PACE NSC 2011
Edited by Mike Bentley, Matt Bollinger, Rob Carson, Kyle Haddad-Fonda, Hannah Kirsch,
Trygve Meade, Bernadette Spencer, Guy Tabachnick, and Andy Watkins

Packet 17

Tossups

1. **This man won a race on his old horse, Dobbin, by striking all his opponent's horses with holly twigs that made them dance. At age thirteen, he freed his master by defeating the servants of King Maelgwn. He took a boon meant for the ugly Morfran, leading Morfran's mother to swallow him in the form of a grain of wheat; later, that woman,** (*) Ceridwen, gave birth to him. The unlucky Elphin pulled him out of the weir as a baby. When he was Gwion Bach, he drank three drops from the Cauldron of Wisdom and Inspiration. For 10 points, name this figure whose name means "Shining Brow," a bard from Welsh myth.
ANSWER: **Taliesin** [or **Gwion Bach** before it is read]
<Bollinger>

2. **James Busby supervised the design of this people's flag, which was defiantly chopped down four times by another leader of this people. According to legend, this people reached their current land in the Great Fleet. Te Wherowhero was the first king of this people, and they received new weapons from the arriving pakeha. Thousands of these people were killed when Hongi Hika's actions sparked the (*)** Musket Wars. This people's rights were protected by a document drawn up by William Hobson and signed by Hone Heke. They're well known for the dance sometimes done before battle called the haka. Agreeing to the Treaty of Waitangi, for 10 points, name this indigenous people of New Zealand.
ANSWER: **Maori**
<Bollinger>

3. **The formation of tenase complex is key to this process, and one variant of a disorder in which it does not occur properly is called Christmas disease. This process is promoted by a protein named for Hageman, and VKORC is inhibited by the drug warfarin in order to prevent it. This process is initiated upon the exposure and binding to (*)** collagen of von Willebrand factor. Factor II, also known as thrombin, promotes this process by cleaving fibrinogen to create fibrin, a protein that polymerizes and enmeshes platelets. For 10 points, name this process by which blood clots.
ANSWER: **coagulation** [accept blood **clotting** before mention; accept logical equivalents]
<Kirsch>

4. **In 1996, a thirty year water sharing treaty addressed claims that the Farraka Barrage on this river was causing desertification in a neighboring country. A 2008 flood caused one of this river's tributaries, the Koshi, to re-fill a channel abandoned a century before. The Sone, which joins this river near Patna, is dammed to provide irrigation for much of Bihar. The Triveni Sangam is formed by its confluence with the (*)** Yamuna at Allahabad. It is also fed by the Meghna well downstream from the most famous city on its banks, Varanasi. For 10 points, name this river that joins the Brahmaputra and flows into the Bay of Bengal after crossing northern India.
ANSWER: **Ganges** River [or **Ganga**]
<Haddad-Fonda>

5. **One of these entities delivers a speech about the Life Force in the 320th century at the end of *Back to Methuselah*, and Anilla becomes one in *Platero and I*. Maxine Hong Kingston wrote about "memoirs of a girlhood among" these things in the subtitle of *The Woman Warrior*. A maid who is secretly not the daughter of an alcoholic carpenter is pursued by a man who smokes his late father's pipe in a play named for these entities; in that play, an (*)** orphanage burns down and Pastor Manders pays hush money to Jacob Engstrand as Regina is pursued by Oswald Alving. For 10 points, identify these entities, which title a work about the ravages of syphilis by Henrik Ibsen.
ANSWER: **ghost**s
<Weiner>

6. **The Battle of Warren, also called the Battle of the Clouds, was fought in this state prior to the Paoli Massacre. In 1842, the Supreme Court overruled this state's personal liberty laws in a case involving Edward Prigg. This state was home to a rebellion arising out of a tax on the number of windows in a home to pay for the Quasi-War; that rebellion in this state was led by John Fries. Before independence, a massacre of Indians in this state was perpetrated by the (*)** Paxton Boys in the city of Lancaster. Letters from a farmer from this state were published by John Dickinson, the author of the *Olive Branch Petition*, and it was the site of the Battle of Brandywine. For 10 points, name this state where American troops spent the winter of 1777-1778 at Valley Forge.
ANSWER: **Pennsylvania**
<Bentley>

7. **Phosphorylation of a serine residue of one variety of these structures helps the cell pinpoint the location of DNA damage. Important modifiers of these structures include factors like CREB binding protein and p300. Lysine residues on the N-terminal domains of these proteins are (*)** acetylated and various other residues are methylated to turn transcription on and off, respectively. The "linking" type of them connects the entry and exit sites of an octameric assembly of the "core" type; that assembly is called the nucleosome. For 10 points, name these spool-like proteins around which DNA wraps to form chromatin.
ANSWER: **histone**s
<Kirsch>

8. **This man's namesake "Plan" was an urban redevelopment plan in Oklahoma City. This man designed two Brutalist apartment buildings in Boston called the Harbor Towers. One of his buildings has no windows on half of one side and is a topless inverted pyramid. This architect of the Dallas City Hall designed a trapezoidal building to fit an irregular lot for a DC museum. He designed the tallest building in (*)** Boston, the John Hancock Towers, as well as the East Wing of the National Gallery of Art and the John F. Kennedy Presidential Library. Another of his works has a section resembling a turntable and spindle; that building is in Cleveland. For 10 points, name this Chinese-American architect of the Rock & Roll Hall of Fame and a glass pyramid at the Louvre.
ANSWER: Ieoh Ming **Pei**
<Rosenthal>

9. **One poem in this collection recalls how the addressee "stole betwixt" the speaker "and the dreadful outer brink" and begins "The face of all the world is changed, I think." In its first poem, the speaker describes being drawn "backward by the hair" by a "mystic Shape" misidentified as Death. This collection's title refers to the** (*) pet name of the author, who was nicknamed for her dark complexion. Its first poem begins "I thought once how Theocritus had sung," and its title refers to the author's poem "Catarina to Camoens." The forty-third and penultimate begins "How do I love thee? Let me count the ways." For 10 points, name this collection by Elizabeth Barrett Browning.
ANSWER: **_Sonnets from the Portuguese_**
<Wynne>

10. **This theorist distinguished primary, secondary, and tertiary circular reactions from reflexes. With Bärbel Inhelder, he used a model of three mountains in one study to test de-centering, the ability to overcome egocentrism. He called himself a "genetic epistemologist," and claimed people either assimilate a new experience into old frameworks or accommodate it, creating new (*)** "schemas." His most famous model includes understanding of conservation years after grasping that things which disappear from view have object permanence. For 10 points, name this Swiss psychologist who included sensorimotor and concrete operational as the first and third stages of child cognitive development.
ANSWER: Jean **Piaget** (pyah-ZHEY)
<Jackson>

11. **During his reign, the Forty-Two Articles were authored. His father arranged this future monarch's marriage through the Treaty of Greenwich, although that match prompted the War of the Rough Wooing. His reign saw the Western Rising and a revolt that arose from anger over sheep grazing led by Robert Kett. The first (*)** _Book of Common Prayer_ was authored during his reign. The Earl of Warwick, John Dudley, as well as the Duke of Northumberland held great power in the latter part of his reign, while earlier the Duke of Somerset served as his Protector. After his death, the crown briefly passed to Lady Jane Grey. His mother died shortly after his birth and was named Jane Seymour. For 10 points, name this only son of Henry VIII.
ANSWER: **Edward VI**
<Bentley>

12. **A woman in blue has fainted and rests her hand next to a skull on the bottom of one of these scenes by Rogier van der Weyden. A man with a brown beard and long hair points at a figure whose legs are grabbed by a man swathed in bright yellow, a green corpse, in Rosso Fiorentino's version of this scene. One brightly colored version of this scene features several women in light blue above a man with a pink torso squatting as he supports the main figure. Besides that work by (*)** Jacopo Pontormo, another version shows Christ's feet resting on the shoulder Mary Magdalene and was done by Peter Paul Rubens. Generally shown before the *Entombment* scene, for 10 points, name this Biblical scene in which Jesus is taken down from the cross.
ANSWER: the **Deposition** of Jesus Christ [or **Descent from the Cross** of Jesus Christ; accept equivalents involving **removing Jesus** from the **cross** until "taken down" is read]
<Bentley>

13. **In this work, a lawyer named Boyd O'Reilly persuades the vain Isabella to claim her age is fifty-two, rather than forty-two, to inherit the estate of her husband, Don Antonio Olivares. In the mountains, the title character of this work must take refuge from a snowstorm with the murderer Buck Scales, but is saved by his pious wife, Magdalena. That protagonist befriends (*)** Kit Carson, but judges him poorly for his removal of the Navajo Indians. The outgoing Father Vaillant serves as a foil to this novel's title character, who travels from Ontario to the diocese of New Mexico. For 10 points, name this work about the cleric Jean Latour, written by Willa Cather.
ANSWER: *Death Comes for the Archbishop*
<Bollinger>

14. **Prior to this battle, the victorious commander was able to establish a beachhead by winning the Battle of Cirta, and after this battle that commander demanded ten thousand silver talents from the losing side but did not destroy their capital. Laelius led a successful counter-charge in this battle after his allies placed velites in gaps and simultaneously played trumpets to repel one attack. Some troops here were commanded by Syphax, while a critical moment came when the losing side's rear was attacked by (*)** Masinissa's cavalry. It concluded a campaign begun at the Battle of Utica. Earlier in this battle, the losing side unleashed an unsuccessful charge of some eighty elephants. For 10 points, name this defeat for Hannibal by Scipio Africanus, the final major battle in the Second Punic War.
ANSWER: Battle of **Zama**
<Bentley>

15. **Muhammad said that this man looked like his friend Urwah ibn Mas'ud. Adherents of the Ahmadi sect believe he went by the name Yuz Asaf when he died in Kashmir, and unlike mainstream Muslims they do not believe that he will fight Dajjal [duj-JAL]. He talked as a newborn to denounce critics of his mother, who was a priestess in a temple run by Zechariah. He will not die until he (*)** returns to assist the Mahdi and establish just rule on earth, which is possible because was raised to Heaven before people thought they killed him. While on earth, he foretold the coming of Muhammad and revealed his own divine scripture. For 10 points, name this prophet born to a virgin mother.
ANSWER: **Jesus** [or **'Isa**; or **ibn Maryam**; prompt on the **Messiah**; prompt on al-**Masih**]
<Haddad-Fonda>

16. **Michel Corrette reworked the first of these pieces into the motet *Laudate Dominum de coelis*. That work includes violas imitating a barking dog. Another one of these contains a caccia, a type of canon which reflects a hunt. The second of these works includes in its first movement imitations of various bird calls and has a hailstorm in the third movement. The last of these works features a scene set by a (*)** fireplace with pizzicato strings representing rain outside. These pieces make up the first section of the twelve-part *Contest of Harmony and Invention*, and each goes along with a sonnet probably written by the composer. For 10 points, name this set of violin concertos by Antonio Vivaldi representing different parts of the year.
ANSWER: The **_Four Seasons_** [or *Le **quattro stagioni***; prompt on *Il **Cimento dell'Armonia e dell'Inventione***; prompt on *The **Contest*** (or ***Test***) ***of*** (or ***between***) ***Harmony and Invention*** before "The last of these" is read]
<Tabachnick>

17. **A controversy exists over the calculation of this quantity for electromagnetic waves in dielectrics between equations proposed by Minkowski and by Abraham; Barnett suggests that one equation gives the kinetic and the other gives the canonical form of this quantity. This quantity is always equal to the Planck constant over an object's (*)** de Broglie wavelength. Special relativity sets the square of energy equal to c to the fourth times invariant mass squared plus c squared times this quantity squared. This quantity is conserved in all closed system collisions, whether elastic or inelastic. For 10 points, name this quantity, equal to the product of mass and velocity.
ANSWER: linear **momentum**
<Watkins>

18. **In one story, this man judged Kale the most beautiful of the three Graces and Aphrodite. This figure inspired a man named Menoeceus to try and save his home city by jumping from its rampart. This son of Chariclo died when he drank from the spring of Tilphussa, and sired a daughter named Manto. He received one punishment for striking at a pair of (*)** mating snakes, and another either for witnessing Athena's bath or for siding with Zeus in a debate with Hera about sex. For 10 points, name this man who spent seven years as a woman and whose ghost appears in the *Odyssey*'s underworld, a blind Greek prophet.
ANSWER: **Tiresias**
<Jackson>

19. **This man paired two works, one published only posthumously, which were entitled *The World* and *The Man*. One of his works, which is divided into six parts, explains the interaction between the consciousness and the outside world with a metaphor of impressions on a ball of wax, hypothesizes that the human soul is located in the pineal gland, and begins from a position of absolute (*)** skepticism, contemplating the existence of an evil demon and ultimately ending at the conclusion "I think, therefore I am." For 10 points, give the French mathematician and philosopher who wrote *Discourse on Method* and *Meditations on First Philosophy.*
ANSWER: Rene **Descartes**
<Meade>

20. **This scenario was used to model the evolution of reciprocal altruism in a 1971 paper by Robert Trivers. Proposed by Merril Flood and Melvin Dresher, this scenario tends to be defined by the conditions T greater than R greater than P greater than S, though related variants relax some of those conditions. A tournament of its iterated variant was proposed by Robert (*)** Axelrod and won by Anatol Rapoport's "tit for tat" strategy. For 10 points, name this zero-sum problem of game theory, whose title characters must agree either to stick to their story or to rat each other out.
ANSWER: **prisoner's dilemma**
<Watkins>

21. **In one work by this author, a man named R.J. Bowman who works for a shoe company stays at a rural home after crashing his car into a ravine. In another of her works, a woman named Phoenix Jackson travels into town to pick up medicine for her grandson. In addition to "A (*)** Worn Path", this author wrote a story in which arguments involving a pink kimono and the child of Stella Rondo lead to the narrator living at the title establishment. This author also wrote a novel in which Laurel Hand returns to New Orleans after her father Judge McKelva has retina surgery. For 10 points, name this author of "Why I Live at the P.O." and The Optimist's Daughter.
ANSWER: Eudora **Welty**
<Cohen>

22. **One person with this last name defiantly cried "On Wisconsin" at the Battle of Missionary Ridge, while another commanded land reformer Wolf Ladejinsky. One person with this surname was replaced in 1901 in one post by William Howard Taft. Another man with this last name formulated a plan to take a base at Rabaul on New Britain as part of Operation Cartwheel. This was the last name of a man who accompanied his troops in the 1932 Battle of Anacostia Flats in an effort to disperse the (*)** Bonus Army. That man later successfully engineered a landing beyond the Pusan Perimeter and was succeeded by Matthew Ridgway. For 10 points, identify this last name of a general who said "I shall return" in the Philippines, later dismissed by President Truman during the Korean War.
ANSWER: **MacArthur**
<Bentley>

23. **Veselago demonstrated that metamaterials with both negative permittivity and permeability may display this property in the reverse sense. This phenomenon may happen different for oppositely-handed circular polarizations in the Faraday effect and is said to happen "double" in materials like calcite, which are (*)** birefringent. This phenomenon is modeled by setting the ratio of the sines of the angles in question equal to the reciprocal ratio of the indices of the media. For 10 points, name this phenomenon, wherein a change in wave speed results in a change in wave direction.
ANSWER: **refraction**
<Watkins>

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Packet 17

Bonuses

1. This theory was adapted by Robert Lucas to form part of his namesake "Islands" model. For 10 points each:
[10] Name this theory which states that all deviations from optimal behavior by consumers are the result of random error, meaning that agents acting within a model always act as if the model's predictions are correct.
ANSWER: **rational expectations** theory
[10] Name the economist who proposed rational expectations theory and wrote "Rational Expectations and the Theory of Price Movements."
ANSWER: John **Muth**
[10] That Muth work partially treats the pricing of this type of security, which represents a share of ownership in a particular company.
ANSWER: **stock**s

2. This state of matter possesses a certain proportion of ionized particles. For 10 points each:
[10] Name this state of matter.
ANSWER: **plasma**
[10] This quantity is the distance over which meaningful charge separation in a plasma can occur. Outside of this distance, the prevalent ions in a plasma screen out electric fields.
ANSWER: **Debye** length
[10] A device for measuring plasma properties is a probe named for this physicist; he also names a type of electron density oscillation in plasmas and, to a lesser extent, metals.
ANSWER: Irving **Langmuir**
<Watkins>

3. Answer some questions about events that transpired on Mount Pelion, for 10 points each.
[10] This immortal centaur trained a number of famous heroes on Mount Pelion.
ANSWER: **Chiron**
[10] In a cave on Mount Pelion, this hero married the nymph Thetis.
ANSWER: **Peleus**
[10] These two giants stacked Pelion on Olympus, but shot one another after Artemis tricked them
ANSWER: **Aloadae** [accept **Otus** and **Ephialtes**]
<Taylor>

4. This man created controversial choreography for *The Rite of Spring*. For 10 points each:
[10] Name this dancer for whom Michel Fokine created *Petrushka* and *Schéhérezade*, who retired at age 29 after a breakdown due to schizophrenia.
ANSWER: Vaslav **Nijinsky** [or Vatslav Fomich **Nizhinsky**]
[10] Nijinsky was a principal dancer for this ballet company founded in Paris by impresario Sergei Diaghilev.
ANSWER: **Ballets Russes**
[10] Nijinsky also wrote the choreography for this composer's *Jeux*. His other works include the opera *Pelléas and Mélisande* and the piano suites *Children's Corner* and *Suite bergamesque*.
ANSWER: Claude-Achille **Debussy**
<Tabachnick>

5. A note in the upper right of this painting indicates that its sitter was twenty-six. For 10 points each:
[10] Name this portrait of a man with a black hat and an upturned mustache smiling at an angle at the viewer. His collar is white with some black in the center, and his sleeves have Cupid's bees and Mercury's winged staff and hat on them. Its artist also painted *Malle Babbe*.
ANSWER: The ***Laughing Cavalier**
[10] This Dutch artist painted *The Laughing Cavalier* and many other individual and group portraits.
ANSWER: Frans **Hals**
[10] This other Dutchman was court painter to Charles I of England, and painted many portraits of him, including a triple portrait from three different angles.
ANSWER: Anthony **van Dyck**
<Nediger>

6. An interpretation of probability as a measure of knowledge is named for the formulator of this theorem. For 10 points each:
[10] Name this theorem that, from the conditional probability of B given A and the two prior probabilities, gives the probability of A given B.
ANSWER: **Bayes**'s theorem [accept equivalents for theorem]
[10] This theorem states that the mean of sufficiently many independent random variables with finite mean and variance will be approximately normally distributed.
ANSWER: **central limit** theorem
[10] The square root of the variance is this quantity.
ANSWER: **standard deviation**
<Watkins>

7. An English queen from this region was imprisoned by Isaac Comnenus on Cyprus before being saved by her husband, Richard the Lionheart. For 10 points each:
[10] Identify this kingdom, also ruled by Sancho VI the Wise.
ANSWER: Kingdom of **Navarre** [prompt on Kingdom of **Pamplona**]
[10] This modern day country made up much of the Roman province of Lusitania. In the Renaissance, it was home to Prince Henry the Navigator.
ANSWER: **Portugal** [or **Portuguese** Republic; or República **Portuguesa**]
[10] A king of this name, known as the Quarreller, ruled Navarre in the early fourteenth Century. Kings of this name from another country include ones known as "The Fat" and "The German."
ANSWER: **Louis**
<Bentley>

8. The intense alcoholism of this work's protagonist prompts him to light his employer's pajamas on fire and later derail his career by ranting at the crowd during a lecture. For 10 points each:
[10] Identify this novel whose title Mr. Dixon ends up winning Christine Callighan, beating out Bertram Welch for a cushy job, and escaping the clutches of the manipulative Margaret Peel.
ANSWER: *Lucky Jim*
[10] *Lucky Jim* was written by this huge James Bond enthusiast, who also wrote *The Green Room* and ventured into science fiction with his story of Hubert Anvil, *The Alteration*.
ANSWER: Kingsley **Amis**
[10] Kingsley Amis's son, Martin, wrote this novel, which reveals through reverse chronology that Dr. Tod Friendly was once the Nazi Odilo Undverdorben.
ANSWER: *Time's Arrow*
<Ray>

9. This work claims that the notions of Christianity and of liberty are inextricably intertwined for the subject population. For 10 points each:
[10] Name this work, inspired by some early nineteenth century travels in the title country to examine its prison system.
ANSWER: Of *Democracy in America* [or *De la démocratie en Amérique*]
[10] This French thinker wrote *Democracy in America*.
ANSWER: Alexis-Charles-Henri Clérel de **Tocqueville**
[10] In this work, de Tocqueville put forth his "theory of continuity," which suggested that the point of the French Revolution was not to destroy church authority or create anarchy, but rather to take power away from feudal institutions.
ANSWER: The *Old Regime and the Revolution*
<Watkins>

10. A triphenyl derivative of this element is employed along with a strong base like n-butyl lithium to convert a ketone or aldehyde to an alkene. For 10 points each:
[10] Name this element with atomic number fifteen, with allotropes like white and red.
ANSWER: **phosphorus**
[10] Phosphorus's characteristic long, slow glow is a product of this phenomenon, which occurs due to a reaction with oxygen that gives HPO and P_2O_2; those compounds subsequently emit light.
ANSWER: **chemiluminescence**
[10] That same compound, triphenyl phosphine, is employed to convert an alcohol into this type of compound. These compounds are known for their fruity scents.
ANSWER: **ester**s
<Watkins>

11. One of these is an extremely brief text about emptiness and "Perfection of Wisdom" delivered by Avalokiteshvara, while another is a dialogue with Subhuti often recited from memory by Japanese monks. For 10 points each:
[10] Name these texts containing Buddhist teaching which often beginning "Thus have I heard." The aforementioned examples are partially named *Heart* and *Diamond*.
ANSWER: Mahayana Buddhist **sutra**s [or **sutta**s]
[10] In this Mahayana sutra central to the Nichiren school, all people are said to have an essential "Buddha-nature" allowing them to get to Buddhahood. Also praising *upaya*, or "skillful means," it was allegedly guarded by Nagas for centuries.
ANSWER: **Lotus** Sutra [or *Sutra of the White **Lotus** Which Is Sublime Dharma*]
[10] In the first chapter of the Lotus Sutra, this figure asks 56 stanzas worth of questions to Manjusri. This bodhisattva will return to Earth once dharma is completely forgotten and reteach dharma as a successor of Gautama Buddha.
ANSWER: **Maitreya** [or **Ajita** Boddhisattva; or **Metteyya**; or **Jampa**]
<Jackson>

12. Identify the following about some veteran societies, for 10 points each.
[10] One of the founders of the American Legion was the son and namesake of this president, who was himself unsuccessful in earning a commission in World War I. He ran on the Bull Moose ticket in 1912.
ANSWER: **T**heodore **Roosevelt** [or **T**eddy **Roosevelt**]
[10] Every president elected from 1868 until 1900, with the exception of Grover Cleveland, was a member of this group of Union veterans founded by Benjamin Franklin Stephenson. A common joke about its name was that its members were almost entirely Republicans.
ANSWER: **G.A.R.** [or **Grand Army of the Republic**; prompt on **Generally All Republican**]
[10] Also active in France, George Washington was elected as the first President General of the American branch of this organization of officers from the Revolutionary War. Its name derives from a Roman dictator who was called from his farm to help his country.
ANSWER: Society of the **Cincinnati** [or Lucius Quincitius **Cincinnatus**]
<Bentley>

13. These characters own a schnauzer named Asta and spend their alcohol-fueled retirement entirely too involved in the intrigues of the Wynant family. For 10 points each:
[10] Identify this couple, the protagonists of the hard-boiled classic *The Thin Man*, generally thought to have been based on the work's author and his lover, Lillian Hellman.
ANSWER: **Nick** and **Nora** **Charles** [prompt on partial answer]
[10] In this other mystery novel, Sam Spade returns the title object to Mr. Gutman, only to discover it is a fake. Sam later decides to turn in Brigid for the murder of his partner, Archer.
ANSWER: The ***Maltese Falcon***
[10] This author of detective fiction such as *The Thin Man* and *The Maltese Falcon* also wrote about the Continental Op in *Red Harvest*.
ANSWER: Dashiell **Hammett**
<Ray>

14. For 10 points each, answer these questions about cities in the Arab world that saw violence between government forces and protesters in April 2011.
[10] Protests in this Ba'thist country west of Iraq turned violent in such cities as Dar'a, Banias, and Homs even after the lifting of the hated "emergency law."
ANSWER: **Syria**n Arab Republic
[10] Ongoing skirmishes in Kirkuk, the oil-rich city whose status is still disputed between Kurds and Arabs, were exacerbated in April after this Kurdish president of Iraq called the city the "Kurdish Jerusalem."
ANSWER: Jalal **Talabani**
[10] Much of the fighting in Libya has centered on this third most populous city, which is located 130 miles east of Tripoli. It was the city that Muammar Qaddafi's forces were destroying when NATO intervened and where two American photojournalists were killed by mortars.
ANSWER: **Misrata**
<Haddad-Fonda>

15. This composer wrote the scores for the films *Lieutenant Kijé* and *Alexander Nevsky*. For 10 points each:
[10] Name this composer of the ballet *On the Dnieper* and the *Scythian Suite*. He also wrote an opera in which Princess Ninetta emerges from one of the title objects.
ANSWER: Sergei Sergeyevich **Prokofiev**
[10] In this work for children by Prokofiev, each character is represented by an instrument or set of instruments. For example, the timpani drums play the hunter's theme.
ANSWER: ***Peter and the Wolf***[or ***Petya i volk***]
[10] This other composer also did some film work, scoring *Of Mice and Men*. He drummed up wartime support with his "Fanfare for the Common Man."
ANSWER: Aaron **Copland**
<Nystrom>

16. Factors affecting this value include birth and death rate, as well as basic needs like the availability of food and habitat space. For 10 points each:
[10] Give this term for the maximum population size that a given environment can sustain.
ANSWER: **carrying capacity**
[10] Population growth is often modeled using this function. Models using this sigmoid function can include carrying capacity as a term and can account for carrying capacity varying with time.
ANSWER: **logistic** equation
[10] The Lotka-Volterra equations are a more specific model of population dynamics for species with this relationship.
ANSWER: **predator**-**prey** [accept logical equivalents]
<Kirsch>

17. At one point in his reign, he had to deal with an uprising by Liudolf, his son through his marriage with Edith, daughter of Edward the Elder. For 10 points each:
[10] Identify this Holy Roman Emperor, the victor at the 955 Battle of Lechfeld.
ANSWER: **Otto I** [or **Otto the Great**; or **Otto Der Grosse**]
[10] The battle was a defeat for the Magyars, who went on to form the majority ethnic group in this European country.
ANSWER: Republic of **Hungary** [prompt on **Magyar Köztársaság**]
[10] This is the name of the Hungarian dynasty that ruled until 1301. Saint Stephen I was a member of this dynasty that was named for the Magyar leader who led the tribe into Central Europe.
ANSWER: **Arpad** dynasty
<Cohen>

18. Answer these questions about the works of a certain African author, for 10 points each.
[10] Munira falls in love with Wanja in this novel, but it doesn't stop him from burning down the brothel she runs at the end of this work.
ANSWER: *Petals of Blood*
[10] *Petals of Blood* was written by this author of *I Will Marry When I Want* and *A Grain of Wheat*.
ANSWER: **Ngugi** wa Thiong'o [or James **Ngugi**]
[10] Ngugi wrote *Petals of Blood* in this language, although he later switched to writing in Gikuyu. This language is the primary language of South Africa.
ANSWER: **English**
<Gaurav Kandlikar>

19. One civilization based in this country constructed the large Huaca de la Luna and Huaca del Sol and were known as the Moche people. For 10 points each:
[10] Identify this modern day country, also home to a civilization known for their aqueducts and geoglyphs, the Nazca.
ANSWER: Republic of **Peru** [or Republica del **Peru**]
[10] This empire, with a capital in modern day Peru at Cuzco, was conquered by Francisco Pizarro.
ANSWER: **Inca** civilization [or **Incan** empire; or the **Inca**s; or the **Inca** people]
[10] The impressive road network in the Inca Empire was constructed using this forced labor system, later adopted by the Spanish. It derives from a Quechua word for "time" or "turn."
ANSWER: **Mit'a** system
<Bentley>

20. This character is served by a huge centurion nicknamed "Ratkiller." For 10 points each:
[10] Name this character, who must decide what to do with the recalcitrant Yeshua Ha Nosri. At the end of the novel in which he appears, he ascends a moonbeam after waking from a 2000 year slumber.
ANSWER: Pontius **Pilate**
[10] The first title character of this work is writing a novel about Pontius Pilate. In this novel, Satan comes to Moscow in the guise of Woland, accompanied by the giant cat Behemoth.
ANSWER: *The **Master and Margarita***
[10] *The Master and Margarita* was written by this Soviet author of *Heart of a Dog*.
ANSWER: Mikhail Afanasyevich **Bulgakov**
<Gaurav Kandlikar>

21. This city was described as "a sewer where all the muck of the universe collects" by Petrarch and was purchased by Clement VI from Joan of Provence. For 10 points each:
[10] Identify this French city, the one-time location of the Papacy.
ANSWER: **Avignon**
[10] This man was King of France when the Avignon Papacy began. His other deeds included disbanding the French branch of the Knights Templar.
ANSWER: **Philip IV** [or **Philip the Fair**; or **Philippe Le Bel**; or **Philip I of Navarre**; do not accept or prompt on "Philip I"]
[10] Another serious problem from the church during the reign of Philip IV was the fall of this city to the Mamluks in 1291. Christians had earlier captured it near the start of the Third Crusade.
ANSWER: **Acre**
<Bentley>

22. A recurring character in this play is the herald Talthybius, who bears the crushed body of Astyanax on his father's shield. For 10 points each:
[10] Identify this play that ends as Andromache, Hecuba, Cassandra, and Helen are led onto Greek ships.
ANSWER: The _**Trojan Women**_ [or _**Troiades**_]
[10] The Trojan Women was written by this ancient Greek playwright who also wrote _Medea_, _Alcestis_, and _Cyclops_, the only extant complete satyr play.
ANSWER: **Euripides**
[10] Euripides and Aeschylus engage in a contest to determine which is the best tragic poet in this play, which opens as Dionysus and his slave Xanthias travel to Hades to fetch Euripides.
ANSWER: The _**Frogs**_ [or _**Bátrachoi**_]
<Gupta>

23. Wernicke names one "fluent" type of this disorder in which speech is normal but for the substitution of nonsensical words. For 10 points each:
[10] Give this general name for impaired language function. While it may involve difficulty in comprehending the written word, it is more famous as an impairment of speech or verbal comprehension.
ANSWER: **aphasia**
[10] Sufferers of this type of aphasia have difficulty constructing and giving proper intonation to sentences. This type of aphasia shares its name with the eponymous area of the brain that is damaged in its sufferers.
ANSWER: **Broca**'s aphasia
[10] The aforementioned Wernicke's aphasia results from damage to this part of the brain, which contains the hippocampus and is responsible for auditory and semantic processing. It lies below the lateral sulcus.
ANSWER: **temporal** lobes
<Kirsch>