

First Period: Tossups with Bonus

1. This essay is prefaced by a brief poem beginning, "Cast the bantling on the rocks, suckle him with the she-wolf's teat." In response to a friend's objections that his impulses may come from below rather than above, the author states, "If I am the (*) Devil's child, I will live then from the Devil." This essay concludes by praising "the triumph of principles" and stresses that "nothing can bring you peace but yourself." For 10 points, name this seminal essay by Ralph Waldo Emerson.

ANSWER: "Self-Reliance"

014-14-101-09101

BONUS: The Millikan oil drop experiment quantified the charge of what particle whose loss or gain during a chemical reaction is quantified by the oxidation number?

ANSWER: electrons

023-14-101-0910-11

2. In 1945, this man was sent on an unsuccessful mission to broker a truce between the Chinese Nationalists and Communists at Yen-an. Winston Churchill called him the "organizer of victory" for his success at mobilizing the U.S. military, and the Point Four Program was a successor to an (*) aid program he proposed in a speech at Harvard. For 10 points, name this U.S. Army chief of staff during World War II who as secretary of state proposed the plan for the European Recovery Program that bore his name.

ANSWER: George Catlett Marshall

030-14-101-09102

BONUS: Name the contest won in 2013 by Denmark's Emmelie de Forest, in 2009 by Norway's Alexander Ryback, and in 1974 by Sweden's ABBA, who sang "Waterloo".

ANSWER: **Eurovision** Song Contest [or Concours **Eurovision** de la chanson]

153-14-101-0910-11

3. Partial protection from this virus can be conferred when the delta 32 mutation occurs on chromosome 3, altering the gene that codes for CCR5. gp120 and gp41 are found on this virus's envelope, enabling it to bind to CD4 receptors on the surface of some (*) T cells. Symptoms of opportunistic infections that follow this virus include Kaposi's sarcoma. For 10 points, identify this retrovirus that attacks cells of the immune system and causes AIDS.

ANSWER: **HIV** [or **human immunodeficiency virus**; do not accept or prompt on "AIDS" or "acquired immunodeficiency syndrome"]

233-14-101-09103

BONUS: What European country, served by Klemens von Metternich, became the dominant part of the "Dual Monarchy?"

ANSWER: Republic of **Austria** [or Republik **Oesterreich**]

4. A Chilean flamingo named Pink Floyd once lived at this lake. Its largest island is named for an animal shot by explorers Kit Carson and John C. Fremont when visiting it. This lake is where Robert Smithson's artwork (*) Spiral Jetty is located, and it is where Antelope Island can be found. It is the remnant of Lake Bonneville, and it lends its name to a city founded by Brigham Young. For 10 points, name this lake in Utah known as "America's Dead Sea."

ANSWER: **Great Salt** Lake

052-14-101-09104

BONUS: What book, which begins with the protagonist and her brother Bailey moving to Stamps, Arkansas to live with their grandmother, is an autobiography by Maya Angelou?

ANSWER: I Know Why the Caged Bird Sings

192-14-101-0910-11

5. The Nernst equation gives the potential of a SHE cell as "E-nought minus 2.303 RT over F", times this quantity. When this quantity is greater than the pKa, the predominant components of the solution will be deprotonated as a consequence of the (*) Henderson-Hasselbalch equation. It equals the negative log of hydronium ion concentration and is seven for neutral solutions. For 10 points, name this measurement of acidity.

ANSWER: **pH** [or **potential of hydrogen**]

190-14-101-09105

BONUS: What golf course was designed by Bobby Jones and is the site of the Masters every year?

ANSWER: Augusta National Golf Course

023-14-101-0910-11

6. The first large use of shell guns in a naval fight happened during this war's Battle of Sinope. Francois Canrobert and Lord Raglan took part in this war's year-long siege of Sevastopol. Nicholas I died while his country fought in this war, which was ended by the Treaty of (*) Paris. The Battle of Balaclava during this war included the Charge of the Light Brigade. For 10 points, name this mid-nineteenth century war lost by Russia to a European coalition and fought on the namesake peninsula.

ANSWER: Crimean War

023-14-101-09106

BONUS: The fallout from failed Operation Fast and Furious proved problematic for what current US

Attorney General?
ANSWER: Eric Holder

233-14-101-0910-11

7. These proteins can be sorted into different classes by spectrotyping, and cells that secrete these proteins have characteristic clockface chromatin. A version of these proteins conjugated to horseradish peroxidase are used to stain a membrane in Western blots. They are created through a process of somatic hypermutation and (*) VDJ recombination, and they have two light chains bonded two heavy chains. They are produced by B cells. For 10 points, name these Y-shaped immune proteins that bind to antigens.

ANSWER: antibodies [or immunoglobulins]

048-14-101-09107

BONUS: Which King of England was killed at the Battle of Bosworth Field, ending the War of the Roses? ANSWER: **Richard III** [prompt on **Richard**]

8. Yahya Jameh, the President of the Gambia, took his country out of this organization in October 2013. The site of its 2013 heads of government meeting was controversially located in Mahinda Rajapaksa's Sri Lanka. Its namesake 2014 (*) games will be held in Glasgow, in the country of its head, Queen Elizabeth II. For 10 points, name this organization whose members are mostly former colonies of Britain.

ANSWER: **Commonwealth** of Nations [or British **Commonwealth**]

153-14-101-09108

BONUS: What leader of the Jacobins published the newspaper *Defense of the Constitution* and led the Committee of Public Safety before being overthrown in the Thermidorian Reaction?

ANSWER: Maximilien de **Robespierre**

Second Period: Directed Round



SET A:

1. BONUS: What substances, like bromothymol blue and methyl red, change color at particular pH values? ANSWER: **indicator**

048-14-101-0910-12

2. BONUS: This is a 30-second calculation question. A rectangular prism has a volume of 80 cubic centimeters and all three dimensions are integers. If the base is a square, what is the minimum height of the prism?

ANSWER: **5** centimeters

003-14-101-0910-12

3. BONUS: What first sacrament of the Catholic Church is responsible for washing away original sin?

ANSWER: baptism

023-14-101-0910-12

4. BONUS: What American author wrote ghost stories like *The Turn of the Screw* in addition to *The Ambassadors*?

ANSWER: Henry **James**

014-14-101-0910-12

SET B:

1. BONUS: This is a 20-second calculation question. In a game of Monopoly, if you roll doubles on three straight rolls of two dice, you go directly to jail. If you play with two fair dice, what is the probability of this happening?

ANSWER: <u>1/216</u> [or <u>1 out of every 216</u> turns]

003-14-101-0910-12

2. BONUS: What physicist developed the path integral formulation and had his Caltech lectures compiled into an introductory physics textbook?

ANSWER: Richard Feynman

233-14-101-0910-12

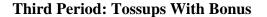
3. BONUS: Name the Southern Gothic writer who described the Misfit's murder of the Grandmother in "A Good Man is Hard to Find."

ANSWER: Flannery O'Connor

190-14-101-0910-12

4. BONUS: What French artist painted a group of concubines in *The Women of Algiers* and a bare-chested personification of the title concept in his *Liberty Leading the People*?

ANSWER: Eugene **Delacroix** [or Ferdinand Victor Eugene **Delacroix**]





9. This man was the first to represent complex numbers as points on a plane, and complex numbers whose real and imaginary parts are both integers are named for him. Ten thousand of a unit named for him equal one tesla, which measures magnetic field strength. He discovered a way to construct a (*) seventeen-sided regular polygon with compass-and-straightedge, and allegedly discovered a quick way to add the first hundred numbers while a child. For 10 points, name this mathematician whose name is sometimes given to the normal distribution.

ANSWER: Carl Friedrich Gauss

121-14-101-09109

BONUS: This is a 30-second calculation question. What is the determinant of the matrix whose first row is [3 3 2], second row is [0 -4 1], and third row is [0 -4 3]?

ANSWER: <u>-24</u>

003-14-101-0910-11

10. A 1936 experiment linked this phenomenon to perception of the autokinetic effect. Floyd Allport recorded how late workers were to their jobs to formulate his J-curve theory of this phenomenon. Groups of "confederates" tasked with matching (*) line lengths on cards were used in an experiment on this behavior by Solomon Asch. It is related to compliance and obedience, and results from groupthink. For 10 points, identify this behavior in which individuals try to fit into a group norm.

ANSWER: conformity

232-14-101-09110

BONUS: What stain separates bacteria into "positive" and "negative" groups?

ANSWER: **Gram** staining

024-14-101-0910-11

11. This country's six classical schools of philosophy include those devoted to enumeration, atomism, and logic. Kautilya authored a Machiavellian tract on government for a ruler from this modern-day country. In *The World as Will and Representation*, Schopenhauer borrowed ancient ascetic (*) philosophy from this country. Satyagraha originated from this country. For 10 points, name this country where the Vedas are an ancient work of Hindu philosophy.

ANSWER: India

190-14-101-09111

BONUS: What German author wrote about Hans Castorp in his novel *The Magic Mountain*?

ANSWER: Thomas Mann

023-14-101-0910-11

12. The speaker of this poem speculates about an "unhappy master whom unmerciful Disaster followed fast and followed faster." It is set in a room in which "each separate dying ember wrought its ghost upon the floor." After a tapping at the (*) chamber door, the title character of this poem enters and perches on a "pallid bust of Pallas," reminding the speaker of his lost love Lenore. For 10 points, name this Edgar Allen Poe poem about a black bird which only says "Nevermore."

ANSWER: "The Raven"

015-14-101-09112

BONUS: What musician, while composing his *Sonatas and Interludes*, came up with the idea for his composition ("four minutes thirty-three seconds") 4'33"?

ANSWER: John Milton Cage, Jr.

232-14-101-0910-11

13. This object is judged to be "more loathsome" even though its owner tries "the denial of self." This object is created by Basil Hallward, who is murdered by his patron. It is last seen displaying "exquisite youth and beauty" as a "withered" and "wrinkled" man lies nearby with a knife in his heart. That occurs after this object is (*) stabbed after developing an aged appearance as its subject sins and remains youthful. For 10 points, name this piece of artwork that is the title object in an Oscar Wilde novel.

ANSWER: picture of Dorian Gray [accept synonyms for "picture" like "portrait"]

052-14-101-09113

BONUS: Name the free and open source operating system whose kernel was originally designed by Linus Torvalds and which has many different distributions, such as Debian and Fedora.

ANSWER: GNU/Linux

066-14-101-0910-11

14. John Greenleaf Whittier wrote a poem lamenting this man's support for the compromise of 1850, called "Ichabod." This man argued the cases of *Darmouth v. Woodward* and *McCulloch v. Maryland* before the Supreme Court, and he is known for a debate in which he said, (*) "Liberty and Union, now and forever, one and inseparable." For 10 points, name this New Hampshire politician who had a famous debate with South Carolina's Robert Hayne over the issue of nullification.

ANSWER: Daniel Webster

030-14-101-09114

BONUS: In what play by Aristophanes do Tereus, Pisthetairos, and Eulepides create a perfect city in the sky named Cloudcuckooland?

ANSWER: The Birds

030-14-101-0910-11

15. In this musical, one married couple sings "most of them are goners so they won't miss much" in the song "One Day More." Another song in this musical contains the lyrics "singing the song of angry men"; that song, (*) "Do you hear the people sing?" is reprised after the protagonist dies in the arms of the newlywed couple Marius and Cosette. For 10 points, name this musical based on a novel about Jean Valjean written by Victor Hugo.

ANSWER: Les Miserables

153-14-101-09115

BONUS: What owner of the *New York World* employed increasingly dirty tactics in his rivalry with William Randolph Hearst and endowed a namesake prize for excellence in journalism?

ANSWER: Joseph **Pulitzer**

080-14-101-0910-11

16. This party's views were explained in the Tamworth Manifesto, and it was the target of the Midlothian campaign. A leader of this party split his party by repealing the Corn Laws and earlier founded the London Metropolitan Police Force. During the late 1800's, a leader of it was the main rival of (*) William Gladstone. This party is also known as the "Tory Party." For 10 points, name this British political party of Robert Peel and Benjamin Disraeli, which opposed the Liberal Party. ANSWER: Conservative and Unionist Party of the United Kingdom [or Tory until mentioned]

052-14-101-09116

BONUS: What university lost four students to gunfire from the Ohio National Guard during a 1970 campus

protest of the Vietnam War?

ANSWER: **Kent State** University



17. This man has been frequently portrayed in a one man show by Hal Holbrook. At Epcot, animatronic versions of this man and Benjamin Franklin host the presentation called "We, the People." This man is the namesake of a prize given by the Kennedy Center for (*) American Humor. In *It's a Wonderful Life*, Clarence gives a book by this man as a gift to George Bailey. For 10 points, name this author of *The Innocents Abroad* and *The Adventures of Tom Sawyer*.

ANSWER: Mark **Twain** [or Samuel **Clemens**]

030-14-101-09117

BONUS: Name the state home to the General Sherman Tree in its Sequioa National Park.

ANSWER: California