

History Department Summer Reading for Upper School

9th Grade Summer Reading Assignment World History

(Mr. Nease)

Reading Requirements:

- Students will read the **Blood Red Horse by K.M. Grant.**
- Students will be required to read pages 379 to 385 from the World History textbook.
- **World History: Patterns of Interaction (Name of 9th World History Textbook)**
- A digital link will be on the 9th grade World History class folder.

Paper Assignment:

- Type a three to five page double spaced paper.
- The paper should be typed in 12 inch Times New Romans font.
- Your name and date should be single spaced in the top left corner.
- You will need a creative title. Your title will be centered and two spaces below your name and date. Each page should be numbered at the top right corner. NO TITLE PAGE!
- **NO MORE THAN THREE QUOTES!!!!!! (CITE THE PAGE NUMBER)**
- First paragraph should consist of your introduction.
- Your body paragraphs should analyze and discuss The Blood Red Horse and how closely aligned the fictional book is with the historical truth found in pages 379-385 of your world history textbook.
- In other words, how accurate is K.M. Grant's book in regards to the actual Crusades?
- Your final paragraph is your conclusion. Summarize your thoughts on the book and how well the author captured the true history of the Crusades.

Grading:

- Your paper will count as a 100 point test grade.
- There will be a 50 point quiz to test your reading comprehension on the book.
- Points will be deducted for misspelled words, grammatical errors, or not following the paper instructions.
- DO NOT PLAGIARIZE!!!!!!!!!!!!!!!!!!!!!!
- Any plagiarism may result in a zero for the paper.!

Due Date:

- **Your paper is due on the first day of class.** Points will be deducted for late papers.
- You will have a quiz on the book on the first full day of school.

10th Grade Pre APUSH Summer Reading Assignment

(Mr. Nease)

Reading Requirements:

- Students will read **Citizen Tom Paine by Howard Fast**
- They will also be required to read pages 199-200 and 202 from Chapter 5 in their A.P. textbook. **Give Me Liberty!: An American History / APUSH Textbook**
- That means you will need to buy the textbook. You could always ask the Juniors if they will sell you their book.

Paper Assignment:

- Type a seven to ten page double spaced paper.
- The paper should be typed in 12 inch Times New Romans font.
- Your name and date should be single spaced in the top left corner.
- Page number in the top right corner.
- Please include a creative title.
- **NO MORE THAN THREE QUOTES!!!!!! (CITE THE PAGE NUMBER)**
- No bibliography since you will only be reading the novel and the textbook.
- First paragraph should consist of your introduction and thesis.
- The last sentence of your first paragraph must make a historically defensible argument relating to either the purpose or intended audience of Howard Fast's novel. You could also write a thesis on Fast's interpretation of Thomas Paine.
- Your body paragraphs should analyze and discuss Citizen Tom Paine and how closely aligned the fictional book is with the historical truth found in pages 199-202 of your AP textbook. Your body paragraphs must also use evidence to defend your thesis.
- Your final paragraph is your conclusion. Summarize your thoughts on the book and how well the author captured the true history of the Revolutionary Era.

Grading:

- Your paper will count as a 100 point test grade.
- There will be a 50 point quiz to test your reading comprehension on the book.
- Points will be deducted for misspelled words, grammatical errors, or not following the paper instructions.
- **DO NOT PLAGIARIZE!!!!!!!!!!!!!!!!!!!!!!**
- Any plagiarism may result in a zero for the paper.!

Due Date:

- **Your paper is due on the first day of class.** Points will be deducted for late papers.
- You will have a quiz on the book on the first full day of school.

10th Grade U. S. History I Summer Reading

Civil War Stories by Ambrose Bierce

[Purchase Link](#)

Students in United States History I will read Civil War Stories by Ambrose Bierce. Read the work and be ready to discuss the work when school begins in August. If you have any questions please contact Coach Salmons at rsalmons@stlukesmobile.com.

11th Grade APUSH Summer Reading Assignment

(Mr. Nease)

Reading Requirements:

- Students will read **Looking Backward** by Edward Bellamy.

Paper Assignment:

- Type a seven to ten page double spaced paper.
- The paper should be typed in 12 inch Times New Romans font.
- Name and date single spaced in the top left corner.
- Page number in the top right corner.
- Please include a creative title.
- No bibliography since you will only be using the novel.
- **NO MORE THAN THREE QUOTES!!!!!! (CITE THE PAGE NUMBER)**
- First paragraph should consist of your introduction and thesis.
- The last sentence of your first paragraph must make a historically defensible argument relating to either the purpose or intended audience of Edward Bellamy's novel. You could also write a thesis on Bellamy's interpretation of the future. You may create a thesis not included above, but you must email me so I can approve it.
- Your body paragraphs should analyze and discuss Looking Backward while using outside historical evidence to defend your thesis. You may use your AP textbook for your outside historical evidence. If you use anything other than your book, you must cite your sources.
- Your final paragraph is your conclusion. Summarize your thoughts on the book and make your final case for your thesis.

Grading:

- Your paper will count as a 100 point test grade.
- There will be a 50 point quiz to test your reading comprehension on the book.
- Points will be deducted for misspelled words, grammatical errors, or not following the paper instructions.
- **DO NOT PLAGIARIZE!!!!!!!!!!!!!!!!!!!!!!**
- Any plagiarism may result in a zero for the paper.!

Due Date:

- **Your paper is due on the first day of class.** Points will be deducted for late papers.
- You will have a quiz on the book on the first full day of school.

11th Grade U. S. History II Summer Reading

In order to encourage reading for fun, students in **United States History II** may choose a book that interests them from the following list. Please note that you may choose more than one book if you would like, but you are only required to read one. Read the book thoroughly and be prepared to have an accompanying assignment from your teacher when school begins. Assignments can include a character sketch, book talk, writing prompts, generic book reviews, etc. If you would like to read a historical novel or historical non-fiction work not listed here, please contact Mr. Box MBox@stlukesmobile.com

Survival in Auschwitz by Primo Levi
Resistance: The Warsaw Ghetto Uprising by Israel Gutman
The Last Days of Stalin by Joshua Rubenstein
Charles and Emma: The Darwin's Leap of Faith by Deborah Heiligman
A Farewell to Arms by Ernest Hemingway
Mao's Last Dancer by Cunxin Li
Lone Survivor: The Eyewitness Account of Operation Redwing... by Marcus Luttrell
The Grand Design by Stephen Hawking and Leonard Mlodinow
Unbroken: A World War II Story of Survival Resilience and Redemption by Laura Hillenbrand
A Thousand Splendid Suns by Khaled Hosseini
The Disappearing Spoon: And Other True Tales of Madness, Love, and the History of the World from the Periodic Table of the Elements by Sam Kean
Girl in Translation by Jean Kwok
In the Garden of Beasts: Love, Terror, and an American Family in Hitler's Berlin by Erik Larson
The Last Town on Earth by Thomas Mullen
The Tiger's Wife by Tea Obreht
Sarah's Key by Tatiana de Rosnay
Hellhound on His Trail: The Stalking of Martin Luther Jr. and the International Hunt for His Assassin by Hampton Sides
The Book Thief by Markus Zusak
The Catcher in the Rye by J.D. Salinger
The Septembers of Shiraz by Dalia Sofer
Written in Bone: Buried Lives of Jamestown and Colonial Maryland by Sally Walker
Native Son by Richard Wright
The Zookeeper's Wife: A War Story by Diane Ackerman
A Long Way Gone: Memoirs of a Boy Soldier by Ishmael Beah
Caleb's Crossing by Geraldine Brooks
Leaving Yuba City: New and Selected Poems by Chitra Banerjee Divakaruni
Fall of Giants by Ken Follett
The Autobiography of Malcolm X by Alex Haley
Bread Givers by Anzia Yezierska
Manhunt: The 12 Day Chase for Lincoln's Killer by James Swanson
A Year in the South 1865 by Stephen Ash
Civil War Stories by Ambrose Bierce

12th Grade Government Summer Reading

Profiles in Courage

by John F. Kennedy

[Purchase Link](#)

ISBN-13: 978-0060854935

John F. Kennedy had long been interested in the topic of political courage, beginning with his senior thesis at Harvard. The thesis, later published as *Why England Slept*, was a study of the failure of British political leaders in the 1930s to oppose popular resistance to rearming, leaving the country ill prepared for World War II. Kennedy's election to the House in 1946 and the Senate in 1952 gave him personal experience in dealing with the conflicting pressures that legislators face. When Kennedy took a leave of absence from the Senate in 1954 to recover from back surgery, it gave him the opportunity to study the topic of political courage. The project resulted in the publication of *Profiles in Courage* [Public Library], which focuses on the careers of eight Senators whom Kennedy felt had shown great courage under enormous pressure from their parties and their constituents. His own battles with physical pain and his experiences in World War II as a PT boat commander also gave him inspiration. *Profiles in Courage*, which Kennedy dedicated to his wife Jacqueline Kennedy, received the Pulitzer Prize for history in 1957. -Amazon review

Due Date

Summer reading assignments will be due on the first day of school in August.

Honor Code

Plagiarized work copied from another student or any other print or electronic source will receive no credit and further disciplinary actions will be taken in accordance with the St. Luke's Episcopal School Honor Code.

Read the work in its entirety and be prepared to discuss the work on the first day of school. Students will use Profiles in Courage throughout the entire semester course. An additional assignment will be presented during the first weeks of school. a

English Department Summer Reading

For Annotating Written Book/Story Instructions

- Recommended Tips:
 - Try to make about 3-5 notes per chapter. Your teachers do not expect you to copy the book or have a note on every page.
 - Use the jacket covers for important information such as characters, setting, or vocabulary terms.
 - Use the margin of the pages to jot down important events in each chapter.
 - At the end of each chapter, briefly summarize (bullet points are okay) the material.
 - Circle unknown vocabulary words and define all words.
 - Underline important quotes or passages, paying close attention to those that indicate a theme, conflict, symbol, or motifs. If you underline a passage, write down a few words to remind yourself later why you underlined the information. Underlining without words is almost pointless.
- Annotating is an art form rather than a science. Eventually, you should develop your own system that works best for you. A book that is well-annotated is a great study tool and an invaluable resource on a test, especially an open book test (hint, hint).

English 9

2018 Summer Reading and Writing Assignment

All 9th grade students will read *Animal Farm* by George Orwell.

Overview:

Animal Farm is an **allegorical** novel in which the author uses animals to represent political figures. The book addresses the corruption that often goes along with power in political systems. Although the book was first published more than 70 years ago, its message is relevant today.

(An allegorical novel is one in which symbolic figures, actions, and/or imagery create meaning.)

Objectives:

- A. Students will enhance reading skills by monitoring understanding through effective annotation.
- B. Students will relate current knowledge and opinions of government systems and leaders to characters and situations in the novel.

Assignment:

1. Students will read and annotate the novel. (**Annotation instructions are in the summer reading folder.**) Be consistent in the use of marks and symbols (for example: circle unfamiliar words, underline or highlight important points, place a star by interesting passages, etc.)
2. Answer the following questions in complete sentences as you read:
 - a. What does Old Major believe is the cause of the animals' problems?
 - b. What effect does Major's death have on the idea of rebelling against man?
 - c. What do the animals do first after chasing the humans from the farm?
 - d. What happens at the Battle of the Cowshed?
 - e. Where is Napoleon during the battle?
 - f. What changes does Napoleon make after Snowball is chased away?
 - g. Why does Napoleon blame Snowball for the destruction of the windmill?
 - h. Discuss the imagery and message of the song "Beasts of England."
 - i. What happens to Boxer?
 - j. Describe the changes in the pigs since the beginning.
 - k. What happens to the pigs' appearance at the end of the novel?
3. Write 1-2 paragraphs (at least five sentences per paragraph) about the following question: If you were a character in the novel, which would you be and why?

Questions? Email me at: gsykes@stlukesmobile.com

2018 Summer Reading Assignment 10th Grade English

Literary Focus: Compare/Contrast British Literature with its movie adaptation, answer analysis questions, and prepare to write an in class compare/contrast essay on the two works

Students will choose ONE of the following literary selections to compare and contrast with the movie version.

Book

Movie



Choice One:

Literature: *The Hound of the Baskervilles* by Sir Arthur Conan Doyle; Dover Thrift Edition: ISBN 978-0486282145

Movie: *The Hound of the Baskervilles*, directed by Terence Fisher, produced originally in 1959; length 1 hour 26 minutes *This version of the movie is available at the Mobile County Public Library

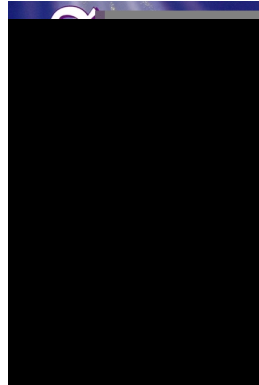
Description: The Hound of the Baskervilles is the third of the crime novels written by Sir Arthur Conan Doyle featuring the detective Sherlock Holmes. Originally serialized in The Strand Magazine from August 1901 to April 1902, it is set largely on Dartmoor in Devon in England's West Country and tells the story of murder inspired by the legend of a fearsome, diabolical hound of supernatural origin. Sherlock Holmes and his companion Doctor Watson investigate the case.

After viewing the movie, answer the following analysis questions in complete sentences for in class essay preparation. Each answer should be at least 3-4 sentences in length.

1. Overall, what was the story in these works?
2. How is suspense different and similar in each version?
3. Are characters presented the same? Why or why not? Describe.
4. Look at how the film and book present major themes.
5. What were major changes? What were the impact of the changes?
6. Which version was most effective in storytelling/ Why?
7. Which version did you prefer? Why?

Book

Movie



Choice Two:

Literature: ***Once and Future King*** Part I “The Sword in the Stone” by T.H. White; ISBN 978-0441627400 **Note that students will only read PART I for the assignment.

Movie: Disney’s Classic ***The Sword in the Stone***, directed by Wolfgang Reitherman, produced in 1963; length 1 hour 19 minutes **This version of the movie is available at the Mobile County Public Library*

Description: Once upon a time, a young boy called “Wart” was tutored by a magician named Merlyn in preparation for a future he couldn’t possibly imagine. A future in which he would ally himself with the greatest knights, love a legendary queen, and unite a country dedicated to chivalrous values. A future that would see him crowned and known for all times as Arthur, King of the Britons.

After viewing the movie, answer the following analysis questions in complete sentences for in class essay preparation. Each answer should be at least 3-4 sentences in length.

1. Overall, what was the story in these works?
2. How is the story different and similar in each version?
3. Are characters presented the same?
4. Look at how the film and book present major themes. Is there stereotyping? Gender difference?
5. What were major changes? What were the impact of the changes?
6. Which version was most effective in storytelling/ Why?
7. Which version did you prefer? Why?

Choice Three:

Literature: *The Lord of the Flies* by William Golding; ISBN 978-0399501487

Movie: *The Lord of the Flies*, directed by Peter Brook; produced in 1963; length 1 hour 32 minutes *This version of the movie is available at the Mobile County Public Library

Description: At the dawn of the next world war, a plane crashes on an uncharted island, stranding a group of schoolboys. At first, with no adult supervision, their freedom is something to celebrate. This far from civilization they can do anything they want. Anything. But as order collapses, as strange howls echo in the night, as terror begins its reign, the hope of adventure seems as far removed from reality as the hope of being rescued.

After viewing the movie, answer the following analysis questions in complete sentences for in class essay preparation. Each answer should be at least 3-4 sentences in length.

1. Overall, what was the story in these works?
2. How is the story different and similar in each version?
3. Are characters presented the same?
4. Look at how the film and book present major themes (especially good vs. evil).
5. What were major changes? What were the impact of the changes?
6. Which version was most effective in storytelling/ Why?
7. Which version did you prefer? Why?

While reading, students are required to ANNOTATE both the written and film adaptations. **You will receive a grade for your notes on both the film and the written version (see rubric).**

- Written version
 - Jotting down 3-5 notes per chapter is acceptable. Be sure to note character names, major plot points, and any unfamiliar vocabulary.
- Film version

- Handwritten notes should be taken on a labeled piece of paper while watching the movie to show an analyzed viewing. Be sure to note character names, major plot points, tone, mood, and important events. These will be used in your essay to make comparisons/contrasts.
- *Attached to this document is an explanation of how to annotate while reading.*
- Students should bring these book to school on the first day and will be required to write and in class essay during the first few days of school.
- A rubric is attached to show how the parts of the assignment will be graded.

Annotation Instructions For Annotating Written Book/Story

- Recommended Tips:
 - Try to make about 3-5 notes per chapter. Your teachers do not expect you to copy the book or have a note on every page.
 - Use the jacket covers for important information such as characters, setting, or vocabulary terms.
 - Use the margin of the pages to jot down important events in each chapter.
 - At the end of each chapter, briefly summarize (bullet points are okay) the material.
 - Circle unknown vocabulary words and define all words.
 - Underline important quotes or passages, paying close attention to those that indicate a theme, conflict, symbol, or motifs. If you underline a passage, write down a few words to remind yourself later why you underlined the information. Underlining without words is almost pointless.
- Annotating is an art form rather than a science. Eventually, you should develop your own system that works best for you. A book that is well-annotated is a great study tool and an invaluable resource on a test, especially an open book test (hint, hint).

Questions? Email Mrs. Cook - mcook@stlukesmobile.com

10th English Summer Reading Grading Rubric

Student Name: _____

Chosen Story: _____

Part I - completed during the summer and brought the first day of class

_____/15 Annotations/analyzed reading of novel/written work **complete and thorough*

Comments: _____

_____/15 Annotated notes on movie version of story **complete and thorough*

Comments: _____

_____/20 Analysis response questions for written work/film comparison **complete sentences*

Comments: _____

Total Summer Grade: _____/50

Part II - completed AFTER return to school in class

In Class Essay Rubric

_____/ 15 Well organized/follows structure of outline

_____/ 25 Appropriate comparison and contrast content of two works

_____/ 10 Well-constructed sentences/ correct grammar, spelling, and punctuation

Total Essay Grade: _____/50

Total Grade Parts I and II: _____/100

Overall Comments: _____

English 11

2018 Summer Reading and Writing Assignment

All 11th grade students will choose between the following selections:

The Glass Castle by Jeannette Walls
Or
David and Goliath: Underdogs, Misfits, and the Art of Battling Giants
by Malcolm Gladwell

Overview:

Each of these books is a work of non-fiction and was selected to provide an opportunity to relate to real-world situations and to consider points of view other than those currently held. Please research the topics and content of each book and consult with parents when making your selection.

Objectives:

Students will read to gain insight into the viewpoints of others, and they will share insightful knowledge of their reading during the first days of classes.

Students will use critical thinking skills to assess an author's experiences and/or the validity of various conclusions.

Assignment:

All students will read and annotate their selected book. (**Annotation instructions are in the summer reading folder.**) Be consistent in the use of marks and symbols (for example: circle unfamiliar words, underline or highlight important points, place a star by interesting passages, etc.) Keep a list of unfamiliar words, and define them as you read.

Choose one of the following based on your book selection.

David and Goliath

1. Keep a journal on **note cards** as you read **chapters 1-6 and chapter 9 only. You are not required to read chapters 7 & 8.** In addition to summarizing (2-3 sentences) what has taken place in each chapter, write 1-2 complete sentences providing your insights and thoughts on the text. (For example: Does the author make his points clearly? Is the author attempting to inform or entertain? Does the author provide adequate evidence to support his claims? etc.)

- Use one card per chapter.
- All information must be your work in your handwriting.
- Bring index cards and book on the first day of class.

2. Choose one of the assigned chapters of the book, and find a connection between the chapter and actual events in your life, school, or community. Write a paragraph about your connection, and be prepared to discuss your work in class.

OR

The Glass Castle

(To follow this assignment, you will need the ISBN 978-0-7432-4754-2 edition.)

Reading Section 1: pp 3-75
Reading Section 2: pp. 76-115
Reading Section 3: pp. 116-158
Reading Section 4: pp. 159-192
Reading Section 5: pp. 193-230
Reading Section 6: pp. 231-288

After reading each section listed above, find two quotes concerning the trials and/or triumphs of the author and her family. Cite each quote with the author's name and the page number (ex. Walls 72). Analyze one of the quotes in each section, and explain its significance. An example of this type of quote and analysis follows:

“Dad was so sure a posse of federal investigators was on our trail that he smoked his unfiltered cigarettes from the wrong end. That way, he explained, he burned up the brand name, and if the people who were tracking us looked in his ashtray, they'd find unidentifiable butts instead of Pall Malls that could be traced to him” (Walls 19). Walls characterizes her father as being paranoid about being followed by government officials, and he believes he can outwit his pursuers by paying attention to small details of his activities.

Write each of these analyses in your handwriting on a separate note card. Bring the cards and the book with you on the first day of class, and be prepared to discuss your responses.

Questions? Email me at: gsykes@stlukesmobile.com

English 11 AP

2018 Summer Reading and Writing Assignment

All students will read *The Glass Castle* by Jeannette Walls –ISBN 978-0-7432-4754-2

Overview:

The Glass Castle is a memoir that will allow AP students to read a personal account of the author's life and experience first-hand recollections of her life and the lives of her family through various situations.

Objectives:

Students will discover the power of memoir writing, and use this story as a means of comparing and contrasting their personal experiences, or those of someone they know, with those of the author.

Students will learn how others measure self worth and commitment to family through reading and classroom discussions during the first days of class.

Assignment:

Read and annotate the novel. (**Annotation instructions are in the summer reading folder.**) The book will be broken down into sections as follows:

Reading Section 1: pp. 3-75 Reading Section 2: pp. 76-115 Reading Section 3: pp. 116-158 Reading Section 4: pp. 159-192 Reading Section 5: pp. 193-230 Reading Section 6: pp. 231-288

1. After reading each section listed above, find two quotes concerning the trial and/or triumphs of the author and her family. Cite each quote with author's name and the page number (ex. Walls 72). Analyze each of the quotes in each section, and explain its significance. An example of this type of quote analysis follows:

“Dad was so sure a posse of federal investigators was on our trail that he smoked his unfiltered cigarettes from the wrong end. That way, he explained, he burned up the brand name, and if the people who were tracking us look in the ashtray they'd find unidentifiable butts instead of Pall Malls that could be traced to him” (Walls 19).

Walls characterizes her father as being paranoid about being followed by government officials, and he believes he can outwit his pursuers by paying attention to small details of his activities.

Write each of these analyses on a separate note card. Bring the cards and the book with you on the first day of class, and be prepared to discuss your responses.

2. Write a short 300-400 word essay describing why the author will not condemn her parents. Include information explaining why you would or would not be able to be nonjudgmental in a similar circumstance. Your essay should be in MLA format.

Questions? Email me at: gsykes@stlukesmobile.com

12th Grade Advanced Composition 2018-2019 Summer Reading and Writing Assignments

You will have TWO assignments due on the first day of school:

1. Compose TWO common app prompts to begin the college application process.
2. Research and annotate THREE in depth articles about a social issue.

Rationale:

The ubiquity of technology seems to negate the importance of reading and writing in today's classroom and curriculum; in fact, the ability of a student to read and write well is essential to his success outside the school arena. According to the International Reading Association,

“Adolescents entering the adult world will do more reading and writing tasks than at any other time in human history. They will need reading and writing to cope with information they will find the world as it exists. They will also need to use literacy to feed their imaginations so that they can create the world of the future. In a complex and diverse world, their ability to read is crucial, and therefore, it is essential not only to help them survive, but also to help them thrive.”

Objectives:

Students will read for a deeper understanding with a common focus that will permit deep instruction on the first day of class.

Students will compose narrative essays to prepare for the college application process as well as engage in a reflection of himself and his abilities.

I. ASSIGNMENT #1: COMMON APPLICATION ESSAY

Your goal is to compose TWO essays that reveal who you are through a memorable experience or significant event. Your essay should show evidence of careful reflection and brainstorming, revision, and style. This is your chance to present yourself as a college-ready student with a work ethic and level of ambition.

At the beginning of school, I will work together to help you craft your essays so that you have two strong essays in your college portfolio.

In our Google drive folder, several documents have been uploaded to help you prepare for this assignment. Please review these before selecting an essay prompt. There are many pitfalls and mistakes students make when composing the college essay, and the better your essays are, the fewer revisions you will need to complete. An email will be sent to your school account granting you access to the class folder.

General Guidelines:

1. Keep all brainstorming and drafts.
2. Your work should be your own. It will be submitted to a plagiarism site for evaluation.
3. Your work should be in final draft format, clean and free of typos and editing errors.
4. Your final draft should be typed and ready to turn in prior to the beginning of school. Electronic submissions are acceptable, but they must be from your school gmail account and on google docs.
5. Check your email! We will send you updates and information during the summer.

The 2018-2019 Common App Prompts

Select TWO prompts from the list to compose an essay:

1. Some students have a background, identity, interest, or talent that is so meaningful they believe their application would be incomplete without it. If this sounds like you, then please share your story.
2. The lessons we take from obstacles we encounter can be fundamental to later success. Recount an incident or time when you faced a challenge, setback, or failure. How did it affect you, and what did you learn from the experience?

3. Reflect on a time when you questioned or challenged a belief or idea. What prompted your thinking? What was the outcome?
4. Describe a problem you've solved or a problem you'd like to solve. It can be an intellectual challenge, a research query, an ethical dilemma-anything that is of personal importance, no matter the scale. Explain its significance to you and what steps you took or could be taken to identify a solution.
5. Discuss an accomplishment or event, or realization that sparked a period of personal growth and a new understanding of yourself or others.
6. Describe a topic, idea, or concept you find so engaging that it makes you lose all track of time. Why does it captivate you? What or who do you turn to when you want to learn more?

Note: If you are applying to a school with a specific prompt, you may use that prompt in place of a common app prompt.

See Appendix A

II. ASSIGNMENT #2: IN-DEPTH ARTICLE ANALYSIS

This semester, you will compose an argument essay on a contemporary issue. To help you begin this process, you must first decide on a contemporary issue. Select a topic that interests you and that can be developed into a 5 page paper with academic sources.

#1 Determine your topic. A list of suggested topics will be uploaded to the class folder, but you may already have a topic that is of particular interest to you. Once you determine your topic, you must notify me via email for approval. Once you receive approval, begin your research.

#2 Research a minimum of THREE in-depth articles about your topic.

- Articles must be 1000+ words.
- Articles must be pulled from Alabama Virtual Library's online database, Opposing Viewpoints in Context. You must print, read, and annotate your articles.
- Answer the following questions about EACH of your three articles:
 1. What is the main idea or big problem?
 2. Who are the opposing sides (may be more than two)?
 3. How did this problem come about (background information about your problem)?
 4. What are possible solutions/outcomes to your problem?

Your responses may be typed or handwritten, and must be stapled atop your annotated article.

Over the summer, I will share sample annotations and responses.

APPENDIX: An Admissions Dean Offers Advice on Writing a College Essay

Prospective students will often ask me if a good essay will really get them accepted. The truth is that while no essay will make an unqualified student acceptable, a good essay can help a qualified applicant stand out from the competition. A good essay just might be what turns a "maybe" into a "yes."

The college application process takes time, preparation and creativity, which is a lot for any active senior to handle. Summer, however, typically offers about 10 weeks free of classes and homework and many of the other stresses that come with high school. The pressure of the looming college application deadline is still months away, which allows students the freedom to play around with different ideas, test different angles and solicit feedback from friends and family.

Another reason to focus your summer energy on crafting a quality essay: at this point in the admission process, it is one of the few things you can still control. This is your chance to show us what you are capable of when you have time to think, prepare, rewrite and polish.

While there is no magic formula for the perfect admission essay, there are a few things prospective college students should know. Here are my Top Ten tips:

- **Write about yourself.** A great history paper on the Civil War might be very well written, but it doesn't tell me anything about the writer. Regardless of the topic, make sure you shine through your essay.
- **Use your own voice.** I can tell the difference between the voice of a 40-year-old and a high school senior.
- **Focus on one aspect of yourself.** If you try to cover too many topics in your essay, you'll end up with a resume of activities and attributes that doesn't tell me as much about you as an in-depth look at one project or passion.
- **Be genuine.** Don't try to impress me, because I've heard it all. Just tell me what is important to you.
- **Consider a mundane topic.** Sometimes it's the simple things in life that make the best essays. Some of my favorites have included essays that reflect on the daily subway ride to school, or what the family goldfish observed from the fishbowl perched on the family kitchen table. It doesn't have to be a life-changing event to be interesting and informative.
- **Don't rely on "how to" books.** Use them to get your creative juices flowing, but don't adhere too rigidly to their formulas, and definitely don't use their example topics. While there are always exceptions, the "what my room says about me" essay is way overdone.
- **Share your opinions, but avoid anything too risky or controversial.** Your essay will be read by a diverse group of individuals from a wide range of backgrounds, so try to appeal to the broadest audience possible.
- **Tell a good story.** Show me why you are compassionate; don't tell me you are. Show me that you have overcome great difficulty; don't start your essay with "I have overcome great difficulties."
- **Don't repeat what is already in your application.** If you go to a performing arts school and all of your extracurricular activities and awards relate to dance, don't write about how much you love dancing. Tell me something I couldn't know just from reading the other parts of your application.
- **Finally, don't forget about the supplements.** The supplement questions are very important - you should plan to spend as much time on them as you do on your essay. A well-written essay won't help if your supplement answers are sloppy and uninformative.

By MARTHA C. MERRILL

Martha C. Merrill, the dean of admission and financial aid of Connecticut College, and a graduate of the class of 1984, encourages incoming high school seniors to begin contemplating their college essays this summer. She also offers perspective on what she looks for in an applicant's essay.

From: <http://thechoice.blogs.nytimes.com/2009/06/23/tip-sheet-essay/>

2018-2019 AP BOOK LIST & SUMMER READING for Literature & Composition (Mrs. Johnson)

AP TEXTS:

Perrine's Literature: Structure, Sound & Sense (AP® Edition)

AUTHORS: Thomas R. Arp; Greg Johnson

ISBN-13: 9781285462349

Understanding Literature: An Introduction to Reading and Writing

by Walter Kalaidjian and Judith Roof

ISBN-13: 978-0618405404

**Note: This is an old edition and can be found for less than \$4.00 on Amazon.*

The Things They Carried Paperback by Tim O'Brien— any edition

Students may purchase used books from the 2017-2018 class, however, I discourage purchase of novels/plays that have been heavily annotated.

Additional novels will be assigned during the year.

AP SUMMER ASSIGNMENTS:

ASSIGNMENT #1: BOOK LIST

Create a list of books you have read that you consider to be of literary merit in the last four years.

ASSIGNMENT #2: INDEPENDENT READING

Read and annotate *Great Expectations* by Charles Dickens OR *Jane Eyre* by Charlotte Bronte OR *Frankenstein* by Mary Shelley. **Annotation instructions are in the summer reading folder.**

ASSIGNMENT #3: REQUIRED READING

Read Thomas C. Foster's *How to Read Literature Like a Professor, Revised Edition*. Be prepared to discuss the novel when school begins.

ASSIGNMENT #4: COLLEGE APPLICATION ESSAY

Compose TWO essays that reveal who you are through a memorable experience or significant event. Your essay should show evidence of careful reflection and brainstorming, revision, and style. This is your chance to present yourself as a college-ready student with a work ethic and level of ambition.

At the beginning of school, we will work together to help you craft your essays so that you have two strong essays in your college portfolio.

In our Google drive folder, several documents have been uploaded to help you prepare for this assignment. Please review these before selecting an essay prompt. There are many pitfalls and mistakes students make when composing the college essay, and the better your essays are, the fewer revisions you will need to complete. An email will be sent to your school account granting you access to the class folder.

General Guidelines:

1. Keep all brainstorming and drafts.
2. Your work should be original and your own. It will be submitted to a plagiarism site for evaluation.
3. Your work should be in final draft format, clean and free of typos and editing errors.
4. Your final draft should be typed and ready to turn in prior to the beginning of school. Electronic submissions are acceptable, but they must be from your school gmail account and on google docs.
5. Check your email! We will send you updates and information during the summer.

The 2018-2019 Common App Prompts

Select TWO prompts from the list to compose an essay:

1. Some students have a background, identity, interest, or talent that is so meaningful they believe their application would be incomplete without it. If this sounds like you, then please share your story.
2. The lessons we take from obstacles we encounter can be fundamental to later success. Recount an incident or time when you faced a challenge, setback, or failure. How did it affect you, and what did you learn from the experience?
3. Reflect on a time when you questioned or challenged a belief or idea. What prompted your thinking? What was the outcome?
4. Describe a problem you've solved or a problem you'd like to solve. It can be an intellectual challenge, a research query, an ethical dilemma—anything that is of personal importance, no matter the scale. Explain its significance to you and what steps you took or could be taken to identify a solution.
5. Discuss an accomplishment or event, or realization that sparked a period of personal growth and a new understanding of yourself or others.
6. Describe a topic, idea, or concept you find so engaging that it makes you lose all track of time. Why does it captivate you? What or who do you turn to when you want to learn more?

Note: If you are applying to a school with a specific prompt, you may use that prompt in place of a common app prompt.

See Appendix for essay writing tips.

If you are taking this class, reading is something that is important to you. There are some novels not on this list that I recommend you read. You are reading for pleasure, but also to expand the depth of your reading. Please consider reading one of the following novels that you may not have read in the past few years.

George Orwell's *Animal Farm*
Robert Louis Stevenson's *Dr. Jekyll and Mr. Hyde*
John Steinbeck's *The Pearl, Of Mice and Men*
Pearl Buck's *The Good Earth*
J. D. Salinger's *A Catcher in the Rye*
Chaim Potok's *The Chosen*
Sandra Cisneros *A House on Mango Street*

William Golding's *Lord of the Flies*
Lorraine Hansberry's *A Raisin in the Sun*
William Shakespeare's *Romeo and Juliet*
J. R. R. Tolkien's *The Hobbit*
Anything by Ernest Hemingway

If you need help selecting a book, please see me or email me (kjohnson@stlukesmobile.com).

APPENDIX: An Admissions Dean Offers Advice on Writing a College Essay

Prospective students will often ask me if a good essay will really get them accepted. The truth is that while no essay will make an unqualified student acceptable, a good essay can help a qualified applicant stand out from the competition. A good essay just might be what turns a "maybe" into a "yes."

The college application process takes time, preparation and creativity, which is a lot for any active senior to handle. Summer, however, typically offers about 10 weeks free of classes and homework and many of the other stresses that come with high school. The pressure of the looming college application deadline is still months away, which allows students the freedom to play around with different ideas, test different angles and solicit feedback from friends and family.

Another reason to focus your summer energy on crafting a quality essay: at this point in the admission process, it is one of the few things you can still control. This is your chance to show us what you are capable of when you have time to think, prepare, rewrite and polish.

While there is no magic formula for the perfect admission essay, there are a few things prospective college students should know. Here are my Top Ten tips:

- **Write about yourself.** A great history paper on the Civil War might be very well written, but it doesn't tell me anything about the writer. Regardless of the topic, make sure you shine through your essay.
- **Use your own voice.** I can tell the difference between the voice of a 40-year-old and a high school senior.
- **Focus on one aspect of yourself.** If you try to cover too many topics in your essay, you'll end up with a resume of activities and attributes that doesn't tell me as much about you as an in-depth look at one project or passion.
- **Be genuine.** Don't try to impress me, because I've heard it all. Just tell me what is important to you.
- **Consider a mundane topic.** Sometimes it's the simple things in life that make the best essays. Some of my favorites have included essays that reflect on the daily subway ride to school, or what the family goldfish observed from the fishbowl perched on the family kitchen table. It doesn't have to be a life-changing event to be interesting and informative.
- **Don't rely on "how to" books.** Use them to get your creative juices flowing, but don't adhere too rigidly to their formulas, and definitely don't use their example topics. While there are always exceptions, the "what my room says about me" essay is way overdone.
- **Share your opinions, but avoid anything too risky or controversial.** Your essay will be read by a diverse group of individuals from a wide range of backgrounds, so try to appeal to the broadest audience possible.
- **Tell a good story.** Show me why you are compassionate; don't tell me you are. Show me that you have overcome great difficulty; don't start your essay with "I have overcome great difficulties."

- **Don't repeat what is already in your application.** If you go to a performing arts school and all of your extracurricular activities and awards relate to dance, don't write about how much you love dancing. Tell me something I couldn't know just from reading the other parts of your application.
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From: <http://thechoice.blogs.nytimes.com/2009/06/23/tip-sheet-essay>

2018-2019 Summer Assignment

Advanced Placement (AP) Biology

Mrs. Angela Dixon
adixon@stlukesmobile.com

Welcome to AP Biology! AP Biology is a challenging, fast-paced curriculum and requires a large investment of time outside the classroom to ensure we cover the breadth and depth of material established within the College Board framework. The 2018-2019 School year will begin on Thursday, August 9, we will meet one evening or afternoon during that week to kick off the season. The date and time of this meeting will be announced as school gets closer. More than likely we will meet on Monday, August 6.

Below you will find the Summer Assignment for this class. Please complete these assignments prior to August 6. During the school year, you will also need to spend several hours each week outside of class preparing for discussions and completing assignments. We may periodically have special meetings outside the classroom. Dates, times and locations will be decided by the group. We may meet at Panera Bread or Moe's to catch up on content or practice for the AP Biology Exam.

1. **AP Biology Remind Sign-Up:** Please download the Remind101 app to your phone and use one of the methods below to sign up for the 2018-2019 AP Biology course as soon as possible. I will use this app throughout the summer and the school year to communicate various information.
 - Using an internet browser: <https://www.remind.com/join/62egk7>
 - Using your phone: text @62egk7 to the number 81010

2. **AP Biology Big Ideas, Science Practices, and Video/Article Notes:** The next assignment will introduce themes and methodology that will be integrated throughout the course. The AP Biology curriculum is based on 4 Big Ideas (Table 1), each with several associated Enduring Understandings, and 7 Science Practices (Table 2).

Table 1. The 4 Big Ideas of AP Biology
Big Idea 1: The process of evolution drives the diversity and unity of life.
Big Idea 2: Biological systems utilize free energy and molecular building blocks to grow, to reproduce and to maintain dynamic homeostasis.
Big Idea 3: Living systems store, retrieve, transmit and respond to information essential to life processes.
Big Idea 4: Biological systems interact, and these systems and their interactions possess complex properties.

Table 2. The 7 Science Practices of AP Biology
Science Practice 1: The student can use representations and models to communicate scientific phenomena and solve scientific problems.
Science Practice 2: The student can use mathematics appropriately.
Science Practice 3: The student can engage in scientific questioning to extend thinking or to guide investigations within the context of the AP course.
Science Practice 4: The student can plan and implement data collection strategies appropriate to a particular scientific question.
Science Practice 5: The student can perform data analysis and evaluation of evidence.
Science Practice 6: The student can work with scientific explanations and theories.
Science Practice 7: The student is able to connect and relate knowledge across various scales, concepts and representations in and across domains.

The videos and articles listed below (Table 3) touch on the nature and methodology of science, along with the seven AP Biology Science Practices. While watching the videos and reading the articles, take handwritten Cornell style notes for each (see links for instructions below). Notes should be your original work. EACH note set will be scored 0 to 5 based on completeness and thoroughness as shown in the rubric in Table 4. You will ultimately have 10 separate sets of

Cornell notes; one for each topic. This assignment is **due on the first day of school** and will count as half of a test grade.

Information on Cornell Note Taking System:

- Sketchnoting Cornell Notes: <https://www.youtube.com/watch?v=pZgMpjjgCRA>
- <https://drive.google.com/file/d/0B2aq9jm-eAInQlBsaGhZQ3ZQU2c/view?usp=sharing>

Table 3. List of summer assignment videos and articles with internet links.		
#	Videos/Articles	Links
1	The Nature of Science	Article 1: http://www.indiana.edu/~ensiweb/nos.html Article 2: www.quackwatch.org/01QuackeryRelatedTopics/science.html
2	Scientific Methodology	Video 1: https://youtu.be/SMGRe824kak Video 2: www.youtube.com/watch?v=8w5MwVhRA9A Video 3: www.youtube.com/watch?time_continue=2&v=CS-DQc3qkXo4
3	CER (Claim-Evidence-Reasoning)	https://youtu.be/5KKsLuRPsvU
4	AP Biology Science Practice 1: Model and Representations	https://youtu.be/v5Nemz_cVew
5	AP Biology Science Practice 2: Using Mathematics Appropriately	https://youtu.be/jgqYISKoXak
6	AP Biology Science Practice 3: Formulate Questions	https://youtu.be/2zB272Ak63A
7	AP Biology Science Practice 4: Data Collection Strategies	https://youtu.be/AzTXnne40wU
8	AP Biology Science Practice 5: Analyze Data and Evaluate Evidence	https://youtu.be/0JqkouOtZA
9	AP Biology Science Practice 6: Scientific Explanations and Theories	https://youtu.be/3gK1xWNM7kk
10	AP Biology Science Practice 7:	https://youtu.be/7l4bcs49JP8

	Connecting Knowledge	
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Table 4. Rubric for Cornell Notes				
0 No Credit	2 Below Expectations	3 Incomplete	4 Complete	5 Exceeds Expectations
No notes OR copied from a peer.	Several criteria are missing from entry.	One criterion is missing from entry.	All criteria are met, but there is room for improvement within criteria.	All criteria listed below are met and have been exceeded for the entry.

What is included in work that “Exceeds Expectations”?

- Your name, the topic title, and the date is at the top of the first page. Subsequent pages are dated and numbered.
- Each topic consists of a separate set of Cornell notes (a “set” can consist of several pages with a single summary).
- The title(s) of videos and articles are included in the notes.
- The notes are legibly written (not typed).
- Underlining, highlighting or colors are used to emphasize key points, new vocabulary, and/or important concepts.
- Examples are documented in some way when given in a video or article.
- Pictures, charts, or graphs are used to display details provided in the video.
- Your own comments and/or questions are included in the notes.
- A summary of the topic is provided at the end of each topic.
- Sketching/notes is not required, but science often involves visual concepts and processes that can best be displayed through diagrams. In other words, ALWAYS look at the pictures and read the captions!

* Assignment modified from

http://yorkcountyschools.org/parents/studentInfo/docs/AP_Biology.pdf

- 4. Graphing and Data Skills Practice:** Making and interpreting graphs is an important part of biology. Every AP exam has numerous multiple choice questions that integrate construction and interpretation of tables and graphs. Typically one of the Free Response Questions (FRQs) on the AP Exam provides a data set and expects students to construct a graph and interpret the results. This is a basic skill that is necessary for you to do well in

any AP science class. While I will expect you to use computer generated graphs in lab reports throughout the school year, the summer assignment questions and associated graphs should be completed by hand in the packet provided. The Graphing and Data Skills Packet is **due on the first day of school** and will count for half of a test grade.

Name: _____

GRAPHING AND DATA SKILLS PACKET – AP Biology Summer Assignment

Objectives

After completing this exercise, you should be able to

1. Explain the difference between discrete and continuous variables and give examples.
2. Use one given data set to construct a line graph.
3. Use another given data set to construct a bar graph.
4. Given a set of data, describe how it would best be presented.
5. Interpret data provided in table and graph format.

Activity A: Tables

A student team performed the following experiment. They tested the pulse and blood pressure of basketball players and nonathletes to compare cardiovascular fitness (Table 1).

Table 1. Pulse rate at rest and after a 5-min step test for 10 non-athletes and 10 basketball players.

If the data were presented to readers like this, they would see just lists of numbers and would have difficulty discovering any meaning in them. This is called raw data. It shows the data the team collected without any kind of summarization. Since the students had each subject perform the test three times, the data for each subject can be averaged (Table 2). The other raw data sets obtained in the experiment would be treated in the same way.

Table 2. Average Pulse Rate for Each Subject

(Average of 3 trials for each subject; pulse taken before and after 5-min step test)

These rough data tables are still rather cumbersome and hard to interpret. A summary table could be used to convey the overall averages for each part of the experiment (Table 3).

Table 3. Overall Averages of Pulse Rate

(10 subjects in each group; 3 trials for each subject; pulse taken before and after 5-min step test)

Notice that the table has a title above it that describes its contents, including the experimental conditions and the number of subjects and replications that were used to calculate the averages. In the table itself, the units of the dependent variable (pulse rate = beats/min) are given and the independent variable (nonathletes and basketball players) is written on the left side of the table.

Tables should be used to present results that have relatively few data points. Tables are also useful to display several dependent variables at the same time. For example, average pulse rate before and after exercise, average blood pressure before and after exercise, and recovery time could all be put in one table.

Activity B: Graphs

Numerical results of an experiment are often presented in a graph rather than a table. A graph is literally a picture of the results, so a graph can often be more easily interpreted than a table. Generally, the independent variable is graphed on the x-axis (horizontal axis) and the dependent variable is graphed on the y-axis (vertical axis; Fig. 1). In looking at a graph, then, the effect that the independent variable has on the dependent variable can be determined.

When you are drawing a graph, keep in mind that your objective is to show the data in the clearest, most readable form possible. Figure 2 illustrates a well-executed graph. In order to achieve this, you should observe the following rules:

- Use graph paper to plot the values accurately.
- Plot the independent variable on the x-axis and the dependent variable on the y-axis. For example, if you are graphing the effect of the amount of fertilizer on peanut weight, the amount of fertilizer is plotted on the x-axis and peanut weight is plotted on the y-axis.
- Label each axis with the name of the variable and specify the units used to measure it. For example, the x-axis might be labeled "Fertilizer applied (g/100 m²)" and the y-axis might be labeled "Weight of peanuts per plant (grams)."
- The intervals labeled on each axis should be appropriate for the range of data so that most of the area of the graph can be used. For example, if the highest data point is 47, the highest value labeled on the axis might be 50. If you labeled intervals on up to 100, there would be a large unused area of the graph.
- The intervals that are labeled on the graph should be evenly spaced. For example, if the values range from 0 to 50, you might label the axis at 0, 10, 20, 30, 40, and 50. It would be confusing to have labels that correspond to the actual data points (for example, 2, 17, 24, 30, 42, and 47).
- The graph should have a title that, like the title of a table, describes the experimental conditions that produced the data.

Figure 2.

Graph of peanut weight vs



The most commonly used forms of graphs are line graphs and bar graphs.

* While this assignment does not give any examples of Pie Charts, they are also very useful tools for presenting data that represents percentages or relative amounts of something. They are not considered graphs because they do not plot independent and dependent variables against each other.

The choice of graph type depends on the nature of the independent variable being graphed.

Continuous variables are those that have an unlimited number of values between points. **Line graphs** are used to represent continuous data. For instance, time is a continuous variable over which things vary. Although the units on the axis can be minutes, hours, days, months, or even years, values can be placed in between any two values. Amount of fertilizer can also be a continuous variable. Although the intervals labeled on the x-axis are 0, 200, 400, 600, 800, and 1000 (g/100 m²), many other values can be listed between each two intervals.

In a line graph, data are plotted as **separate points** on the axes, and the points are connected to each other. Notice in Figure 3 that when there is more than one set of data on a graph, it is necessary to provide a key indicating which line corresponds to which data set.



Discrete variables, on the other hand, have a limited number of possible values, and no values can fall between them. For example, the **type of fertilizer** is a discrete variable. There are a certain number of types of fertilizers which are distinct from each other. If fertilizer type is the independent variable displayed on the x-axis, there is no continuity between the values.

Bar graphs, as shown in Figure 4, are used to display discrete data.

In this example, before- and after-exercise data are discrete. There is no possibility of intermediate values. The subjects used (basketball players and nonathletes) also are a discrete variable (a person belongs to one group or the other). This graph could also have been constructed as shown in Figure 5.

1. What is the difference between these two graphs (Figures 4 and 5)?
-

2. Which way would be better to convey the results of the experiment (in reference to Figures 3-5)? Explain why.

3. What can you infer from these results?

Activity C: Graphing Practice

Use the temperature and precipitation data provided in Table 4 to answer the questions located below.

Table 4.

Average monthly high temperature and precipitation for four cities.
(T = temperature in °C; P = precipitation in cm)

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
--	-----	-----	-----	-----	-----	------	------	-----	------	-----	-----	-----

1) Compare monthly temperatures in Fairbanks with temperatures in San Salvador.

a) Can data for both cities be plotted on the same graph? _____

b) What will go on the x-axis?

c) How should the x-axis be labeled?

d) What should go on the y-axis?

e) What is the range of values on the y-axis? _____

f) How should the y-axis be labeled?

g) What type of graph should be used? _____

2) Compare the average September temperature for Fairbanks, San Francisco, San Salvador, and Indianapolis.

a) Can data for all four cities be plotted on the same graph? _____

b) What will go on the x-axis?

c) How should the x-axis be labeled?

d) What should go on the y-axis?

e) What is the range of values on the y-axis? _____

f) How should the y-axis be labeled?

g) What type of graph should be used? _____

3) Graph the temperature and precipitation data for San Francisco on the grid below. Plot all data on one graph. Be sure to use the majority of the space provided and include a title, x- and y-axis intervals, x- and y-axis labels (including units, if applicable), and a key (if applicable).

a) What is the independent variable? _____

b) What is the dependent variable(s)? _____

c) Is the independent variable continuous or discrete?

* In the following questions you will be constructing graphs WITHOUT plotting data. By practicing how to construct graphs, you will learn how to graph your own data in later labs. Use the regularity and size intervals to determine if a variable is continuous or discrete.

- 4) A team of students hypothesizes that the amount of alcohol produced in fermentation depends on the amount of sugar supplied to the yeast. They want to use 5, 10, 15, 20, 25, and 30% sugar solutions. They propose to run each experiment at 40°C with 5 mL of yeast.

a) What type of graph is appropriate for presenting these data? Explain why.

b) Sketch the axes of a graph that would present these data. Mark the intervals on the x-axis and label both axes completely. Write a title for the graph.

- 5) Having learned that the optimum sugar concentration is 25%, the students next decide to investigate whether different strains of yeast produce different amounts of alcohol.

a) If you were going to graph the data from this experiment, what type of graph would be used? Explain why.

b) Sketch and label the axes for this graph and write a title.

- 6) A team of students wants to study the effect of temperature on bacterial growth. They put the dishes in different places: an incubator (37°C), a lab room (21°C), a refrigerator (10°C) and a freezer (0°C). Bacterial growth is measured by estimating the percentage of each dish that is covered by bacteria at the end of a 3-day growth period.

a) What type of graph would be used to present these data? Explain why.

b) Sketch the axes below. Mark the intervals on the x-axis, and label both axes completely. Write a title for the graph.

7) A team of scientists is testing a new drug, XYZ, on AIDS patients. The scientists monitor patients in the study for symptoms of 12 different diseases.

a) What would be the best way for them to present these data? Explain why.

[illegible]

8) A group of students decides to investigate the loss of chlorophyll in autumn leaves. They collect green leaves and leaves that have turned color from sugar maple, sweet gum, beech, and aspen trees. Each leaf is subjected to an analysis to determine how many mg of chlorophyll is present.

a) What type of graph would be most appropriate for presenting the results of this experiment? Explain why.

Activity D: Interpreting Information on a Graph

Once you understand how graphs are constructed, it is easier to get information from the graphs in your textbook as well as to interpret the results you obtain from laboratory experiments. For the graphs below, answer the questions that follow.



1) Interpret this graph: What patterns or trends are depicted in the graph?

2) What was the world's population in 1900? _____

3) Predict the world's population in 2000. _____

4) Why does this graph change from a solid line to a dashed line at the end?

* Remember that Rate = amount / time. In this case it should be product / minute.

5) Interpret this graph: What patterns or trends are depicted in the graph?

6) At what temperature is reaction rate the highest? _____

* Please note that the y-axis is given as a “range” of temperatures, not actual temperatures.

7) Interpret this graph: What patterns or trends are depicted in the graph?

8) At what latitude does the least variation in temperature occur? _____

9) Miami is at approximately 26° N latitude. From the information on the graph, what is the range in mean monthly temperature there? _____

10) Minneapolis is at approximately 45° N latitude. From the information on the graph, what is the range in mean monthly temperature there? _____

11) Sydney, Australia is at approximately 33° S latitude. From the information on the graph, what is the range in mean monthly temperature there? _____

12) Look at any map or photographs of the world to try and explain the temperature patterns in the graph. Hint: think hydrogen bonds for the southern latitudes.

* Please note that the y-axis has no units. Absorbance is a type of measurement used in spectroscopy.

13) Interpret this graph: What patterns or trends are depicted in the graph?

14) At what wavelength does P_r phytochrome absorb the most light? _____

15) At what wavelength does P_{fr} phytochrome absorb the most light? _____

16) Use this graph to explain why (how) the pigments were named.

17) Interpret these graphs: What patterns or trends are depicted in the graphs?

18) On what day does *Paramecium aurelia* reach its maximum population density?

19) Does *Paramecium caudatum* do better when it is grown alone or when it is grown in a mixture with *Paramecium aurelia*? Why do you think this is the case?
