

Students of Biology! Below is a list of factual concepts in Chemistry which will be covered next year. Each student is required to choose one (1) of these item topics of discussion for 2017-18. The student will then produce a video (**file type .mov**) not exceeding 3 minutes in length that demonstrates your research on the topic. No more than two (2) students in a given class can have the same topic.

First, the video will need to be planned using a storyboard, and this storyboard must be submitted to your Biology teacher during the last week of classes (exact date determined by your instructor).

Exceptional productions will show the following: a demonstration, discussion regarding an equation, experiment, and/or presentation of student-collected observations.

Get creative! Your video will be used as an introduction for the unit that we investigate in the upcoming year.

A rubric of grading is also provided to help show you expectations for an exemplary, proficient, or poor grade.

Your final video submission will be due September 11th, 2017. Your Chemistry teacher for next year will setup a DropBox for submittal during the first week of school.

Summer Assignment Topics Chemistry

Topic	Presentation
Phase Change	Demonstrating phase change with H ₂ O; Scientific terms; Difference chemical reaction and physical changes
Separation Techniques	Theory & Demonstration of techniques
Density	Theory & Experiment
Compounds Mixtures Elements	Using substances/objects from everyday life
Isotopes	Using models, like M&Ms, to explain isotopes
Thomas & Millikan Atomic Models	Using simulations; own narration
Bohr Atomic Model	Building a Atomic Model; using it to explain Atomic Theory
Rutherford & Chadwick	Own Narration to Simulation
Intermolecular Forces	Explain physical properties; suitable experiment or simulation
Periodic Table	History; Today's version
Synthesis and Decomposition	With experiment
Combustion & Acid-Base Neutralization	With experiment
Catalyst	Explanation should included graphs and strong connection to biology (e.g. enzymes; bombardier beetles)

Lewis, Bronsted-Lowry & Arrhenius Acid Base Theory	
pH Measurement and indicators	Using household products; different natural indicators
Titration of strong acids/strong bases	Experiment
VSEPR	Building models and using them to explain molecule geometry (bonding pairs only)
Le Chatelier	
Boyles Gay Lussac	Use Simulations

Activity	Exemplary	Proficient	Poor	Points
Storyboard and Plan: May 2017	<p>The storyboard illustrates the video presentation structure with thumbnail sketches of each scene. Notes of proposed transition, special effects, sound and title tracks include: text, background color, placement & size of graphic, fonts - color, size, type for text and headings. Notes about proposed dialogue/narration text are included.</p> <p>The proposal is well written; addresses all necessary components in detail with a clear understanding of the message the student must convey.</p>	<p>The storyboard includes thumbnail sketches of each video scene and includes text for each segment of the presentation, descriptions of background audio for each scene, and notes about proposed shots and dialogue.</p> <p>The proposal shows the details of the project, including all requested components.</p>	<p>The thumbnail sketches on the storyboard are not in a logical sequence and do not provide complete descriptions of the video scenes, audio background, or notes about the dialogue.</p> <p>The proposal doesn't explain the project focus or convey an understanding of the direction the student wishes to take with his concept</p>	Max 20 pts
Media Presentation Part 1: September 2017	<p>Strong message. Covers topic completely and in depth. Includes complete information.</p>	<p>Message is vaguely communicated. Includes some essential information with few facts.</p>	<p>Message is unclear. Includes little essential information and one or two facts.</p>	Max 50pts
Media Presentation Part 2: TBA	<p>The content includes a clear statement of purpose or theme and is creative, compelling, and clearly written. A variety of supporting information in the video contributes to understanding the project's main idea. The project includes motivating questions and information that provide the audience with a sense of the presentation's main idea. Events and messages are presented in a logical order. The audience was clearly engaged and clearly understood the information.</p>	<p>Information is presented as a connected theme with accurate, current supporting information that contributes to understanding the project's main idea. The audience's perception of the presentation as unclear though they did grasp the underlying primary concept.</p>	<p>The content lacks a central theme, clear point of view and logical sequence of information. Much of the supporting information in the video is irrelevant to the overall message. The viewer is unsure what the message is because there is little persuasive information and only one or two facts about the topic. Information is incomplete, out of date and/or incorrect. Audience was unable to grasp the information and did not understand the direction of the presentation.</p>	

Part 1: Proposal and Storyboard – Due the last week of classes (exact date determined by your current science instructor)

Video Project Proposal – The Pitch

- Form an idea that has depth and substance.
- Have a good grasp on the main idea, the information, the structure of the presentation, and the use of your creativity in conveying the message.
- Consider creating a presentation to better explain your idea to the class and involve some type of demonstration/real life example. This will also help you to be focused and stay on track.

Be specific and to-the-point.

Video Title:

Video Style: (narrative, demonstration, voice over with photographs)

Target Audience:

Video Goals & Objectives - What does the video aim to teach?

1. What is the purpose? (Why have you chosen this style of presentation to convey your information? Will it show/or explain the facts through narration solely? Will it demonstrate something—what?)
2. Describe the content of your video. (Briefly describe what you expect your project to be about. What is the goal of the message you wish to convey? Identify the critical information to be presented.)

STORYBOARD₉












