2016 OAC Regionals - Round 7

Questions written by Ike Jose and Steven Wellstead

Category Round

American Literature: Questions in this category will deal with the moon.

<u>Team A</u>: This author dramatized Billy and Saxon Roberts, two men eking out a living in Oakland, in his novel *The Valley of the Moon*. He also wrote about a literary critic who is rescued from a shipwreck in his novel *The Sea-Wolf*.

ANSWER: Jack **London** [or John Griffith **London** or John Griffith **Chaney**]

<u>Team B</u>: This author allegorically depicted a Nazi invasion of a Norwegian town in *The Moon is Down*. He wrote about a man who his targeted for owning the title valuable in the novella *The Pearl*.

ANSWER: John Ernst Steinbeck Jr.

<u>Tossup</u>: One novel by this author includes the character Bernardo de la Paz, who warns others that shipments of hydroponic wheat will cause the moon's resources to run out. That novel by this author is narrated by Mannie O'Kelly-Davis, a technician who is in charge of a computer named after Mycroft Holmes. One of this author's characters learns of the Fosterite Church of the New Revelation and is killed by its members; that character is a man from Mars named Valentine Michael Smith. Name this science fiction author who wrote *The Moon is a Harsh Mistress* and *Stranger in a Strange Land*.

ANSWER: Robert Anson Heinlein

Mathematics: Pencil and paper ready. Answer the following about set theory. For team questions consider the sets A and B. Set A contains the numbers $\{3, 4, 5\}$ ("three, four, and five"). Set B contains the numbers $\{2, 3, 4\}$ ("two, three, and four").

Team B: Give the union of A and B.

ANSWER: {2, 3, 4, 5} [accept answers in any order, so long as they are not repeated]

Team A: Give the intersection of A and B.

ANSWER: {3, 4} [accept answers in any order, so long as they are not repeated]

<u>Tossup</u>: Sets with this property are used to define a topological space. In the discrete topology, every subset of a set has this property. This kind of "ball" describes the shell that surrounds a sphere without its limit points. On the real number line, intervals with infinity and negative infinity have this property. A single parenthesis indicates that an interval has this property, as opposed to a square bracket; thus, intervals with this property do not include their endpoints. Name this mathematical property which is the opposite of closed.

ANSWER: openness [accept open sets or open intervals]

World History: Name these 19th century rulers.

<u>Team A</u>: While serving as the final ruler of the Kingdom of Sardinia, this man was recognized in 1861 as the first king of a unified Italy.

ANSWER: Victor Emmanuel II [or Vittorio Emanuele II; prompt on partial answer]

<u>Team B</u>: This czar, who came to power upon the 1801 assassination of his father, Paul I, ruled Russia until being succeeded in 1825 by Nicholas I.

ANSWER: Alexander I of Russia [or Alexander I Romanov; prompt on "Alexander"]

<u>Tossup</u>: This ruler was known by the nickname Badinguet (BAA-din-"gay"), which was the identity he used to escape his imprisonment at the Ham fortress. This leader first came to power following the June Days uprising, and he chose Baron Haussmann (OHSS-mahn) to redesign and modernize his capital city. This ruler helped install Maximilian as the Emperor of Mexico. He was captured at the Battle of Sedan (suh-DAN) during a brief war with Prussia that led to the establishment of the French Third Republic in 1870. The abdication of Louis Philippe (LOO-ee "fee"-LEEP) in 1848 led to the rule of what Frenchman who was the nephew of Napoleon?

ANSWER: Napoleon III [or Louis-Napoleon Bonaparte; do not accept or prompt on "Napoleon"]

Fine Arts: Answer the following about works of classical music completed or added to by another composer.

<u>Team B</u>: Colin Matthews added a movement called "the Renewer" to this seven-movement suite, whose various movements depict a "mystic" and a "bringer of old age."

ANSWER: The Planets, Op. 32

<u>Team A</u>: Frank Merrick wrote an "English Zone" movement to an orchestral work by this composer. Other composers to add to that aforementioned work by this composer include Felix Weingartner and Robin Holloway, the latter of whom wrote a scherzo (SKAIRT-soh) for it.

ANSWER: Franz Peter Schubert

<u>Tossup</u>: Colin Matthews provided his own material to try to complete this composer's unfinished 10th symphony, which incorporated atonal elements. One symphony by this composer was named after a Jean Paul novel and includes a funeral march based on *Frere Jacques* (FRAY-ruh ZHAH-kuh). The title of his second symphony is taken from an ode by Friedrich Klopstock that begins with the words "Arise, yes, you shall rise again." The nickname of his 8th symphony alludes to the fact that many performers are needed to play it. Name this Austrian composer of such symphonies as *Titan*, *Resurrection*, and *Symphony of a Thousand*.

ANSWER: Gustav Mahler (MAH-lur)

Life Science: Name these bio molecules.

<u>Team A</u>: This type of steroid, which provides structure to the cell membrane, was first isolated from gallstones in a liquid crystal phase.

ANSWER: cholesterol

<u>Team B</u>: The first metabolic cycle that was discovered produces this molecule from ornithine. The synthesis of this molecule disproved the theory of vitalism.

ANSWER: **urea** [do not accept or prompt on "urine"]

<u>Tossup</u>: Ricin ("RYE-sin") a-chains contain an N-glyco sylase that disrupts the structure of this bio molecule. This molecule is held to be self-replicating in a widely accepted "world" hypothesis, whose name was coined by Walter Gilbert. "Micro" pieces of this molecule are responsible for gene silencing. The term "cloverleaf structure" is used to refer to the form of one type of this molecule. In this kind of molecule, uracil replaces the thiamine. Name this genetic material which is single stranded, unlike DNA.

ANSWER: <u>RNA</u> [accept <u>rRNA</u> or <u>ribomsal RNA</u> or <u>tRNA</u> or <u>transfer RNA</u> or <u>mRNA</u> or <u>messenger RNA</u> or <u>microRNA</u>; accept <u>RNA</u> world hypothesis; accept any answers which mention <u>ribonucleic acid</u> in place of RNA; prompt on "nucleic acid"]

World Literature: Answer the following related to poems.

<u>Team B</u>: "Mithridates (mith-rih-DAH-teez), he died old" are the final words of this A.E. Housman poem, which notes that "ale's the stuff to drink for fellows whom it hurts to think." Its title character is told to "eat your victuals fast enough."

ANSWER: "Terence, this is stupid stuff"

<u>Team A</u>: In "Terence, this is stupid stuff," Housman notes that "malt does more than [this man] can to justify God's ways to man." *L'Allegro* (lah-LEG-roh) and *Il Penseroso* (eel PEN-suh-ROH-soh) are poems by this author, who began one sonnet with the words "when I consider how my light is spent."

ANSWER: John Milton

<u>Tossup</u>: A poem that was inspired by this work imagines that Homer's sprite "cursed the access of that celestial thief"; that poem was titled "A Vision Upon this Conceit of [this work]." One section of this work focuses on the "legend of" Sir Artegall. In this work, the boastful Braggadocchio ("brag"-uh-DOHSH-ee-oh) steals a horse belonging to Sir Guyon ("GUY"-ahn), who represents Temperance. In this poem, Archimago ("ARCH"-uh-mah-go) is a sorcerer who tempts the Redcrosse Knight. Gloriana is the title woman of this poem, which was written in a style of "stanzas" named after its author. Elizabeth I is represented by the title monarch in what epic poem by Sir Edmund Spenser?

ANSWER: The Faerie Queene ("ferry queen")

U.S. Government/Economics: Name these presidential elections.

<u>Team A</u>: Henry Wallace was the winning vice-presidential candidate in this election which saw the defeat of Republican candidate Wendell Willkie.

ANSWER: presidential election of 1940

<u>Team B</u>: Charles Dawes was the winning vice-presidential candidate in this election which saw the defeat of Democratic candidate John Davis.

ANSWER: presidential election of 1924

<u>Tossup</u>: One candidate in this election was criticized in articles that were published as part of the so-called "A.B. Plot"; that candidate chose Nathaniel Macon as his running mate after Albert Gallatin (GAL-luh-"tin") dropped out. The top two vote getters in this election had the same vice-presidential running mate. William Crawford finished third in this election, in which the winner was determined by the House of Representatives as part of the so-called "Corrupt Bargain." Despite receiving the highest number of popular and electoral votes, Andrew Jackson did not win what presidential election in which victory was claimed by John Quincy Adams?

ANSWER: presidential election of <u>1824</u>

Physical Science: Answer the following about potential energy.

<u>Team B</u>: The formula for determining the gravitational potential energy of a body revolving around another body is equal to negative the gravitational constant, times the mass of one body, times the mass of the other body, times the distance between the two bodies to *this* power.

ANSWER: <u>-1</u> or <u>negative one</u> or <u>minus one</u> [do not accept or prompt on "one" by itself]

<u>Team A</u>: The formula for determining the potential energy of one of these objects is equal to one half, times a namesake constant, times the displacement from equilibrium squared.

ANSWER: springs [prompt on "simple harmonic oscillators" or partial answers thereof]

<u>Tossup</u>: Gyrators are often used to simulate these devices, whose namesake quantity appears in the numerator of the formula for the Q factor. One half, times a unit named for Heinrich Lenz, times the current squared, gives the potential energy of these devices. Along with a capacitor, this component's energy oscillates in an LR ("L-R") circuit. The strength of these devices, which usually consist of a wire wound into a (*) coil, is measured in units named henry. Give this circuit component in which the energy is stored in a magnetic field.

ANSWER: <u>inductor</u>s [accept <u>reactor</u>s; accept <u>coil</u>s before (*); accept <u>inductance</u>]

World Geography: Name these cities.

<u>Team A</u>: Kingsford Smith is the namesake of the primary airport serving this city, in which Jorn Utzon (yurn OOT-zun) designed a notable building on Bennelong Point just east of a bridge nicknamed "The Coathanger."

ANSWER: Sydney, Australia

<u>Team B</u>: The mouth of the Parana ("par"-uh-NAH) River is just north of this city, in which the Plaza de Mayo sits in front of the presidential mansion known as La Casa Rosada, or "The Pink House."

ANSWER: Buenos Aires (BWAY-nohss "EYE"-"race"), Argentina

Tossup: This city's tallest building, named Sapphire, is within its Levent business district. The Galata (GAH-lah-tuh) Tower provides views of much of this city, which was protected during the Middle Ages by the Theodosian (thee-uh-"DOE"-zhihn) Walls. A promontory in this city named Seraglio ("sir"-AG-lee-oh) Point, which contains such sites as Topkapi ("TOP"-kap-ee) Palace, the Blue Mosque, and the Grand Bazaar, is south of a harbor known as the Golden Horn. This city is located where the Sea of Marmara (MAR-muh-ruh) meets the Bosporus ("BOSS"-puh-russ) Strait. Name this city in Turkey formerly known as both Byzantium and Constantinople.

ANSWER: **Istanbul**, Turkey [prompt on "Byzantium" or "Constantinople" before being mentioned]

U.S. History: Give the following related to monopolies.

<u>Team B</u>: Price discrimination was addressed by one provision of this 1914 antitrust legislation, which was introduced by an Alabama Representative as a supplement to the Sherman Antitrust Act of 1890.

ANSWER: Clayton Antitrust Act of 1914

<u>Team A</u>: The 1895 Supreme Court case *U.S. v. E.C. Knight Company*, which dealt with a potential sugar refining monopoly, was heard during the tenure of this Chief Justice, whose court is better known for establishing the "separate but equal" doctrine in the 1896 case *Plessy v. Ferguson*.

ANSWER: Melville Weston Fuller

<u>Tossup</u>: In the 1920s, a government-sponsored plan to consolidate companies in this industry was developed by Harvard economist William Ripley. Regulation of this industry was the subject of the Elkins Act and Hepburn Act. In 1904, the Supreme Court forced the dissolution of a monopoly in this industry, the Northern Securities Company. The Credit Mobilier (moh-beel-ee-AY) scandal involved companies in this industry, which created the fortunes of Jay Gould and Cornelius Vanderbilt. In 1869 a golden spike was used to complete the first "transcontinental" route in what transportation industry that utilizes locomotives?

ANSWER: railroads [accept train companies or railway companies]

Alphabet Round – Letter H

- 1. These shapes are defined as n-th dimensional versions of squares, where n is higher than 3. The fourth dimension version of these shapes is called a tesseract.
- 2. (MULTI-WORD ANSWER) Engelbert Humperdinck composed this opera about two children who are nearly eaten by a witch after wandering into a forest.
- 3. This man's interest in witchcraft and satanic rites led him to write *The Devils of Loudon*. He is probably more famous for a novel depicting a society that consumes *soma*.
- 4. Mughal Emperor who ruled from 1530-1540 and again from 1555-1556.
- 5. This adjective describes solutions that have a lower concentration of solutes to other solutions. It is often used to describe solutions surrounding cells.
- 6. In some languages, there exists this class of words that indicate a high amount of respect. *Sonkeigo* and *Teineigo* are two modes of speech in Japanese that extensively uses this class of words.
- 7. Second word in the title of the French satirical magazine whose offices were attacked in January of 2015 by the Kouachi brothers, who killed twelve people.
- 8. The title of the first poetry collection published by Wallace Stevens.
- 9. (MULTI-WORD ANSWER) Virginia institution that was the first elected legislative body in the American colonies.
- 10. Jean-Philippe Rameau wrote a theoretical treatise on this phenomenon, which is defined as the simultaneous use of chords or pitches, ideally to create an aesthetically pleasing effect.
- 11. People with excessive amounts of sodium in their diet often have this condition, more commonly called high blood pressure.
- 12. In ancient Roman religion, this is the term for seers or prophets who interpreted the future by analyzing the fecal remains of animals.
- 13. Greek words for "throwing" and "beyond" gave the English language this noun, which refers to exaggeration for rhetorical effect.
- 14. Medieval Baltic trading alliance centered in Lubeck.
- 15. In Greek myth, the twin sister of Phrixus who drowned after falling off of a flying golden ram into the ocean.
- 16. The principle named for this Dutch physicist states that every point of a wave front can be considered as a source of secondary waves.
- 17. (MULTI-WORD ANSWER) 19th century art movement whose practitioners included Albert Bierstadt and Asher Durand.
- 18. (**TWO WORD ANSWER**) Pen name of the Chinese author who wrote about a soldier who fights in the Korean War in *War Trash*. He also wrote about a doctor who waits 18 years so that he can divorce his wife in the novel *Waiting*.
- 19. Strait which separates Anticosti Island from the Gaspe Peninsula at the mouth of the Saint Lawrence River.
- 20. 2nd century Roman emperor who ordered construction of a namesake wall across northern England.

<u>Alphabet Round – Letter H Answers</u>

- 1. hypercube
- 2. <u>Hansel and Gretel</u> [or <u>Hansel und Gretel</u>] (MULTI-WORD ANSWER)
- 3. Aldous Leonard **Huxley**
- 4. <u>Humayun</u> (HOO-"my"-oon) [or Nasir ud-din Muhammad <u>Humayun</u>]
- 5. **hypotonic** [do not accept "hypertonic"]
- 6. **honorifics**
- 7. **Hebdo** [accept *Charlie Hebdo*]
- 8. Harmonium
- 9. House of Burgesses (MULTI-WORD ANSWER)
- 10. harmony
- 11. **hypertension** [do not accept "hypotension"]
- 12. <u>Haruspex</u>es ("hair"-UH-"specks"-eez) [or <u>haruspices</u> ("hair"-UH-spih-seez) or <u>haruspicy</u> ("hair"-UH-spih-see)]
- 13. **hyperbole** ("high"-PUR-buh-lee)
- 14. Hanseatic League [or Hanse or Hansa]
- 15. **Helle**
- 16. Christiaan **Huygens** (HOY-gunz)
- 17. Hudson River School (MULTI-WORD ANSWER)
- 18. <u>Ha Jin</u> (TWO WORD ANSWER)
- 19. **Honguedo** Strait
- 20. **Hadrian** [or Publius Aelius Traianus **Hadrianus**]

Lightning Round

1. One scene in this film is a close-up of a blinking human eye that changes hue after each of six successive blinks. Early in this film, an ape gains control over a waterhole after learning to use an animal bone as a weapon. One character in this film sabotages a mission to investigate a signal being emitted to Jupiter by a black monolith on the moon. A request to "open the pod bay doors" is refused by the super-computer HAL 9000 (hal "nine thousand") in what 1968 film by Stanley Kubrick?

ANSWER: 2001: A Space Odyssey

2. In relativity, this effect produces a shift given by the square root of 1 plus beta over 1 minus beta. This effect produces a redshift in the spectra of a receding galaxy. This effect causes a reduction in wavelength and an increase in frequency for a wave emitted by an object approaching an observer. Name this effect which explains why a passing ambulance's siren changes in pitch.

ANSWER: **Doppler** effect or **Doppler** shift

- 3. Heinrich Biber wrote a series of these works known as the "Mystery" ones since they are meditations on Jesus Christ. Count Moritz von Fries was the dedicatee of one work in this genre that is nicknamed "Spring" due to its light-hearted tone. George Bridgetower was originally the dedicatee of one of these works by Ludwig van Beethoven, but it was later rededicated to Rudolph Kreutzer. Name this type of chamber work which highlights a single stringed instrument. ANSWER: **violin sonata** [prompt on "sonata"]
- 4. This work's "Requiem" scene takes place while accompanied by the "soft pulsation of a single cello string" and features a character noting that "I'm not licked that easily." In another scene of this play, a character picks up both Miss Forsythe and Letta. At the conclusion of this play, the title character hopes to provide a stable financial future for his wife Linda and his two sons Happy and Biff by killing himself. Name this play about Willy Loman that was written by Arthur Miller.

ANSWER: **Death of a Salesman**

- 5. This ruler's wife was a niece of Iyasu V (ee-YAH-soo "the 5th"), who was deposed in favor of this man's predecessor, Zewditu ("zoo"-DEE-"too"). This man became the last ruling monarch of the Solomonic (sah-luh-MAH-nik) dynasty when he was overthrown by the Derg. This ruler endured the Abyssinia (ab-uh-"SIN"-ee-uh) Crisis, which forced him into a brief exile when his country was invaded by Italy in 1935. Adherents of the Rastafari (rah-stuh-FAH-ree) movement worship what man who ruled from 1930 to 1974 as the Emperor of Ethiopia?

 ANSWER: Haile Selassie ("highly" seh-LAH-"see") I [accept Tafari Makonnen Woldemikael; prompt on "Selassie"]
- 6. At the end of the work named for this character, the sight of large walls causes him to praise Urshanabi (UR-shuh-NAH-"bee"). When he is bathing, a snake eats a precious plant owned by this man and sheds his skin right afterwards. This man encounters the ale wife Siduri (SEE-"due"-ree) when he seeks out immortality from Utnapishtim (OOT-nuh-pish-teem), who is a survivor of the Great Flood. This man had earlier slain Humbaba in the Cedar Forest with his good friend Enkidu (ENN-"key"-due). Name this king of Uruk (UR-ook) who titles an ancient Sumerian epic. ANSWER: Gilgamesh [accept *Epic of Gilgamesh*]
- 7. Zeolites are good examples of these substances due to their high surface area for (*) adsorption. Heterogenous ones are in a different phase from the substances in which they interact. These substances reduce the transition state energy. Palladium is used as one of these substances in hydrogenations. Enzymes act as these compounds, which work by lowering activation energy. Name these substances which speed up chemical reactions. ANSWER: **catalysts** [prompt on "sorbents" or "adsorbents" before (*)]
- 8. In the IS-LM ("I-S-L-M") model, the second curve is named for the liquidity preference for this entity. When this quantity is endogenously defined, it is defined by the economy and not by an institution. In micro economic theory, the rate at which it exchanges ownership is known as its "velocity." The amount of this entity that an institution must withhold is known as the reserve ratio. Barter economies completely lack this concept. Name this medium of exchange which is sometimes called "cash."

ANSWER: money [accept clear knowledge equivalents; accept velocity of circulation of money]

9. This author wrote a long work which begins with the story of Ceyx ("SEE"-iks) and Alcyone (al-"SIGH"-UH-nee) and commemorates the death of Blanche of Lancaster. This author of *The Book of the Duchess* was possibly the first to suggest that Valentine's Day was a day for lovers in *The Parliament of Birds*. Another of his works is partly narrated by Sir Thopas (TOH-puss), the Parson, and the Monk; that work takes place during a journey to the shrine of Thomas Beckett. Name this English author of *The Canterbury Tales*.

ANSWER: Geoffrey Chaucer

10. During this conflict, the HMS *Centurion* (sen-CHUR-ee-un) circumnavigated the world under the command of George Anson. At the end of this war, France exchanged the captured city of Madras for the Fortress of Louisbourg (LOO-ee-burg). The sitting British king led troops at the Battle of Dettingen (DEH-ting-en) in this conflict, which included the War of (*) Jenkins' Ear. This war was sparked by the death of Holy Roman Emperor Charles VI ("the 6th"), who had made Maria Theresa his successor. Name this war ended by the treaty of Aix-la-Chapelle (eks lah shuh-PEL) in 1748.

ANSWER: War of the **Austrian Succession** [accept War of **Jenkins' Ear** prior to (*)]

11. This man discussed Moroccans who made a living selling fake fossils in an essay about the public's conception of science entitled "The Lying Stones of Marrakech (mar-uh-KESH)." In a certain work, Daniel Dennett attacked this author in a chapter entitled "Bully for Brontosaurus" for distorting how Darwinism truly works. This author of the essay collection *The Panda's Thumb* is best known for a theory he developed alongside Niles Eldridge. Name this paleontologist who proposed the theory of punctuated equilibrium.

ANSWER: Stephen Jay Gould

12. This nation's lowest point, the Bayovar (BAY-oh-varr) Depression, is in the Sechura (say-CHOO-rah) Desert. Much of its northern border is formed by the Putumayo (poo-too-MY-oh) River. In 1929, this nation received the Tacna (TAHK-nah) Region after a longstanding border dispute stemming from the War of the Pacific. The Nazca (NAHZ-kuh) culture existed in this present-day country, which controls the western end of Lake Titicaca (tih-tee-KAH-kuh). Hiram Bingham rediscovered the site of Machu Picchu (MAH-choo PEE-choo) in what South American nation whose capital is Lima?

ANSWER: Republic of **Peru** [or Republica del **Peru**]

- 13. In one poem, this author noted that "the hour of the spell…blazed like a lighthouse" and that "the wars and the flights accumulated" in you. That poem by this author repeats the line "In you everything sank!" and appears in a collection that also includes "Tonight I can Write the Saddest Lines" and a poem about a "White Bee" that buzzes in the speaker's soul. The collection *Twenty Love Poems and a Song of Despair* was written by what Nobel Prize-winning poet from Chile? ANSWER: Pablo **Neruda** (nay-ROO-dah) [or Neftali Ricardo **Reyes** Basoalto]
- 14. In one book, this philosopher discussed the example of what causes billiard-balls to move to provide an adequate theory of causation. In that same book, he also notes the value of "testimony" in the validity of "miracles." He asked if humans could imagine a "missing shade of blue" to discuss whether or not it was possible one could imagine a sensation that he or she had not experienced. Name this Scottish philosopher who wrote *A Treatise of Human Nature* and *An Enquiry Concerning Human Understanding*.

ANSWER: David **Hume** (hyoom)

15. This country's passage of the Partisan Ranger Act led to the rise of a cavalry group known as Mosby's (MOZE-beez) Raiders. The "Cornerstone Speech" was given by a politician of this nation, which carried out several bank robberies as part of the St. Albans Raid. Two diplomats of this nation were imprisoned during the *Trent* Affair. The Anaconda Plan involved a blockade of this nation during a war that began with an attack on Fort Sumter. Name this short-lived country led by President Jefferson Davis.

ANSWER: Confederacy or Confederate States of America [accept CSA]

16. The horizon problem asks how two objects in this construct can be relatively similar if the separation distance between them is greater than the distance that light could have traveled over a given period of time. WMAP (W-"map") has found that this object is essentially flat. The ultimate fate of this object might be a "Heat Death," or it may undergo a "Big Crunch." Name this object that is thought to have originated about 13 billion years ago with a "Big Bang." ANSWER: universe

17. In this book, the seven sons of Sceva are attacked while trying to perform an exorcism. A speech is given at the Areopagus ("air"-ee-AH-puh-guss) by one character in this book, which features a chapter in which an Ethiopian eunuch (YOO-nuk) and Simon Magus ("MAY"-guss) are converted by Philip the Evangelist. This book recounts the stoning of Stephen and the conversion of Saul on the road to Damascus. Name this book of the Bible that immediately follows the Gospels and recounts the behavior of Jesus' closest followers.

ANSWER: Acts of the Apostles

18. While at a spa, a character in this novel meets Madame Stahl, whose religiosity is largely feigned. In another scene in this novel, a man rides his horse Frou-Frou too hard, causing the horse's back to break. This novel begins by describing how happy families are all alike. In this novel, the title character has an affair with Count Vronsky and ultimately kills herself by jumping in front of a train. Name this novel by Leo Tolstoy.

ANSWER: Anna Karenina

19. One figure in this painting wears a shirt that is adorned with a red cross representing the Order of Santiago. The central figure of this painting is offered a drink from a woman holding a golden tray with a small red cup. Two dwarves appear on the right side of this painting, in which a background mirror reflects the images of King Philip IV ("the 4th") and his wife, who are being painted by the artist in front of the Infanta Margaret Theresa. Name this best known painting by Diego Velazquez (vuh-LAZ-kwez).

ANSWER: Las Meninas (lahss "may"-NEE-nahss) [or The Maids of Honor]

20. The most recent of these events damaged dozens of U.S. Air Force planes near the city of Terzigno (tair-ZEEN-yoh). One of these events led to the relocation of the 1908 Olympic Games. During another of these events, Pliny (PLY-nee) the Elder was killed in the village of Stabiae ("STAY-bee-eye"). That event, which occurred in AD 79, more notably destroyed the towns of Herculaneum (hur-kyoo-"LAY"-nee-um) and Pompeii (pahm-"PAY"). Name this type of destructive event involving a volcano just east of Naples, Italy.

ANSWER: <u>eruptions</u> of Mount <u>Vesuvius</u> (vuh-SOO-vee-"us") [accept <u>eruption</u>s of Monte <u>Vesuvio</u> or <u>eruption</u>s of Mons <u>Vesuvius</u>; accept equivalent answers that mention <u>Vesuvius</u> or <u>Vesuvio</u> and the notion of a volcanic <u>eruption</u>; prompt on partial answers]