Edited by Jacob O'Rourke (Head Editor); David Dennis; Seth Ebner; Chris Chiego, and Jake Sundberg. Special Thanks goes to Eric Mukherjee and Sean Phillips.

Written by members of the Washington (Joe Stitz, Sophia Johnson, Carrie Derner, Matt Chalem, Jonathan Amlong, Cole Phinney) and Hickman (Alex Harmata, Diana Harmata, Wenzer Qin, Sherry Xie, Owen Pasley, Jackson Atkins, Stephen Bunch and Dinis Trindade) Teams

Packet 3

## Tossups

1. Along with iridium concentration, a variety of this mineral was used to explain the extinction of the dinosaurs in the Alvarez hypothesis. The site of a meteor impact is often made of a "shocked" variety of this mineral. This mineral is commonly used in crystal (*) oscillators due to its piezoelectric properties. This mineral, which includes amethyst, is the second most abundant in the earth's crust, after Feldspar. For 10 points, name this mineral with chemical formula SiO 2 with a Mohs hardness rating of 7.
ANSWER: Quartz [or "Shocked" Quartz; or $\underline{\mathbf{S i O 2}}$ before it is mentioned; or silicon dioxide before "SiO2" is mentioned] <Matt Dew>/<ed. Jacob>
2. A poem by this author describes an object in Tennessee that was "round upon the ground, and tall and of a port in air," and contrasts that object with a "slovenly wilderness." In another poem, this man chastises the "thin men of Haddam" for imagining golden birds instead of seeing the title animal, which was the only thing moving "among twenty snowy mountains." This author of (*) "Anecdote of the Jar" began a poem by declaring "Call the roller of big cigars." For 10 points, name this American poet of "Thirteen Ways of Looking at a Blackbird" and "The Emperor of Ice Cream."
ANSWER: Wallace Stevens <Wenzer Qin>/<ed. Jacob>
3. This man's final illness was documented by Ruy Gonzalez de Clavijo, an ambassador of Henry III of Castile. At the battle of the Terek River, this ruler defeated his rival Tokhtamysh of the Golden Horde. This man captured the Ottoman sultan (*) Bayezid the Thunderbolt at the Battle of Ankara. This ruler built a pyramid out of the skulls of his enemies after besieging Delhi, and he ruled from Samarkand. For 10 points, name this Central Asian ruler whose nickname referred to his injured foot.
ANSWER: Tamerlane [or Tamburlane; or Timur the Lame] <Joe Stitz>/<ed. Jacob>
4. This actor was the first private US citizen to own a Humvee, and converted one to run on hydrogen fuel in 2003. This actor was once carried back to his table by Andre the Giant as he was leaving to pay for dinner. In his most iconic role, this actor only spoke $\mathbf{7 4}$ words, and he was ironically not allowed to do the $\left(^{*}\right)$ German overdubbing for that part, as his accent was too rural. He had a handful of credits, including a cameo in The Expendables, while he was in office as Governor of California. For 10 points, name this star of the Terminator series. ANSWER: Arnold Schwarzenegger [Arnold Alois Schwarzenegger] <David Dennis>/<ed. Sean Phillips>/<ed. Jacob>
5. It's not Kuala Lumpur, but one building in this city consists of twin cylindrical high-rise towers said to resemble corncobs. That complex, Marina City, is found on this city's State Street, which runs from the Little Calumet River to Lincoln Park. The Museum of Science and Industry in this city was built as part of its $\left(^{*}\right.$ ) "White City" at the 1893 World's Fair. The downtown of this Cook County city includes the Loop, formed by the path of its "El" train. The Willis Tower is in, for 10 points, what city on Lake Michigan, the third most-populous in the United States?
ANSWER: Chicago, Illinois <Owen Pasley>/<ed. Chris Chiego>
6. This man was fired from his professorship at the City College of New York for a book challenging Victorian notions of contraception and sex, Marriage and Morals. In his article "Is There a God?," this philosopher jokingly posited the existence of a teapot between Earth and Mars that revolved around the Sun to refute the notion that unprovable claims had to be disproved. This philosopher's namesake $\left(^{*}\right)$ paradox asks whether the set of all sets that are not members of themselves contains itself. For 10 points, name this British thinker who collaborated with Alfred North Whitehead to write Principia Mathematica.
ANSWER: Bertrand Russell <Wenzer Qin>/<ed. Jacob>
7. A secret society in this country met in "barracas" and distinguished its leaders with small, symbolic hatchets. A battle fought during this country's second war of independence inspired Henri Dunant ("Doo-nahn") to found the International Red Cross. The "coal burners" influenced groups that fought for the independence of this country, which was the goal of the $\left(^{*}\right.$ ) Risorgimento ("ree-soar-jee-men-toh"). The Red Shirts under Giuseppe Garibaldi fought for the unification of this country. For 10 points, name this country whose first unified king, Victor Emmanuel II, ruled from Rome.
ANSWER: Italy [or Italia; or the Kingdom of Italy; or the Italian Republic; or Repubblica Italiana] <Joe Stitz>/<ed. Jacob>
8. The virial theorem states that in the case of a gravitational system, negative one-half times the average value of this quantity is equal to the average value of a related quantity. The work done by a conservative force is equal to the difference in this quantity from the start to end points at which the force is applied, and a conservative force can be calculated as the negative (*) gradient of this quantity with respect to position. Integrating Hooke's law shows that this quantity is equal to one-half times the spring constant times the square of the displacement from equilibrium. Its gravitational definition is mass times gravitational acceleration times height, or $m g h$. For 10 points, name this stored energy that is often contrasted with kinetic energy.
ANSWER: Potential energy [prompt on energy] <Wenzer Qin>/<ed. Seth Ebner>
9. A speech that is made at this character is about a fairy who plagues ladies' lips with blisters and is drawn in a chariot made of "an empty hazel-nut." This character is the target of a speech about Queen Mab made by a friend while travelling to attend a party. This character declares "I am fortune's fool!" after killing his wife's cousin, $\left(^{*}\right)$ Tybalt. This member of the Montague family is married to a member of the Capulet family by Friar Lawrence. For 10 points, name this title character of a Shakespeare tragedy, the lover of Juliet. ANSWER: Romeo [or Romeo Montague; prompt on Montague until it is read; do NOT accept any other Montagues, such as "Old Montague" or "Lord Montague"] <Carrie Derner>/<ed. Jacob>
10. At the end of this opera, three characters sing "O terra, addio." In this opera, a rival of the title character sings "Ritorna vincitor" ("ree-TOR-nah vin-chi-TOR") to a departing general. The protagonist of this opera sings "O patria mia" after her lover's engagement to ${ }^{(*)}$ Amneris. In this opera, Amonasro learns military secrets by hiding himself, and Radames is buried alive with the title character, whose home country is at war with Egypt. For 10 points, name this Giuseppe Verdi opera about an Ethiopian princess.
ANSWER: $\underline{\text { Aüda }}$ <Carrie Derner>/<ed. David Dennis>
11. One of these events was organized by the "MOBE" and is depicted in Norman Mailer's Armies of the Night. According to Henry Littlefield, the journey to Emerald City in The Wizard of $O z$ was a metaphor for one of these events, which was led by an Ohio businessman. Jacob Coxey led one of these events in support of unemployment relief, and Ralph Abernathy organized one of these events for the ( ${ }^{*}$ ) Poor People's Campaign after the assassination of Martin Luther King Jr. For 10 points, name these events, one of which in 1963 featured King's "I Have a Dream" speech.
ANSWER: Marches on Washington, D.C. [or Rallies in Washington, D.C.; or Protests in Washington, D.C.; or Marches on Washington, District of Columbia; prompt on marches or a march] <David Dennis>/<ed. Jacob>
12. In one myth, as a baby this god was ripped to shreds by the Titans, who ate every part of his body except for his heart. This god's symbol is a pinecone-tipped staff called the thyrsus, and he fathered Priapus with Aphrodite. Acoetes was the only member of a crew of Tyrrhenian pirates not to be turned into ${ }^{(*)}$ dolphins by this god. This god found Ariadne after Theseus abandoned her. This god's mother died after viewing Zeus in his full glory, and he took Hestia's place on Olympus. For 10 points, name this god known to the Romans as Bacchus, the Greek god of wine.
ANSWER: Dionysus [or Bacchus before it is read; or Liber Pater] <Joe Stitz>/<ed. Jacob>
13. In the last story of a collection by this author, the engineer D'Arrast stays in a town which celebrates a "growing stone." In a novel by this author, the Mexico City bar is where the last circle of hell is, according to the "judge-penitent" Clamence. In a different novel by this author of Exile and the Kingdom and The Fall, Bernard Rieux ("hree-oo") struggles to keep the title $\left(^{*}\right)$ disease contained in Oran. In a novel by this author of The Plague, the protagonist shoots an Arab on the beach after feeling no emotion at his mother's funeral. For 10 points, name this French existentialist author who wrote about Mersault in The Stranger. ANSWER: Albert Camus <Jacob O'Rourke>
14. The tetrafluoride of one element in this group adopts a square planar geometry. One element in this group has the highest first ionization energy of any element, and another element in this group is a major cause of indoor air pollution, as it accumulates in basements and can cause lung cancer due to its $\left(^{*}\right)$ radioactivity. These elements are typically monatomic due to their full valence shells. For 10 points, name this generally unreactive group of elements, including Xenon, Neon, and Helium.
ANSWER: noble gases [or inert gases; or group 18; or group 8A] <Alex Harmata/ed. David Dennis>
15. Le Courbusier is said to have coined the name of this artistic movement in a series of articles about a 1925 Paris exhibition. A district in Miami is named after this eclectic artistic movement. This movement replaced the organic shapes of Art Nouveau with geometric lines. This artistic movement, also sometimes called (*) style moderne, emphasized a "streamlined" look. Primarily known for architecture, this interwar movement incorporated many man-made materials, such as Bakelite. For 10 points, name this artistic style of the 1920 's and 30's, examples of which include the Chrysler Building.
ANSWER: Art Deco [or style moderne until it is read] <David Dennis>
16. The protagonist of this novel picks up a horned turtle whose shell was clipped by a truck while it was crossing a highway. Before he dies, a character in this novel is given "soothin' syrup" to convince him to leave his home. Connie Rivers leaves his wife in this novel, who (*) breastfeeds a starving man. In this novel, the former preacher Jim Casy is killed during a strike. The central family of this novel includes Rose of Sharon and Tom. For 10 points, name this John Steinbeck novel where the Joad family travels from Oklahoma to California during the Great Depression.
ANSWER: The Grapes of Wrath <Sherry Xie>/<ed. Jacob>
17. The central figures of this painting were replaced with Humphrey Bogart, James Dean and Marilyn Monroe in Gottfried Helnwein's parody Boulevard of Broken Dreams. The setting of this painting is usually thought to be the empty Mulry Square. The central building in this painting has a yellow door with no handle and no obvious exit. This painting may have been based on a Greenwich Village restaurant. A women in a red dress next to $\left(^{*}\right.$ ) two men and a waiter appear in this painting, which also shows a sign for "five cent Phillies cigars." For 10 points, name this painting of a lonely diner by Edward Hopper. ANSWER: Nighthawks <Joe Stitz>/<ed. Jacob>
18. In a central text of this religion, Lickety and Split drill holes into a character who lacks the seven holes that all people have. This religion's founder is depicted with a smile, in contrast to the negative reactions of two others, in the Vinegar Tasters allegory. This religion's central texts include the Zhuangzi ("Zhyahng-zee"), and it includes the (*) Jade Emperor as a chief deity. A text in this religion emphasizes acting through "non-action," or wu wei ("woo wey"). This religion describes how opposing forces are interconnected through yin and yang. For 10 points, name this Chinese religion created by Lao Tzu ("lao dzuh").
ANSWER: Taoism [or Daoism] <Sophia Johnson>/<ed. Jacob>
19. After this scientist suffered a stroke which partially paralyzed his left side, colleagues set up a mobile laboratory so he could work from his sickbed. This scientist names an effect where yeast consumes glucose faster in anaerobic conditions. This scientist used two differently-shaped flasks to disprove $\left(^{*}\right.$ ) spontaneous generation. This man used observations about immunity from chicken cholera to save the life of nine-year-old Joseph Meister with the first-ever rabies vaccine. For 10 points, identify this French scientist who created a namesake process to destroy microorganisms in milk.
ANSWER: Louis Pasteur <David Dennis>
20. A funerary inscription made by this man, a copy of which is located next to the monument in Ancyra ('ang-ker-uh"), was originally inscribed on bronze pillars and is known as the Res Gestae ("reez jes-tee"). This man allegedly shouted at Quinctilius Varus to "give me back my legions!" after a loss at the Battle of the Teutoburg Forest. This emperor's admiral Marcus Agrippa defeated a former ally and (*) Cleopatra at Actium. With Marcus Lepidus and Mark Antony, this man was part of the Second Triumvirate. For 10 points, name this first Roman Emperor, the adoptive heir of Julius Caesar.
ANSWER: Augustus Caesar [Octavian; or Gaius Octavius; or Gaius Julius Caesar Octavianus] <Cole Phinney>/<ed. Jacob>

Tiebreaker
This man's last novel takes place at Howth Castle and Environs, where the dead body of "Earwicker" vanishes while being served as a meal at the title event. In a novel by this author, the protagonist becomes a devout Catholic after listening to Father Arnall's hell sermon. This author of Finnegans Wake created Stephen (*) Dedalus, who appears with Leopold and Molly Bloom in a novel detailing each of their experiences on June 16th, 1904. For 10 points, name this Irish author of A Portrait of the Artist as a Young Man and Ulysses. ANSWER: James Joyce [James Augustine Aloysius Joyce] <Sherry Xie>/<ed. Jacob>

## Bonuses

1. At the end of this novel, the worn-down Maureen leaves her family behind and runs toward an unmarked helicopter. For 10 points each:
[10] Name this novel in which the white, liberal Smales family is forced to stay in the village of the title former servant during a revolution.
ANSWER: July's People
[10] This author of The Conservationist and Burger's Daughter wrote July's People.

## ANSWER: Nadine Gordimer

[10] July's People fictionalized the end of apartheid in this country, which was home to both Nadine Gordimer and J.M. Coetzee.
ANSWER: South Africa [Republic of South Africa; or Union of South Africa] <Sherry
Xie>/<ed. Jacob>
2. The Snail is one of this man's "cut-outs," a scissor and paper based medium he turned to after being diagnosed with cancer. For 10 points each:
[10] Name this French artist of Woman with a Hat and Blue Nude.
ANSWER: Henri Matisse
[10] With André Derain, Matisse founded this art movement whose members emphasized the use of color. Its name means "wild beasts."
ANSWER: Fauvism [or les Fauves]
[10] A foreshadowing of Matisse's later painting The Dance appears in the background of this work that shows numerous figures lying around a vividly colored forest.
ANSWER: The $\underline{\text { Joy of Life }}$ [or Le bonheur de vivre] <Alex Harmata>/<ed. Seth Ebner>
3. The fractional variety of this procedure is used in oil refineries. For 10 points each:
[10] Name this laboratory technique where substances are separated by differences in boiling point. It can be used to purify ethanol.
ANSWER: distillation
[10] These mixtures do not change composition due to boiling, and thus cannot be separated by distillation.
ANSWER: azeotropes
[10] Azeotropes deviate from this law, named for a French scientist. It calculates total vapor pressure as a sum of partial pressures multiplied by mole fractions.
ANSWER: Raoult's law <Alex Harmata>/<ed. David Dennis>
4. This procedure was developed in Kansas in 1947 using napalm and sand from the Arkansas River. For 10 points each:
[10] Name this controversial method of extracting previously unavailable hydrocarbons from shale by injecting chemical fluid at high pressure.
ANSWER: Hydraulic fracturing [or hydrofracturing; or hydrofracking; or fracking]
[10] Fracking has allowed this Baltic nation with capital at Tallinn to become the world's first country to meet all its power needs by processing oil shale.
ANSWER: Estonia [Republic of Estonia; or Eesti Vabariik]
[10] Estonian oil shale contains this precursor to liquid oil consisting of bituminous solids. It is also found in areas such as Colorado's Green River formation and must be heated to become viable.
ANSWER: Kerogen <David Dennis>
5. These people raided the monastery of Lindisfarne, and they forced Aethelred the Unready to pay the Danegeld. For 10 points each:
[10] Name these Norse seafarers, who travelled on longships and raided and pillaged throughout Europe.
ANSWER: Vikings [or Norseman before it is mentioned; or Northman before "Norse" is mentioned; or Varangians]
[10] This viking, believed to be the first European to set foot in North America, established a settlement at L'Anse aux Meadows in an area he called Vinland.
ANSWER: Leif Erikson [or Leif Eriksson; or Leif Erikson; or Leiv Eriksson; or Leiv Eriksson den Hepne; or Leifur Eiriksson]
[10] L'Anse aux Meadows, a part of Vinland, is found on this Canadian Island. This area was once home to the Beothuk people.
ANSWER: Newfoundland <Alex Harmata>/<ed. Jacob>
6. This nation mass-produced the first modern assault rifle. For 10 points each:
[10] Name that modern-day country, whose "Sturmgewehr ("Shtoorm-gay-vair") 44" inspired such weapons as the USSR's AK-47.
ANSWER: Germany [or Nazi Germany; or Federal Republic of Germany; or Deutschland; or Bundesrepublik Deutschland]
[10] This German sidearm, used in both World Wars, has a distinctive toggle lock action. Since Allied soldiers took these pistols as trophies, German soldiers would often booby trap them. ANSWER: Luger P08 pistol [or Luger P08 ("P-zero-eight"); or Pistol Parabellum; or Pistole Parabellum 1908; or Parabellum-Pistole]
[10] This German anti-tank weapon during World War II literally translates to "tank fist" or "armor fist." This weapon was intended to be used by one soldier, and it fired a single shot.
ANSWER: Panzerfaust <Alex Harmata>/<ed. Jacob>
7. Some call it the devil's box, but others call it a pastime. For 10 points each:
[10] Name this sliding puzzle, the goal of which is to make six faces match to a different color. ANSWER: Rubik's cube
[10] Erno Rubik, the inventor of the cube, hailed from this nation, the capital of which contains St. Stephen's Basilica.
ANSWER: Hungary [Republic of Hungary; or Magyar Koztarsasag; or Magyarorszag]
[10] On April 25, 2015, Collin Burns set the Rubik's Cube world record at a competition held in Doylestown, Pennsylvania, where this lyricist of Oklahoma! and South Pacific owned a farm before he passed there in 1960.
ANSWER: Oscar Hammerstein II <Wenzer Qin>/<ed. Sean>/<ed. Jacob>
8. Did you know that light can behave both as a wave and as a particle? For 10 points each: [10] This experiment, performed by shining light through two narrow openings onto a screen, demonstrated the wave nature of light.
ANSWER: Young's double slit experiment [or Thomas Young's double slit experiment] [10] If you wanted to use more than two slits, you could use a "grating" named for this effect. Light behaving as a wave can exhibit this phenomenon in which the wave bends around an obstacle.
ANSWER: Diffraction
[10] Light's particle nature is supported by this effect, in which charge carriers are ejected from a material when it is hit by sufficiently energetic photons.
ANSWER: Photoelectric effect <Wenzer Qin/Andy Sun>/<ed. Seth Ebner>
9. Answer the following about a particular branch of Christianity. For 10 points each:
[10] The largest communion of this Christian sect holds the Lambeth Conference every ten years. This sect was created by King Henry VIII following Clement VII's refusal to annul his marriage.
ANSWER: Anglicanism [or the Church of England]
[10] This Anglican text introduced the phrases "peace in our time" and "ashes to ashes, dust to dust." It's first two editions were compiled by Thomas Cranmer.
ANSWER: The Book of Common Prayer [or The Book of Common Prayer and Administration of the Sacraments and other Rites and Ceremonies of the Church according to the use of the Church of England together with the Psalter or Psalms of David pointed as they are to be sung or said in churches; and the form and manner of making, ordaining, and consecrating of bishops, priests, and deacons]
[10] This contributor to Tracts For the Times founded the Oxford Movement and left the Church of England, eventually becoming a Cardinal in the Roman Catholic Church.
ANSWER: John Henry Newman [or Cardinal John Henry Newman; or Blessed John Henry
Newman] <Sophia Johnson>/<ed. Jacob>
10. This poem begins "What mighty contests rise from such trivial things." For 10 points each: [10] Name this poem, where the gnome Umbriel travels to the Cave of Spleen. In this mockheroic poem, a piece of Belinda's hair is stolen by the Baron.
ANSWER: "The Rape of the Lock"
[10] This author of "The Rape of the Lock" stated "To err is human, to forgive divine," in "An Essay on Criticism."
ANSWER: Alexander Pope
[10] This poem by Alexander Pope attempts to "vindicate the ways of God to man." This poem is addressed to Lord Bolingbroke and declares that "whatever is, is right."
ANSWER: "An Essay on Man" <Carrie Derner>/<ed. Jacob>
11. The Red, White, and Black branches of the Volta unite in this country to form Lake Volta behind the Akosombo Dam. For 10 points each:
[10] Name this West African nation, once known as the Gold Coast under British rule, whose capital is Accra.
ANSWER: Ghana
[10] The British also had a colonial presence in this modern-day nation where they created the Oil Rivers Protectorate. More recently, its city of Lagos has become Africa's most populous. ANSWER: Nigeria [Federal Republic of Nigeria]
[10] This other former British colony in West Africa is named for the river that bisects the country. The location of the main British fort in this country was renamed Kunta Kinteh Island in 2011.

ANSWER: The Gambia [Republic of the Gambia] <Alex Harmata>/<ed. Chris Chiego>
12. If you like stories about gods sneezing out other gods, then Shinto has the stories for you! For 10 points each:
[10] Shinto is the indigenous religion of this Asian country. This country's emperor is said to be descended from Jimmu, who himself was a descendant of Amaterasu ("ah-mah-te-rah-soo"). ANSWER: Japan [or Nihon; or Nippon]
[10] This kami was born after Izanagi washed his nose. This god also drew the Kusanagi sword from the body of Orochi and gave it to his sister, Amaterasu.
ANSWER: Susano'o [or Susanowo; or Susanoo; or Takehaya Susanoo-no-Mikoto; or His-Swift-Imperial-Male-Augustness]
[10] The kami of the sea took the form of this creature and owned jewels that he used to control the waves. That kami who took this creature's form was Ryujin.
ANSWER: Dragons [prompt on snakes] <Wenzer Qin>/<ed. Jacob>
13. This first Marxist to become a leader of a Latin American country in open elections allegedly committed suicide with an AK-47 inside the La Moneda presidential palace. For 10 points each: [10] Name this socialist president, who was overthrown by and died during a 1973 coup led by Augusto Pinochet.
ANSWER: Salvador Allende [Salvador Guillermo Allende Gossens]
[10] Salvador Allende was the president of this country from 1970-1973. Augusto Pinochet ruled this country from Santiago.
ANSWER: Chile [Republic of Chile; or Republica de Chile]
[10] A group of Chilean economists named for this city's "boys" brought free market policies to the country under Pinochet, leading to what Martin Friedman called the "Miracle of Chile."
ANSWER: Chicago [or "Chicago Boys"] <Cole Phinney>/<ed. Jacob>
14. These polymers are made up of two nucleic acid chains in the form of a double helix. For 10 points each:
[10] Name this molecule that encodes the genetic instructions of life. It is made of the nucleotides thymine, guanine, adenine, and cytosine.
ANSWER: DNA [or deoxyribonucleic acid]
[10] This pyrimidine base pairs with adenine in RNA instead of thymine, and isn't present in DNA.
ANSWER: Uracil
[10] This scientist first stated the central dogma of biology, which says that DNA codes for RNA, which codes for proteins, in 1958. He was the co-recipient of a Nobel for the discovery of DNA.
ANSWER: Francis Crick [Francis Harry Compton Crick] <Wenzer Qin>/<ed. David Dennis>
15. This poem appears in Montage of a Dream Deferred, and it begins by stating that "The instructor said, 'Go home and write a page tonight.'" For 10 points each: [10] Name this poem, whose speaker would like "records-Bessie, bop or Bach." Its speaker notes that "you are white-yet a part of me, as I am a part of you. That's American."
ANSWER: "Theme for English B"
[10] This poet of "Mother to Son" and "The Negro Speaks of Rivers" wrote "Theme for English B." He asked "what happens to a dream deferred" in his most famous poem.

ANSWER: Langston Hughes [James Mercer Langston Hughes]
[10] Hughes lived in this New York City neighborhood, where he participated in its namesake literary "Renaissance."
ANSWER: Harlem [or "the Harlem Renaissance"] <Carrie Derner>/<ed. Jacob>
16. A work in this field was criticized as a "hoax" by Derek Freeman for having unknowingly included the lies of interviewed subjects. For 10 points each:
[10] Name this field of social science, whose "structural" form was practiced by Claude LeviStrauss. This social science studies other cultures to learn about humanity.
ANSWER: Anthropology [or structural anthropology; prompt on ethnography]
[10] Freeman attacked Coming of Age in Samoa, which was written by this woman, as an "anthropological hoax." She also wrote Sex and Temperament in Three Primitive Societies. ANSWER: Margaret Mead
[10] Mead was a student of this man, who taught anthropology at Columbia University. He claimed that race does not affect cultural development or intelligence in The Mind of Primitive Man.
ANSWER: Franz Boas <Sherry Xie>/<ed. Jacob>
17. For 10 points each, name these Europeans who served in the Continental Army. [10] This French nobleman served as George Washington's aide-de-camp. This "Hero of Two Worlds" was wounded at Brandywine and helped to close off Cornwallis' escape at Yorktown. ANSWER: The Marquis de Lafayette [Marie-Joseph-Paul-Yves-Roch-Gilbert du Motier, Marquis de Lafayette]
[10] This Prussian baron drilled the Continental Army into shape at Valley Forge before writing his "Blue Book," which was a drill manual that helped to professionalize the army.
ANSWER: Baron Friedrich von Steuben [Baron Friedrich Wilhelm Ludolf Gerhard Augustin von Steuben; or Frederick William Augustus, Freiherr von Steuben]
[10] This Polish military engineer created defenses for the Americans at the Battle of Saratoga.
He led a namesake uprising against Russia during the Third Partition of Poland.
ANSWER: Tadeusz Kosciuszko ("Ko-shooz-ko") [Andrzej Tadeusz Bonawentura Kosciuszko] <Owen Pasley>/<ed. Jacob>
18. A character in this play earns a sum of three thousand pounds a year after being described as the "most original moralist in England." For 10 points each:
[10] Name this play, in which Henry Higgins bets Colonel Pickering that he can teach Eliza Doolittle to speak like a duchess.
ANSWER: Pygmalion
[10] This Irish author of Pygmalion and Major Barbara included the scene "Don Juan in Hell" in his play Man and Superman.
ANSWER: George Bernard Shaw
[10] This character in Shaw's Major Barbara adopts Adolphus Cousins as his heir, as Cousins is a foundling. This arms manufacturer's donation to the Salvation Army upsets Barbara.
ANSWER: Andrew Undershaft [or Andrew Undershaft] <Carrie Derner>/<ed. Jacob>
19. It's good practice to play these when you practice. For 10 points each:
[10] Name these musical sequences which can be ascending or descending, common types of which are major and minor ones.
ANSWER: scales
[10] In this type of scale, named for the Greek word for "color," each of its twelve notes is always a half-step higher or lower than the previous pitch.
ANSWER: chromatic scale
[10] These ancient Greek scales have seven pitches, separated by different combinations of half steps and whole steps. Examples of these include Dorian and Lydian.
ANSWER: modes <Sherry Xie>/<ed. David Dennis>
20. Surfaces of revolution are formed when 2-dimensional curves are rotated along an axis. For 10 points each:
[10] Rotating a circle that is centered at the origin of the $x, y$-plane around the $y$-axis produces one of these surfaces. The area of this surface is 4 pi times the radius squared.
ANSWER: sphere
[10] If instead the circle is rotated about a coplanar axis not contained in the circle, this donutlike figure results.
ANSWER: torus
[10] When the graph " $y$ equals $x$ squared" is rotated about the $y$-axis, one of these figures is formed.
ANSWER: paraboloid <Alex Harmata>/<ed. Seth Ebner>

## Extra

For 10 points each, name some things about the 1964 Presidential Election.
[10] The victor was this incumbent Texas Democrat, who had previously become president in 1963 when John F. Kennedy was assassinated.
ANSWER: Lyndon Baines Johnson [or LBJ; prompt on Johnson; do NOT accept or prompt on "Andrew Johnson"]
[10] Johnson defeated this Republican Senator from Arizona, who carried only six states and lost by 22 percentage points.
ANSWER: Barry Goldwater
[10] The success of the Johnson campaign has been attributed to this TV commercial that was only aired once. It depicted a young girl picking the title flowers followed by a nuclear explosion.
ANSWER: The Daisy ad [or Daisy Girl; or Peace Little Girl] <Dinis Trindade>/<ed. Jacob>

