## New Trier Scobol Solo 2013 Round 6

1. Many of this person's works were published by Friedrich Chrysander, and one of his works was composed as background music for an event staged by Thomas Desaguliers [day-zah-gool-yay] at
$\checkmark$ Green Park. This composer set two Dryden poems to music, "Alexander's Feast" and "A Song for St. Cecilia's Day". This composer's four coronation anthems include Zadok the Priest. One of his works, first performed on a boat traveling near King George the First, is Water Music. This composer collaborated with librettist Charles Jennens on a work that featured the Hallelujah chorus. Name this composer of The Messiah.
Answer: George Frideric Handel
2. The third section of Ovid's Heroides [heh-ROH-ih-dees] is a letter written to this character from Briseis [brih-SAY-is]. This man's disguise as a woman was foiled when he took up a spear in response to a false call to arms. In one account, he was ambushed and killed by the forces of Paris during a secret meeting with Polyxena. Ajax the Greater committed suicide after failing to win this man's armor. Following a quarrel with Agamemnon, he refused to fight until the death of his friend Patroclus, after which this man killed Hector. As an infant, his mother Thetis almost entirely submerged him in the River Styx. Name this Greek hero who was invulnerable everywhere except for his heel.
Answer: Achilles
3. Two of these devices are combined to build a harmonograph, which can be used to draw Lissajous [lees-ah-zhoo] figures. The double rod types of these objects are often used to demonstrate chaotic motion, while a set of these in a row make up a Newton's cradle. One of these was used to demonstrate the rotation of the Earth by Frenchman Léon Foucault. Derivations of the most common formulas associated with these objects approximate that theta equals the sine of theta for small oscillations. Name these devices whose period varies with the square root of its length and which consist of a mass able to swing back and forth.

## Answer: pendulums

4. This conflict introduced swept-wing fighter jets such as the F-86 Sabre, which engaged in skirmishes in MiG ["mig"] Alley. Outpost Harry held out against over a week of constant artillery fire, while battles over White Horse Mountain and Pork Chop Hill ended in stalemates. The American Tenth Corps fought their way out after being encircled at Chosin Reservoir, while U.N. forces broke out of the Pusan Perimeter after an amphibious assault at Inchon led by Douglas MacArthur. Name this 1950 to 1953 war halted by an armistice that established a demilitarized zone along the $38^{\text {th }}$ parallel. Answer: Korean War [or Hanguk Jeonjaeng or Yuk Ee-oh Dongnan or Joseon Jeonjaeng or Joguk Haebang Jeonjaeng; or Han Zhan or Chaoxian Zhanzheng or Kangmeiyuanchao Zhanzheng; or Koreyskaya voyna]
5. This work describes a painting showing a blindfolded woman with a lit torch located at the Central Station. One of the characters in this novel blows out a candle after another character dies. The character who died had put together a report for the International Society for the Suppression of Savage Customs on which he had hand-written "Exterminate all the brutes!" The final words of that dying character are "The horror! The horror!". In this work, a sailor on the River Thames [TEMZ] describes his experiences in Africa. Identify this work about Kurtz that is narrated by Captain Marlow, a short novel by Joseph Conrad.
Answer: Heart of Darkness
6. Many plants in this biome use cauliflory to aid in seed dispersal. The theory of Pleistocene refugia explains its diversity of bird species. Ants produce devil's gardens in one region of this biome, and another region's fauna are separated by Wallace's line. Despite a high rate of decomposition, only $10 \%$ of nutrients are retained in this biome's soil, forcing slash-and-burn techniques to be used when this land is converted for agriculture. Lianas and epiphytes are common in this biome, while the largest species form a canopy where animals like birds of paradise, monkeys, and sloths live. Name this equatorial biome home to greater biodiversity than any other ecosystem, known for broadleaf trees and high precipitation.
Answer: tropical rainforest
7. In one work by this author, a monk is killed by an Italian named Donatello, who resembles a Praxiteles [praak-SIH-tuh-leez] statue. In a story by this author, Aylmer obsesses about a defect on Georgiana's face. In another work, a deed to ancient Indian lands is discovered after Phoebe's lover
$\nabla$ Holgrave presses a spring in a portrait of Colonel Pyncheon hanging in the title house. This author of The Marble Faun and "The Birth-Mark" also wrote about Reverend John Wilson questioning Roger Chillingworth's wife Hester Prynne after she commits adultery. Name this writer of The House of the Seven Gables and The Scarlet Letter.
Answer: Nathaniel Hawthorne [or Nathaniel Hathorne]
8. This river is fed in close proximity by Duck Creek, Muskingum River, and Little Kanawha River near the town of Parkersburg. Fort Anderson on this river was the site of a successful raid by Confederate General Nathan Forrest that became known as the Battle of Paducah. This river
$\checkmark$ flows past Wheeling in the northern panhandle of West Virginia. After being fed by the Wabash River, this ends near Cairo [KAIR-oh], Illinois, where it feeds the Mississippi. This is fed by the Monongahela [muh-NAWN-guh-HAY-lah] and Allegheny [aal-uh-GAY-nee] Rivers in Pittsburgh. Name this river that forms the border between its namesake state and Kentucky.

## Answer: Ohio River

9. One attempt to lessen the power of this person was made when Gabriel Hédouville recognized Andre Rigaud [ree-gaw], whose state was later eliminated by this leader. When this person was arrested, he warned his captors that, while they had the "trunk of the tree of liberty", the roots would bring liberty back, and that prediction was validated by Jean-Jacques Dessalines [day-sah-leen]. Before this person was arrested, U.S. president Thomas Jefferson cut off aid to his country, reversing the policies of John Adams. Name this revolutionary leader of Saint Domingue [doh-meeng], which is now known as Haiti.
Answer: (François-Dominique) Toussaint Louverture [accept either underlined name; accept Toussaint Bréda]
10. Iron chloride in the atmosphere of this body makes it partially opaque to ultraviolet light. The arachnoid features unique to this body were mapped by the Magellan spacecraft. This planet has the least eccentric orbit in the solar system, while its significant topographical structures include the Maxwell Montes, Lakshmi Planum, and Ishtar Terra. In 1610, Galileo observed the phases of this planet, whose permanent layer of sulfuric acid clouds creates an intense greenhouse effect, giving this planet the highest surface temperature. Its rotation is retrograde, and its size is similar to Earth's. Name this second planet from the Sun.

## Answer: Venus

11. One legend from this novel tells the story of why tortoises do not have soft shells, and one character in this work is assaulted by her husband for having her hair braided. Another character in this work Arequently remarks that he wishes his daughter Ezinma would have been born a boy. The gun of the protagonist of this work explodes at a funeral, killing a son of the man being buried, so the protagonist is exiled for seven years. The town in this novel, which is visited by Christian missionaries, is Umuofia. Name this novel in which Ikemefuna is killed by Okonkwo, a work by Chinua Achebe. Answer: Things Fall Apart
12. A kneeling woman kisses a bending man in this person's Eternal Springtime, while a crouching woman with an infant is shown in his Young Mother in the Grotto. Those works are displayed in a museum dedicated to this artist in Philadelphia. This person made a few portrayals of the author Balzac, and his portrayal of six heroes wearing nooses around their necks is The Burghers of Calais. This person spent much of his life working on a set of doors inspired by Dante, above which Dante sat with his chin on the back of his hand. Name this French sculptor whose The Gates of Hell included The Thinker.
Answer: (François-)Auguste(-René) Rodin [accept Eternal Springtime before it is mentioned]
13. Though enzymes containing this element are unusual, two of them, AOR and GAPOR, are used by Pyrococcus furiosus. For many living things, this element is toxic because it interferes with the use of molybdenum and copper. Found with calcium and oxygen in scheelite, this element is often used
$\nabla$ for electrodes in arc welding and in high-speed steel. This element with the highest melting point is combined with rhenium in X-ray tubes. In the early $20^{\text {th }}$ century, this element started being used as a light bulb filament. Name this element that was known as wolfram, which is why its symbol is W. Answer: tungsten
14. William Douglas headed this organization before joining the Supreme Court. A decade before heading the CIA, William Casey headed this organization, during which time it investigated Nixon donor
A Robert Vesco for fraud. Created in part to give a national basis for blue-sky laws, its first leader was
$\checkmark$ Joseph Kennedy. An attempt to strengthen this agency was made in 2002 with the Sarbanes-Oxley Act, which was passed soon after the Enron bankruptcy scandal, and this was strengthened more recently by the Dodd-Frank Act. Name this organization created during the Great Depression to regulate assets such as stocks.
Answer: SEC [or United States Securities and Exchange Commission]
15. One work by this poet describes looking at Mortenson's pasture two years after a fire and seeing blueberries. Another work by this poet describes the location of a broken drinking goblet by "a town that is no more a town". This poet also wrote "The land was ours before we were the land's." In another poem by this poet, a horse "gives his harness bells a shake" when the narrator stops in a place between a frozen lake and the woods not near a farmhouse. Name this poet of "Directive" and "The Gift Outright" who wrote about somebody with "promises to keep" and "miles to go before" he sleeps in "Stopping by Woods on a Snowy Evening".
Answer: Robert (Lee) Frost
16. A measure of how well numbers in this set can be represented by numbers not in this set is the Liouville-Roth constant. One proof showing that a number belongs to this set is based on the fact A that two raised to a natural number cannot equal three raised to a natural number, and another is
$\checkmark$ based on the fact that a positive integer cannot be less than the reciprocal of another positive integer. This set includes the golden ratio in addition to all transcendental numbers, such as pi and $e$. Name this type of real number whose decimal representation neither terminates nor repeats.
Answer: irrationals [or irrational numbers]
17. This politician was criticized for not disclosing his holdings in Caribbean Equity Partners Investment Holdings LTD when he ran for office. This person's father, a pastor for Purifying Fire Ministries, said A he would like to send President Obama "back to Kenya". This politician took the seat formerly held $\checkmark$ by Kay Bailey Hutchison by winning his only election in 2012. Saying that he didn't need 99 new friends in the Senate, this person gave the fourth-longest speech in U.S. Senate history in September 2013 in an effort to defund the Affordable Care Act. Name this senator from Texas.
Answer: (Rafael Edward) Ted Cruz
18. This painter showed a woman standing at a file cabinet and a man sitting at his desk in front of a banker's lamp in his Office at Night. A similar picture, which gives a view that is in one large window and out another one as a single worker looks outside, is Office in a Small City. One of his works
$\checkmark$ shows a woman with a hat and green coat drinking alone, while another shows two women, one in green and one in purple, facing each other at a Chinese restaurant. Another work appears to be set at a triangular bar with a server dressed in white and three customers. Name this American artist of Automat, Chop Suey, and Nighthawks.
Answer: Edward Hopper
19. The navy of this man's rival was decimated when this man's son defeated Abantus at the Battle of Hellespont, and this emperor finally beat his rival at the Battle of Chrysopolis [kry-SAH-puh-liss]. This emperor put down Maximian's revolt after that man proclaimed this ruler was dead. He supposedly saw a cross in the sky before defeating a force twice that of his at the Battle of Milvian Bridge. This enemy of Licinius joined with him to support religious tolerance by issuing the Edict of Milan. Name this first Christian Roman emperor, in whose honor the city of Byzantium was temporarily renamed.
Answer: Constantine I [or Constantine the Great; prompt on Constantine]
20. This person wrote "Man has, as it were, become a kind of prosthetic God." In the same work, he wrote "What decides the purpose of life is simply the program of the pleasure principle." Those quotes are from Civilization and Its Discontents. In another work, this person discussed the fear of horses in five-year-old Herbert Graf, who this person called Little Hans. This person used the phrase "Royal Road to the Unconscious" in his work The Interpretation of Dreams. Name this person who divided the human psyche into the id, ego, and superego, and who was considered the father of psychoanalysis.
Answer: Sigmund [ZEEG-moont] Freud [or Sigismund Schlomo Freud]

TB. The high-temperature version of this process commonly uses lanthanum strontium manganate and yttria-stabilized zirconia. The Hall-Héroult process is a version of this process used to produce aluminum, while a Downs cell uses carbon and iron in this process to produce sodium. The second law of this process uses equivalent weights to predict the amount of output; that and its first law were developed by Michael Faraday. Name this process that uses an anode and cathode as the sites of a chemical reaction caused by a direct current, especially the decomposition of water into hydrogen and oxygen.
Answer: electrolysis [accept word forms]

TB. Mark Morris used G.I. Joe in his modern version of this work, and Matthew Bourne set this work in an orphanage. This work's second act begins with a series of character dances, including ones for the clowns who begin in Mother Ginger's skirt. The first act ends with the Waltz of the Snowflakes. The version of this work that became popular in America was by George Balanchine [bah-lahn-sheen], who played Drosselmeyer. Part of this work takes place in the Land of Sweets, which is headed by the Sugar Plum Fairy. Identify this work named for Clara's Christmas present, a ballet by Tchaikovsky. Answer: The Nutcracker Suite

TB. Identify the color that appears in the name of a viral disease studied by Dr. Walter Reed, names a type of unethical journalism based on sensationalism and exaggeration, and is the primary color of
A sunflowers and lemons.
Answer: yellow

