________________________

**DAY 1: What Is Science?**  
(CA Standard B11E 1.f)
1. Read Section 1-1 (all), pages 3-7.
2. In complete sentences, define the following vocabulary words from the section: science, observation, data, inference, hypothesis
3. Complete the Section 1-1 Assessment on page 7 (Questions 1-6). Use complete sentences.

**DAY 2: Designing an Experiment; Characteristics of Living Things**  
(CA Standards 7IIE 7.c, 8IIE 9.c, BIIE 1.f, BIIE 1.j)
1. Read Section 1-2 (Designing an Experiment only), pages 8-10.
2. In complete sentences, define the following vocabulary words from the section: spontaneous generation, controlled experiment, manipulated variable, responding variable.
3. Read Section 1.3 (Characteristics of Living Things only), pages 15-17.
4. In complete sentences, define the following vocabulary words from the section: biology.

**DAY 3: Tools and Procedures**  
(CA Standard BIIE 1.a)
1. Read Section 1-4 (all), pages 24-28.
2. In complete sentences, define the following vocabulary words from the section: metric system, microscope, compound light microscope, electron microscope, cell structure, cell fractionation.
3. Complete the Section 1-4 Assessment on page 28 (Questions 1-5). Use complete sentences.

**DAY 4: Workbook Assignments**  
(CA Standard BIIE 1.a)
1. Read Adapted Reading and Study Workbook B pages 1-3.
2. Complete Adapted Reading and Study Workbook B pages 4, 7, and 8.

**DAY 5: Labs**  
(CA Standards BIIE 1.a, 1.f, 1.j)
Pick ONE (1) of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)
1. Choose one of the Online Activities at [https://sites.google.com/site/coasbioa/assignment-1](https://sites.google.com/site/coasbioa/assignment-1).
3. Froguts CD: Cow Eye. Complete all lessons then complete the test. Print test completion certificate and turn in.

**REVIEW**: Prepare to take the Chapter Assessment, page 31 (1-10) and Standards Practice, page 33 (1-6)
ASSIGNMENTS FOR WEEK #2: The Chemistry of Life (Chapter 2)

Due: ___/___/___  Rec’d: ___/___/___  Evaluation: ________________________________________
Comments: __________________________________________

DAY 1: The Nature of Matter
1. Read Section 2-1 (all), pages 35-39.
2. In complete sentences, define the following vocabulary words from the section: atom, nucleus, electron, element, isotopes, compound, ionic bond, ions, covalent bond, molecule, van der Waals forces.
3. Complete the Section 2-1 Assessment on page 39 (Questions 1-6). Use complete sentences.

DAY 2: Properties of Water
1. Read Section 2-2 (all), pages 40-43.
2. In complete sentences, define the following vocabulary words from the section: cohesion, adhesion, mixture, solution, solute, solvent, suspension, pH scale, acid, base, buffer.
3. Read Adapted Reading and Study Workbook B pages 9-11 and complete pages 12-14.

DAY 3: Carbon Compounds
(CA Standards 8 6.b, 8 6.c, BI 1.h, BI 4.e, BI 4.f)
1. Read Section 2-3 (all), pages 44-48.
2. In complete sentences, define the following vocabulary words from the section: monomers, polymers, carbohydrate, monosaccharide, polysaccharide, lipid, nucleic acid, ribonucleic acid (RNA), deoxyribonucleic acid (DNA), protein, amino acid.
3. Complete the Section 2-3 Assessment on page 48 (Questions 1-5). Use complete sentences.

DAY 4: Chemical Reactions and Enzymes
(CA Standard BI 1.b)
1. Read Section 2-4 (Chemical Reactions, Energy in Reactions, and Enzymes only), pages 49-52.
2. In complete sentences, define the following vocabulary: chemical reaction, reactants, products, activation energy, catalyst, enzymes.
3. Complete Adapted Reading and Study Workbook B pages 15-19.

DAY 5: Labs
(CA Standards BI 1.b, BIIE 1.a, BIIE 1.b)
Pick ONE (1) of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)
1. Choose one of the Online Activities at https://sites.google.com/site/coasbioa/assignment-2.
2. Worksheet: Sweet 16 Game. Complete and turn in completed worksheet.
3. Lab Simulation: Properties of Biomolecules and Building Biomolecules. Take and print out self-quiz following both labs.
4. Virtual Lab: Lab 1: Catalase Action in Living Tissue (see text p. 54), pages 31-33. Print record sheet lab to complete and turn in.

REVIEW: Prepare to take the Chapter Assessment, page 57 (1-9) and Standards Practice, page 59 (1-10)
### ASSIGNMENTS FOR WEEK #3: Cell Structure and Function (Chapter 7)

**Due: __/__/__  Rec’d: __/__/__  Evaluation: ________________________________________  Comments: ________________________________________**

#### DAY 1: Life is Cellular
(CA Standards BI 1.c, BIIE 1.k)
1. Read Section 7-1 (all), pages 169-173.
2. In complete sentences, define the following vocabulary words from the section: cell, cell theory, nucleus, eukaryotes, prokaryotes.
3. Complete the Section 7-1 Assessment on page 173 (Questions 1-5). Use complete sentences.
4. Read Adapteed Reading and Study Workbook B pages 61-63 and complete pages 64-65.

#### DAY 2: Eukaryotic Cell Structure
(CA Standards 7 1.c, 7 1.d, BI 1.c, BI 1.e, BI 1.j)
1. Read Section 7-2 (all), pages 174-181.
2. In complete sentences, define the following vocabulary words: organelles, cytoplasm, nuclear envelope, chromatin, chromosomes, nucleolus, ribosome, endoplasmic reticulum, Golgi apparatus, lysosome, vacuoles, mitochondria, chloroplast, cytoskeleton, centriole.
3. Complete the Section 7-2 Assessment on page 181 (Questions 1-5). Use complete sentences.
4. Complete Adapted Reading and Study Workbook B pages 66-68.

#### DAY 3: Cell Boundaries
(CA Standards BI 1.a, BI 1.j)
1. Read Section 7-3 (all), pages 182-189.
2. In complete sentences, define the following vocabulary words from the section: cell membrane, cell wall, lipid bilayer, concentration, diffusion, equilibrium, osmosis, isotonic, hypertonic, hypotonic, facilitated diffusion, active transport.
3. Complete the Section 7-3 Assessment on page 189 (Questions 1-6). Use complete sentences.
4. Complete Adapted Reading and Study Workbook B pages 69-70.

#### DAY 4: The Diversity of Cellular Life
(CA Standard 7 5.a)
1. Read Section 7-4 (all), pages 190-193.
2. In complete sentences, define the following vocabulary words from the section: cell specialization, tissue, organ, organ system.
3. Complete the Section 7-4 Assessment on page 193 (Questions 1-4). Use complete sentences.
4. Complete Adapted Reading and Study Workbook B pages 71-72.

#### DAY 5: Labs
(CA Standards BIIE 1.a, 1.f, 1.j)
Pick ONE (1) of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)
1. Choose one of the Online Activities at [https://sites.google.com/site/coasbioa/assignment-3](https://sites.google.com/site/coasbioa/assignment-3).
2. **Worksheet**: Osmosis Lab. Complete and turn in completed worksheet.
3. **Worksheet**: Cell Factory Poster. Complete and turn in completed worksheet.
4. **Virtual Labs**: Lab 3: Diffusion and Lab 4: Osmosis. Print record sheet lab to complete and turn in.

**REVIEW**: Prepare to take the Chapter Assessment, p. 197 (1-10) & Standards Practice, p. 199 (1-9)
### ASSIGNMENTS FOR WEEK #4: Photosynthesis; Cellular Respiration (Chapters 8 and 9)

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#### DAY 1: Energy and Life
1. Read Section 8-1 (all), pages 201-203.
2. In complete sentences, define the following vocabulary words from the section: *autotrophs, heterotrophs, ATP.*
3. Complete the Section 8-1 Assessment on page 203 (Questions 1-5). Use complete sentences.

#### DAY 2: Photosynthesis
(CA Standard 7 1.d)
1. Read Section 8-2 (*The Photosynthesis Equation* only), page 206.
2. In complete sentences, define the following vocabulary word from the section: *photosynthesis.*
3. Study all Figures in Section 8-3.
4. Read *Adapted Reading and Study Workbook B* pages 73-74 and complete pages 75-81.

#### DAY 3: Chemical Pathways
(CA Standard BI 1.g)
1. Read Section 9-1 (all), pages 221-225.
2. In complete sentences, define the following vocabulary words: *calorie, glycolosis, cellular respiration, NAD, fermentation, anaerobic.*
3. Complete the Section 9-1 Assessment on page 225 (Questions 1-6). Use complete sentences.

#### DAY 4: The Krebs Cycle and Electron Transport
(CA Standard 7 1.d, BI 1.i)
1. Read Section 9-2 (all), pages 226-232.
2. Complete the Section 9-2 Assessment on page 232 (Questions 1-6). Use complete sentences.
3. Read *Adapted Reading and Study Workbook B* pages 82-83 and complete pages 84-90.

#### DAY 5: Labs
(CA Standards 7 1.d, BI 1.g, 7 1.d, BI 1.i)
Pick **ONE (1)** of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)
1. Choose one of the **Online Activities** at [https://sites.google.com/site/coasbioa/assignment-4](https://sites.google.com/site/coasbioa/assignment-4).
2. **Lab Simulation:** *Photosynthesis* (see text p. 215) and *Cell Respiration.* Take self-quiz following both labs; print them out and turn in.
3. **Virtual Labs:** *Lab 6: Paper Chromotography, Lab 7: Light-Dependent Reactions,* and *Lab 8: Cell Respiration.* Print lab sheets, complete and turn them in.

#### REVIEW: **Prepare to take the Chapter Assessment,** pp. 217 (1-10), 237 (1-10) & **Standards Practice,** pp. 219 (1-9), 239 (1-9)
ASSIGNMENTS FOR WEEK #5: Introduction to Genetics (Chapter 11)

Due: ___/___/___  Rec’d: ___/___/___  Evaluation: ________________________________________________
Comments: __________________________________________________________________________________

### DAY 1: The Work of Gregor Mendel
(CA Standards 7.2.c, 7.2.d, BI 2.d, BI 3.b)
1. Read Section 11-1 (all), pages 262-266.
2. In complete sentences, define the following vocabulary words from the section: genetics, fertilization, true-breeding, hybrids, genes, alleles, segregation, gametes.
3. Complete the Section 11-1 Assessment on page 266 (Questions 1-6). Use complete sentences.

### DAY 2: Probability and Punnett Squares; Independent Assortment
(CA Standards 7.2.c, 7.2.d, BI 2.g, BI 3.a, BI 3.b)
1. Read Section 11-2 (all), pages 267-269.
2. In complete sentences, define the following vocabulary words from the section: probability, Punnett square, homozygous, heterozygous, phenotype, genotype.
3. Complete the Section 11-2 Assessment on page 269 (Questions 1-5). Use complete sentences.
4. Read Section 11-3 (Independent Assortment only), pages 270-271.
5. In complete sentences, define the following vocabulary word from the section: independent assortment.

### DAY 3: Meiosis
(CA Standards BI 2.a, BI 2.b, BI 2.d, BI 2.e)
1. Read Section 11-4 (all), pages 275-278.
2. In complete sentences, define the following vocabulary words from the section: homologous, diploid, haploid, meiosis, tetrad, crossing-over.
3. Complete the Section 11-4 Assessment on page 278 (Questions 1-5). Use complete sentences.

### DAY 4: Workbook Assignments
(CA Standards 7.2.c, 7.2.d, BI 2.d, BI 3.b, BI 2.g, BI 3.a, BI 2.e, BI 2.a, BI 2.b)
- Read Adapted Reading and Study Workbook B pages 99-101 and complete pages 102-106.

### DAY 5: Labs
(CA Standards BIIE 1.a, 1.f, 1.j)
Pick ONE (1) of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)
1. Choose one of the Online Activities at https://sites.google.com/site/coasbioa/assignment-5.
2. **Worksheet:** Punnet Square. Complete and turn in completed worksheet.
3. **BioDetectives Workbook:** Investigation 4 – Interpreting DNA Analysis. Complete pages 21-26 and turn in.
4. **Lab Simulation:** Meiosis. Take the self-check quiz and turn it in.

**REVIEW:** Prepare to take the Chapter Assessment, page 283 (1-5, 9) and Standards Practice, page 285 (1-10)
ASSIGNMENTS FOR WEEK #6: DNA and RNA (Chapter 12)

Due: ___/___/___  Rec’d: ___/___/___  Evaluation: __________________________________________
Comments: __________________________________________________________________________

**DAY 1: DNA**
(CA Standards 7 2.e, BI 5.a, BIIE 1.k)
1. Read Section 12-1 (The Components and Structure of DNA only), page 291.
2. In complete sentences, define the following vocabulary word from the section: nucleotides
3. Read Adapted Reading and Study Workbook B pages 107-109 and complete pages 110-113.

**DAY 2: Chromosomes and DNA Replication**
(CA Standards 7 2.e, BI 5.b)
1. Read Section 12-2 (all), pages 295-299.
2. In complete sentences, define the following vocabulary words from the section: histones, chromatin, replication, DNA polymerase
3. Complete the Section 12-2 Assessment on page 299 (Questions 1-6). Use complete sentences.

**DAY 3: RNA and Protein Synthesis**
(CA Standards BI 1.d, BI 4.a, BI 4.b, BI 5.a)
1. Read Section 12-3 (all), pages 300-306.
2. In complete sentences, define the following vocabulary words from the section: genes, messenger RNA, ribosomal RNA, transfer RNA, transcription, RNA polymerase, promoters, introns, exons, codon, translation, anticodon.
3. Complete the Section 12-3 Assessment on page 306 (Questions 1-5). Use complete sentences.

**DAY 4: Workbook Exercises**
(CA Standards: See Days 1-3 above.)
- Complete Adapted Reading and Study Workbook B pages 114-118.

**DAY 5: Labs**
(CA Standards: See Days 1-3 above.)
Pick ONE (1) of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)
1. Choose one of the Online Activities at https://sites.google.com/site/coasbioa/assignment-6.
2. Worksheet: DNA. Complete and turn in completed worksheet.
3. Lab Simulations:
   - DNA Structure and Replication (see text p. 313),
   - From Gene to Protein: Transcription
   - From Gene to Protein: Translation
   - Take self-quiz following all three labs. Turn in printout of completed quizzes.

**REVIEW:** Prepare to take the Chapter Assessment, page 315 (1-8) and Standards Practice, page 317 (1-9)
## ASSIGNMENTS FOR WEEK #7: Genetic Engineering (Chapter 13)

Due: __/__/___  Rec’d: __/__/___  Evaluation: ________________________________________  
Comments: _____________________ ____________________ ______________________

### DAY 1: Changing the Living World  
(CA Standards BI 5.e)  
1. Read Section 13-1 (all), pages 319-321.  
2. In complete sentences, define the following vocabulary words from the section: *selective breeding*, *hybridization*, *inbreeding*.  
3. Complete the Section 13-1 Assessment on page 321 (Questions 1-5). Use complete sentences.

### DAY 2: Manipulating DNA  
(CA Standards BI 5.c, BI 5.d)  
1. Read Section 13-2 (all), pages 322-326.  
2. In complete sentences, define the following vocabulary words from the section: *genetic engineering*, *restriction enzymes*, *gel electrophoresis*, *recombinant DNA*, *polymerase chain reaction*.  
3. Complete the Section 13-2 Assessment on page 326 (Questions 1-5). Use complete sentences.

### DAY 3: Cell Transformation  
(CA Standards BI 5.c, BI 5.e)  
1. Read Section 13-3 (all), pages 327-329.  
2. In complete sentences, define the following vocabulary words from the section: *plasmid*, *genetic marker*.  
3. Complete the Section 13-3 Assessment on page 329 (Questions 1-5). Use complete sentences.

### DAY 4: Workbook Assignments  
(CA Standards: See Days 1-3 above.)  
- Read *Adapted Reading and Study Workbook B* pages 119-121 and complete pages 122-126.

### DAY 5: Labs  
(CA Standards: See Days 1-3 above.)  
Pick ONE (1) of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)  
1. Choose one of the Online Activities at [https://sites.google.com/site/coasbioa/assignment-7](https://sites.google.com/site/coasbioa/assignment-7).  
2. **Quick Lab**: *How can restriction enzymes be modeled?* (Textbook, page 326; complete and answer questions 1 and 2.)  
3. **Virtual Labs**: *Lab 11: Restriction Enzyme Cleavage and Lab 12: Bacterial Transformation*. Print lab sheets, complete and turn in.  
4. **Lab Simulation**: *Restriction Enzyme Digestion on DNA*. Take the self-check quiz and turn it in.

### REVIEW: Prepare to take the Chapter Assessment, page 337 (1-8) and Standards Practice, page 339 (1-10)
ASSIGNMENTS FOR WEEK #8: The Human Genome (Chapter 14)

Due: ___/___/___  Rec’d: ___/___/___  Evaluation: ______________________________________
Comments: _______________________________________________________________________

**DAY 1: Human Heredity**  
(CA Standards 7.2.c, 7.2.d, BI 2.e, BI 2.f, BI 2.g, BI 3.a, BI 3.c)  
1. Read Section 14-1 (*Human Chromosomes and Human Traits* only), page 341-343.  
2. In complete sentences, define the following vocabulary word from the section: *karyotype, sex chromosomes, autosomal, pedigree.*  
3. Read *Adapted Reading and Study Workbook B* pages 127-128 and complete pages 129-131.

**DAY 2: Human Chromosomes**  
(CA Standards BI 2.g, BI 3.a, BI 7.b)  
1. Read Section 14-2 (*Sex-Linked Genes, X-Chromosome Inactivation and Chromosomal Disorders* only), pages 350-353.  
2. In complete sentences, define the following vocabulary words from the section: *sex-linked genes, nondisjunction.*  
3. Complete *Adapted Reading and Study Workbook B* pages 131-134.

**DAY 3: Human Molecular Genetics**  
1. Read Section 14-3 (all), pages 355-360.  
2. In complete sentences, define the following vocabulary word from the section: *DNA fingerprinting.*  
3. Complete the Section 14-3 Assessment on page 360 (Questions 1-5). Use complete sentences.

**DAY 4: Labs**  
(CA Standard: See Days 1-2 above.)  
Pick **ONE (1)** of the following lab activities: (Note: Online activities are accessible on the internet; all other activities can only be accessed on student computers.)  
1. Choose one of the **Online Activities** at [https://sites.google.com/site/coasbioa/assignment-8](https://sites.google.com/site/coasbioa/assignment-8).  
2. **Real World Lab:** Modeling DNA Probes. Textbook, page 361. Complete the Procedure and answer all questions under Analyze and Conclude and turn in your work.

**DAY 5: Review for Final**  
• Complete your final project or study for your final exam.

**REVIEW:** Prepare to take the **Chapter Assessment**, page 363 (1-10) and **Standards Practice**, page 365 (1-7)
### ASSIGNMENTS FOR WEEK #9: Final Assessment

**OPTION 1:**
Take home and complete the final exam for Biology A.

**OPTION 2:**
Consult with your teacher to pick a subject covered in this course from this course. Choose one of the following alternative assessments to elaborate on your chosen subject:

**Artistic Expression:** Compose a song, choreograph a dance, write a poem, or create a painting or other visual art piece that explains or demonstrates a concept you learned in this course. Lyrics for songs and poems must fill at least one standard piece of paper (double-spaced with a 12 point font). Songs and Dances must be performed live or on video and must last 2-3 minutes. Dances and visual art pieces will need to be submitted with a one-minute verbal explanation or one-page report of your work. At least five terms learned in this course should be incorporated.

**Film Documentary Summary:** Watch a documentary or feature film (minimum 1 hour) on a topic related to a concept you learned in this course. Write a five-paragraph summary of the documentary using the following format.

- **Paragraph 1:** Cite the title and source of the movie and give a brief description of what it covers.
- **Paragraph 2:** A description of one new concept you learned from the movie.
- **Paragraph 3:** A description of another new concept you learned from the movie.
- **Paragraph 4:** A description of a third new concept you learned from the movie.
- **Paragraph 5:** General final thoughts on the movie. (i.e. Would you recommend it? Explain.)

*NOTE: Paragraphs 2, 3 and 4 must be at least five sentences long*

**Museum Visit:** Visit a local museum that features exhibits relevant to this course. Write a five-paragraph summary of your visit using the following format:

- **Paragraph 1:** A general description of the museum and the date and time you visited.
- **Paragraph 2:** A description of an exhibit and how it relates to a concept you’ve learned in this course.
- **Paragraph 3:** A description of a second exhibit and how it relates to another concept you’ve learned in this course.
- **Paragraph 4:** A description of a third exhibit and how it relates to another concept you’ve learned in this course.
- **Paragraph 5:** General final thoughts on your visit to the museum.

*NOTE: Paragraphs 2, 3 and 4 must be at least five sentences long.*

**Newspaper or Magazine Article Summary:** Find three recent (no more than six months old) newspaper or magazine articles with topics related to concepts you’ve learned in this course. Write a five-paragraph synopsis of the three articles using the following format:

- **Paragraph 1:** Cite the names, authors, and sources of your three articles.
- **Paragraph 2:** A synopsis of the first article and how it relates to a concept you’ve learned in this course.
- **Paragraph 3:** A synopsis of the second article and how it relates to a concept you’ve learned in this course.
- **Paragraph 4:** A synopsis of the third article and how it relates to a concept you’ve learned in this course.
- **Paragraph 5:** General final thoughts on your three articles.

*NOTE: Paragraphs 2, 3 and 4 must be at least five sentences long.*

**Poster Presentation:** Create a poster that illustrates or diagrams a concept you learned in this course. The poster should be at least 2x3 feet and use bold letters and colors. It should also include at least five terms you learned in this course. Feel free to use illustrations in your textbook. You will need to explain your poster in a two-minute speech/presentation to your teacher.

**PowerPoint Presentation:** Prepare and deliver a 5-minute PowerPoint presentation explaining or demonstrating a concept learned in this course. You must include at least 5 slides. At least five terms learned in this course should be incorporated. You will present your report to an audience that will include teachers and fellow students.

**Video or Audio Presentation:** Create, present, and record a 2-3 minute presentation explaining or demonstrating a concept learned in this course. The presentation could be a straightforward delivery of information or it could be a skit acted out by you and others (e.g. fictional scene, news report, interview, mock debate, etc.). At least five terms learned in this course should be incorporated.