New Trier Scobol Solo 2014

Round 4



1. This painter often portrayed his sister-in-law, the painter Berthe Morisot [bairt mor-ee-soh]. Many of his friends, including Jacques Offenbach and Théophile Gautier [tay-oh-feel goh-tee-ay], are portrayed outdoors in his *Music in the Tuileries* [twee-lur-ee]. This artist also painted a series showing a firing squad preparing to execute the emperor of Mexico, Maximilian. A woman surrounded by bottles of alcohol in this artist's *A Bar at the Folies-Bergère* [foh-lee bair-zhair], while a nude reclining woman being brought flowers by a servant is the subject of his painting *Olympia*. Name this French painter who showed two fully clothed men having a picnic with a nude woman in *Luncheon on the Grass*.

Answer: Édouard Manet [ayd-war ma-nay]

2. Elizabeth Tyler promoted the women's version of this group's in the 1920s and tied it to the Woman's Christian Temperance Union. Following the revival of this group by William S. Simmons in 1915, it was popularized by Edward Young Clarke until Clarke was arrested for taking his mistress across state lines. The "imminent lawless action" test was created in a case involving a leader of this group, Brandenburg v. Ohio. Members of this group bombed the 16th Street Baptist Church in 1963. This group was revived on Stone Mountain after its founding was romanticized in The Birth of a Nation. Name this white supremacist group known for wearing white hoods.

Answer: Ku Klux Klan [or KKK]

3. In this province, the Rupert River flows from Lake Mistassini. This province's highest point of Mount Caubvick rests in the Torngat Mountains, while the Nord and St. Maurice rivers rise in the Laurentian Mountains in its south. A group of magma intrusions called the Monteregian Hills rest in this province, as do its Chic-Choc Mountains on the Gaspe Peninsula, which is north of New Brunswick. The La Grande and the Eastmain rivers are sites of this province's James Bay Hydroelectric Project, located east of Ontario. Name this Canadian province whose official language is French, and which includes the city of Montreal.

Answer: Quebec

4. Vacant pairs in these structures create an anomaly named for Schottky ["SHOT-key"], and when particles in these structures occupy interstitial sites, it causes an issue named for Frenkel. In semiconductor production, these substances are often formed by the Czochralski ["choke"-RAHL-skee] process. They are often classified into one of fourteen structures named for Bravais [brah-vay], examples of which are monoclinic and triclinic. Study of these substances uses the laws of rational indices and constancy of interfacial angle. These structures consist of a repeated unit cell which forms a lattice. Name these structures which consist of particles arranged in a uniform pattern, an example of which is quartz.

Answer: <u>crystals</u>

5. In this work, a barber is silent while ten men are beheaded and then talks about his six brothers. This work also tells about the son of a tailor who is unable to learn his father's trade but eventually marries a princess. Also in this work, a sailor who shares his name with a porter talks about the time he was forced to carry an old man on his neck for a long time. That sailor also finds the eggs of enormous birds known as rocs and settles on an island that turns out to be an enormous whale. This work also tells of a woodcutter who finds forty thieves. Name this work in which Scheherazade tells of Ali Baba, Sinbad the Sailor, and Aladdin.

Answer: The <u>Arabian Nights'</u> (Entertainments) [or The <u>One Thousand and One Nights</u> or The <u>Book of The Thousand Nights and One Night</u>; or Alf <u>Laylah wa Laylah</u>; accept similar answers]

6. Despite no real evidence, several Jews were accused of trying to kill this person in what became known as the Doctors' Plot. Scientists imprisoned while this leader was in power were sometimes assigned to sharashkas, where they would work without receiving credit, sometimes under the supervision of Lavrentiy Beria. This leader is often blamed for the Holodomor, a brutal famine during the 1930s. This person encouraged Ramón Mercader to go to Mexico to assassinate Leon Trotsky. Name this leader who consolidated his power after the death of Vladimir Lenin and led the Soviet Union beyond the end of World War II.

Answer: Josef Stalin [or Ioseb Dzhugashvili]

7. This figure was the subject of a sculpture that Alan LeQuire spent most of the 1980s working on. This figure was depicted on common coins worth four drachmas [DRAHK-muhz] in Greece and is depicted leaning on a staff and wearing a helmet in a relief created for the Acropolis in the fifth century BCE. A large bronze sculpture of this figure holding up a spear was moved from the Acropolis to Constantinople and later destroyed by a mob. This figure was sometimes portrayed holding Nike and was often shown with an owl, and she sometimes had the epithets Promachos, Parthenos, or Pallas. Name this Greek goddess associated with Minerva.

Answer: Athena [accept other answers that contain Athena; accept Minerva before the end]

8. The impact of this force on wavelength was the subject of the Pound–Rebka experiment, which demonstrated the relationship between this force and the Doppler effect. Joseph Weber created bars to detect waves associated with this force. The equivalence principle based on this force became the basis of the general theory of relativity, which extended special relativity to account for this force. Objects affected by this force have a period described by Kepler's third law, and an attraction described by Newton's universal law. Name this force that explains the attractions between any two objects with mass and why we are pulled toward the Earth.

Answer: gravity [or gravitational force]

9. Some critics claim that this author based the character of Orual on his wife Joy Davidman in his retelling of the Psyche myth, *Till We Have Faces*. One of his works starts with a letter stating that humans no longer think of doctrines as true or false, so jargons proclaiming a belief as the philosophy of the future are effective. The letters in that work are addressed to Wormwood. This author also wrote a series that ends with a book in which a donkey named Puzzle impersonates a lion who is based on Jesus and is named Aslan. Name this author of *The Screwtape Letters* and *The Chronicles of Narnia*.

Answer: C(live) S(taples) <u>Lewis</u>

10. The second-largest church in Rome is the burial site of this person. Because this person was the chief speaker, he was referred to as Hermes or Mercury after he healed a cripple while in Lystra with Barnabas. This person later refused to travel with John Mark, traveling with Silas instead, and they decided not to leave a prison at Philippi after an earthquake. This person was asked "Why persecutest thou me?" when the light of heaven shone on him while he was on the Road to Damascus, causing his conversion. Name this author of most of the New Testament epistles, an apostle who was originally called Saul of Tarsus.

Answer: (Saint) Paul (the Apostle) [accept Saul of Tarsus before "Saul"]

11. The 14th moon of this planet was discovered in 2013 by examining images dating back to 2004. Its largest moon, which features several geysers that shoot out nitrogen gas, has a retrograde orbit. Urbain Le Verrier predicted the location of this planet before it was observed because of its gravitational impact on another planet, and Johann Galle [YOH-hahn GAH-luh] observed it in 1846. The atmosphere of this planet features several storm systems, one of which was named the Great Dark Spot. Name this planet orbited by Triton that is similar in many ways to Uranus, and which is now considered the outermost planet in our solar system.

Answer: Neptune

12. A lawsuit originating in this U.S. state led to a 2014 Supreme Court decision that overseas human rights abuses could not be tried in U.S. courts, *Daimler v. Bauman*. This state was the named defendant in another 2014 decision declaring that warrantless cell phone content searches are illegal. This is the first state to have a carbon cap-and-trade program. The home state of new House Majority Leader Kevin McCarthy, this is the state where Neel Kashkari is challenging incumbent governor Jerry Brown. Brown has asked residents of this state to cut back on water usage during its 2014 drought. Name this most populous U.S. state, the home of Silicon Valley.

Answer: California

13. This poet addressed a poem to his wife while he was away from her, stating that he sees her "in the dewy flowers" and hears her "in the tunefu' [TOON-fuh] birds" before concluding that every bird's song reminds him of his "Jean". In a different poem by this writer, the speaker compares his love to an object "that's newly sprung up in June". This poet of a "A Red, Red Rose" addresses an "earth-born companion" and ask for forgiveness for how "man's dominion/ has broken Nature's social union." That poem, addressed to a "tim'rous beastie", is "To a Mouse". Name this Scottish poet who wrote the song used to bid farewell to years past, "Auld Lang Syne".

Answer: Robert Burns

14. William Bourne's 1580 plan for this kind of device included leather chambers that could be manipulated by a hand-controlled screw. Starting in 1861, several of these devices were funded by cotton broker Horace Hunley, the namesake of the first of these devices to successfully attack an enemy. The first device of this type to travel under nuclear power was the USS Nautilus. In warfare, these devices are usually classified as "attack" or "ballistic missile" types. One of these devices launched the weapon that sank the RMS Lusitania, and the Germans called these devices "U-boats". Name these conveyances that can travel underwater.

Answer: <u>submarines</u> [accept <u>subs</u>; prompt on <u>U-boats</u>]

15. The malfunctioning lysosomes [LY-soh-sohmz] of Pompe [PAHM-puh] disease primarily affect this tissue, which stores creatine [KREE-uh-tin] phosphate as an easily accessible source of energy. The units of this tissue are the subject of the sliding filament model, and troponin is found in it. One type of this tissue contains intercalated discs, and this tissue is made up of multinucleated cells. This tissue contains a calcium storing organelle called the sarcoplasmic reticulum, and its basic units are made of actin and myosin. This tissue, which is composed of sarcomeres, comes in skeletal, smooth, and cardiac varieties. Name this tissue that contracts, allowing the body to move.

Answer: <u>muscle</u> tissue or <u>muscles</u> or <u>muscular</u> tissue [accept answers that also contain "skeletal", "smooth", "cardiac", or "striated"]

16. In one story by this writer, the main character's wife goes to an Indian fort and is not seen again. That work is set near the place that Kidd the pirate hid his fortune. This person wrote about a character who, while walking with his dog Wolf, found the ghosts of Hendrick Hudson's crew playing ninepins; that story was published under the name Diedrich Knickerbocker. Another of his works is set in Tarry Town, where a teacher falls in love with Katrina Van Tassel but is scared off, possibly by Brom Bones disguised as the Headless Horseman. Name this author of "The Devil and Tom Walker", "Rip Van Winkle", and "The Legend of Sleepy Hollow".

Answer: Washington <u>Irving</u> [accept Diedrich <u>Knickerbocker</u> before "Diedrich"]

17. Plutarch claimed that this person was once smuggled into a palace by Apollodorus in a bedroll. Arsinoe IV at first opposed both this ruler and Ptolemy XIII [13], leading to fighting between those three siblings. This person, believed to be the only Ptolemaic [tah-luh-MAY-ik] dynasty member who learned to speak Egyptian, ruled jointly with the last leader of that dynasty, Caesarion. This leader benefited from Julius Caesar's victory at the Battle of the Nile and later became allied with Mark Antony, who committed suicide when he heard rumors of this person's death after their defeat at Actium. Name this Egyptian queen.

Answer: <u>Cleopatra</u> (VII Thea Philopator)

18. This composer's works for two pianos include his two sets of *Liebeslieder Waltzes*, or *Love Songs*. This composer referred to Bach's *Nach dir*, *Herr*, *verlanget mich* in his fourth and final symphony, and he worked on his first symphony from 1855 to 1876. This composer also wrote variations based on Handel's *Harpsichord Suite No. 1 in B-flat major*. For this composer, 1880 is called the year of the two near-twin overtures, since in it, he wrote his *Tragic Overture* to balance the work he wrote to thank the University of Breslau, the *Academic Festival Overture*. Name this German composer whose song "Good evening, good night" is known as his lullaby.

Answer: Johannes Brahms

19. Joseph Schumpeter introduced the phrase "creative destruction" in his book named *Capitalism*, *Socialism and* (this system). The educator John Dewey believed that the support of this system was a central goal of education systems, which is why he named one of his books for (this system) and *Education*. After being sent from France to study American prisons, Alexis de Tocqueville wrote about the conditions that allowed this system to succeed in America. A republic is a variation on this system that uses representatives instead of being direct. Identify this system whose name is based on the Greek term for "rule of the people".

Answer: <u>democracy</u> [accept word forms]

20. An algorithm to compute this function pairs up digits and looks like long division. This function is applied to 2 pi in the denominator of the standard normal distribution. If a complex number is



Applying this function to the variance of data gives the standard deviation. Its graph is the upper half of a rightward-opening parabola. This function is applied to the sum of the squares of the legs of a right triangle to calculate the hypotenuse. Name this function, equivalent to raising a number to the one-half power, that is expressed using a radical.

Answer: square <u>roots</u> [accept raising <u>to the</u> one-<u>half</u> power before "raising"; prompt on <u>radical</u>]

In one novel by this author, Lavinia Penniman helps raise Catherine and encourages her engagement with Morris Townsend despite the misgivings of Catherine's father, Dr. Austin Sloper. Another one of his novels starts with an Italian Prince in London for his wedding and ends with his lover going to America. That work, about Prince Amerigo and the Verver family, is titled for an expensive item bought from a little shop. This author also wrote about a woman who marries Gilbert Osmond in Italy but argues with him about his daughter Pansy. Name this author of Washington Square, The

Answer: Henry <u>James</u>

TB22. The main library building in this city features the large Rose Main Reading Room and flagpole bases sculpted by Raffaele Menconi. When not planning Chicago, Daniel Burnham designed an early

triangular skyscraper in this city. This city contains bridges designed by Othmar Ammann, who also designed its Lincoln Tunnel. One of its skyscrapers, designed in parts by Philip Johnson and Ludwig

Mies van der Rohe [MEES van dair ROH-huh], is the Seagram Building. This home of the Flatiron Building includes the neighborhood of Turtle Bay, home of the United Nations Headquarters. Name this city whose skyscrapers include the Chrysler Building and Empire State Building.

Answer: New York City, New York [or NYC]

Golden Bowl, and The Portrait of a Lady.

TB23. Identify the body part that is held by St. Bartholomew in Michelangelo's painting *The Last Judgement*, was taken from the Nemean lion and worn by Hercules, and is the outer covering of the body containing dermis and epidermis layers.

Answer: <u>skin</u> [or <u>hide</u>; accept <u>epidermis</u> before it is mentioned]