

Times² Academy High School Summer Reading and Prompts

What follows are suggested summer readings for students in grades 10-12. Please note that each major content area (math, science, social studies, and English) has suggested readings this year. This is different from past years where only English was responsible for the summer reading assignment. ***Every student will be required to choose at least two books from two different content areas (i.e., math and science, English and social studies, etc.) and respond to their associated prompts either by writing a reflective essay, creating a PowerPoint presentation, or doing an oral interpretation of the text.***

When students return during the first week of school, they will submit completed assignment(s) to the teacher of the content area(s) they selected. For example, if students read *A Beautiful Mind*, they will submit their assignment to their math teacher for grading purposes. He or she will then grade it based on their Comprehensive Course Assessment rubric.

Summer Reading Selections by Content Areas:

Mathematics

Grade 10

Flatland: A Romance of many Dimensions by Edwin Abbott

Prompt: This book is considered a classic work of fiction that cleverly melds the worlds of geometry and social satire. Give as many examples as you can of how the author uses geometrical concepts to illuminate and critique the world of Victorian England. How do these conceptual links advance the overall view put forth in the book?

The Phantom Tollbooth by Norton Juster

Prompt: Norton Juster has a knack for bringing life to the abstractions of language and mathematics, doing so by mimicking the perspective of someone encountering them for the first time. What events in the book best make use of mathematical concepts, what are those concepts, and how might you try to unravel the contradictions and confusions that ensue from them?

Grade 11

A Beautiful Mind by Sylvia Nasar

Shadows of the Mind by Roger Penrose

Prompt: Identify the math concepts and understanding that came through your reading of this/these book(s) and share how they are meaningful to you.

Grade 12

The Code Book: The Science of Secrecy from Ancient Egypt to Quantum Cryptography by Simon Singh

Prompt: Give examples of the many ways in history in which higher mathematics has been crucial to the keeping of secrets through codes.

The Fabric of the Cosmos: Space, Time, and the Texture of Reality by Brian Greene

Prompt: In a book such as this one, a work that attempts to make advanced scientific ideas accessible to a general audience, the author must use carefully thought-out analogies and compelling writing to “make up for” the missing scientific details. How does Green make use of analogies to make abstract physics and mathematics meaningful to his readers?

Science

Grade 10 – Chemistry

Uncle Tungsten: Memoirs of a Chemical Boyhood by Oliver Sacks

Prompt: How did Oliver’s boyhood fascinations lead to his understanding of science?

Mauve: How One Man Invented a Color That Changed the World by Simon Garfield

Prompt: How did the invention of the color mauve change the world?

Grade 11

The Origin of the Species by Charles Darwin

Prompt: Darwin found fossils of many organisms that were different from any living species. How would this finding have affected his understanding of life’s diversity?

Grade 12

The Driving Force by Jim Livingston

Prompt: How are magnets used in today’s technology?

Surely You’re Joking Mr. Feynman by Richard Feynman

Prompt: How are Feynman’s stories about his life related to his understanding of physics?

History

Grade 10

Child of the Dark by Carolina Maria de Jesus
Up From Slavery by Booker T. Washington

Prompt: “Many great figures throughout history were forced to overcome great obstacles. What economic, political, and social obstacles must the characters overcome in this book and how does this ultimately change the quality of their lives?”

Grade 11

Brave Companions by David McCullough

Prompt: Based on your reading, explain how significant events and people fit into the broader political and cultural trends in society?

Rise to Rebellion by Jeff Shaara

Prompt: Jeff Shaara’s book captures the prominent figures of the American Revolution in a new light. How has reading this book enriched your understanding of our “founding fathers” and the significance of the American Revolution?

English

Grade 10

The Things They Carried by Tim O’Brien
A Tale of Two Cities by Charles Dickens
A Separate Peace by John Knowles

Prompt: How do personal burdens affect a person’s decision to maintain and uphold a code of ethics and morality?

Grade 11

This Side of Paradise by F. Scott Fitzgerald
The Man in the Iron Mask by Alexandre Dumas
The Republic by Plato

Prompt: How does the scope of one person’s knowledge and sense of influence over others significantly intertwine and shape the fabric of the society in which he/she resides?

Grade 12

Native Son by Richard Wright
Angela’s Ashes by Frank McCourt
A Man for All Seasons by Robert Bolt

Prompt: How does a man define himself and measure his character among men?