Scobol Solo 2019

Packet 11 (Round 11)



1. Boxes in the shape of this god were used as places to plant corn in mud. Those boxes were often wrapped and placed in tombs and referred to as this god's "bed". As time went on, this god rather than Anubis [uh-NOO-biss] became associated with the god Khenti-Amentiu [KEN-tee ah-MEN-tee-oo], whose temple in Abydos ["uh-BY-dose"] was eventually dedicated to this god. When they died, pharaohs became manifestations of this god. This god's body was cut into 26 pieces when he was murdered, and his sister buried all but one of the pieces. Name this green god of the afterlife who was the brother and husband of Isis ["EYE"-siss].

Answer: Osiris [oh-SY-riss] [or Usir]

2. People who have been exposed to this compound have excessive [not a typo] trans,trans-muconic [myoo-KAH-nik] acid in their urine. This compound is combined with propene [PROH-peen] in a Friedel-Crafts alkylation to make cumene ["CUE-mean"]. Because this compound causes leukemia, its use as a solvent has been decreased, and its use in gasoline is strictly regulated. Replacing two hydrogen atoms from this molecule with methyl groups creates a xylene [ZY-leen] molecule, and replacing one hydrogen atom creates a toluene [TAHL-yoo-een] molecule. This compound is the simplest aromatic hydro-carbon. Name this molecule whose chemical formula is C_6H_6 .

Answer: <u>benzene</u> [prompt on C_6H_6 before the end]

3. An organization named for this person was led by Karl Liebknecht [LEEB-"connect"] and Rosa Luxemburg [pause] and attempted a Communist Revolution in Germany in January 1919. This military leader probably was killed at the Battle of the Silarius River, though his body was never found. This person lost that battle to Marcus Licinius [lik-IN-ee-uss] Crassus. This person had defeated Gaius ["GUY-us"] Claudius Glaber by repelling down Mount Vesuvius. This person worked with Crixus to build an army that could fight the Romans in the Third Servile War. Name this gladiator who raised an army of people who, like him, were escaped slaves.

Answer: <u>Spartacus</u>

4. An old gentleman in this play says he has a cat named Socrates in response to a logician's syllogisms. This play ends with the protagonist screaming "I'm not capitulating!". In this play, a receptionist named Daisy works at a newspaper office and is loved by both Dudard [doo-dar] and the protagonist. The three of them are together when they learn that the fire station has been destroyed by animals. This play's protagonist is an alcoholic named Bérenger [bair-en-zhay], who does not go through the same transformation as everybody else. Name this play set in a French town by Eugène Ionesco [oo-ZHEN yoh-NESS-koh] that is titled for the animal its characters change into.

Answer: <u>Rhinoceros</u> [or <u>Rhinocéros</u>]

5. One painting by this artist shows a farm building and two large trees during sunset, and its left side shows a larger bright white building. Another painting by this artist set near that one shows a warmly dressed boy running down a hill. Those works, Winter 1946 and Evening at Kuerners, are set at a farm in Chadds Ford, Pennsylvania. Another painting by this artist is set in Cushing, Maine and depicts a woman in a pink dress pulling herself along the ground. Name this 20th-century artist who painted Christina's World.

Answer: Andrew Wyeth

6. In the FIRAS experiment, the spectrum of the cosmic microwave background was compared to the spectrum of one of these objects. These objects emit an amount of radiant heat energy proportional to the fourth power of their absolute temperature, according to the Stefan-Boltzmann law. The emissivity of these objects equals 1, and the energy from them emits independently of direction. The spectral-energy distribution of radiation emitted by these objects is given by Planck's law. This theoretical object is approximated by a hole in the surface of an object with a very dark interior. Name this ideal object that absorbs all incident radiation, including light.

Answer: <u>blackbody</u> [prompt on <u>black hole</u>s before "approximate by a hole"; do not accept "black hole" after that]

7. This type of law originated after a case involving James Workman, who said "We didn't ask for any of" these laws. One of these laws was invoked in 2018 after Michael Drejka [DRAY-kuh] and Markeis [mahr-KEES] McGlockton got into an argument over the use of a handicapped parking space. This same law was invoked by George Zimmerman, who was acquitted after a 2012 incident with Trayvon Martin. These laws expand the castle doctrine to public locations. A hotline nicknamed for these laws was set up by the U.S. Concealed Carry Association. Name these laws that allow the use of lethal force even though retreating would have been possible.

Answer: <u>stand-your-ground</u> laws [prompt on <u>line in the sand</u> or <u>no duty to retreat</u>]

8. In one novel by this author, the title character receives a letter from Lucas's friend Geraldine, a former student who dots her letter I's with little open circles. That letter in this author's novel states that the title character's daughter, Junie, had been locked in a car while Madeleine argued with Valentine Gersbach. In another novel by this author, the narrator says that his brother Georgie was born an idiot. This author wrote about that protagonist going to Mexico with Thea. Like many of this author's characters, that character grew up in Chicago. Name this author of *Herzog* and *The Adventures of Augie March*.

Answer: Saul <u>Bellow</u> [or Solomon <u>Bellows</u>]

9. When this person was 16, he decided to always wear black to show he was in mourning for his country. Early in his political career, this person was imprisoned at Savona and then exiled to Geneva and Marseille [mar-say], from where he wrote a letter to Charles Albert. This person, Carlo Armellini, and Aurelio Saffi led the short-lived Roman Republic in 1849. This person started a group based on the idea "one, independent, free republic". Name this person who joined the Carbonari, started the secret society Young Italy, and who refused to be a part of the Italian government because it included the Savoy monarchy.

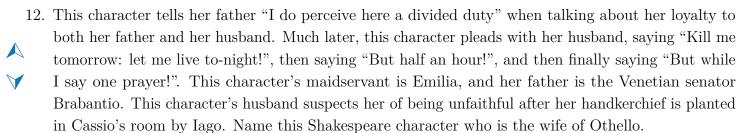
Answer: Giuseppe <u>Mazzini</u> [accept Joseph <u>Mazzini</u>]

10. The last piece in each of Frédéric Chopin's group of twelve études [ay-toodz] is in this key signature, those are his *Ocean* and *Revolutionary* Études. Shortly after his marriage, Wolfgang Mozart wrote the solo soprano parts of his *Great Mass* in this key for his wife Constanze [kon-STAHN-zuh]. The first and third movements of Beethoven's fifth symphony are in this key, which is unusual because it ends in a major key even though it is primarily in this minor key. This minor key's three flats are E flat, A flat, and B flat. Name this key signature whose relative major is E-flat major.

Answer: C minor [before "minor", do not accept or prompt on "C"; after "minor", accept C]

11. The first probe from this program is designated "2" and overheated one of its magnet·o·meters ["magnet"-AH-mih-turz] in 2006. The second probe from this program, designated "1", took the Family Portrait image in 1990 at the request of Carl Sagan [SAY-gun]; that photo included the Pale Blue Dot. Both probes from this program detected a hydrogen wall that was confirmed by New Horizons. Both probes from this program carry Golden Records with natural sounds, Chuck Berry's "Johnny B. Goode", and other music. Both probes from this program surpassed the Pioneer probes to become the farthest-away artificial objects. Name this mission that sent two probes to distant planets and interstellar space.

Answer: Voyager (1 and 2)



Answer: <u>Desdemona</u>

13. One work by this philosopher begins with a prayer in its section "The Expectancy of Faith". This writer referred to that work as "discourses" rather than "sermons" because he did not have the authority to preach. Another work by this philosopher begins by asking "What is a poet?" in its "Diapsalmata" [dee-ahp-sal-MAH-tuh] section. The first part of that work by this author is in the format of papers written by "A", while the second part has letters written from "B" to "A". This person also wrote about Abraham in a text for which he used the pseudonym "Johannes de Silentio". Name this Danish philosopher who wrote Eighteen Upbuilding Discourses, Either/Or, and Fear and Trembling.

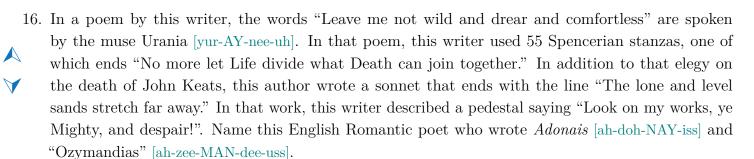
Answer: Søren (Aabye) <u>Kierkegaard</u> [SAH-run <u>KEER-kuh-gard</u>]

14. In 2004, this organization produced the movie *Celsius 41.11*. In 2008, this organization produced a documentary with commentary from Robert Novak and Dick Morris, among others. This organization tried to show that movie using cable video-on-demand, violating the McCain-Feingold Bipartisan Campaign Reform Act. This conservative organization made *Hillary: The Movie* and won its case against the Federal Election Commission. Name this organization that won a Supreme Court decision declaring that corporations can spend money as they wish because they have free speech rights.

Answer: <u>Citizens United</u>

15. These organisms, which form a phylum or division depending on whom you ask, have carpo·sporo·phytes ["CARP-oh-SPORE-oh-fights"] that develop into diploid [DIP-loyd] spores called carpo·spores. According to recent discoveries, the coralline [KOR-uh-lin] type of this organism has been around for 400 million years. Those organisms deposit calcium carbonate in their cell walls, which strengthens coral reefs. Like cyano·bacteria ["sigh-AN-oh-bacteria"], these organisms get their color from phyco·bili·proteins [fy-koh-BIL-ih-"proteins"]. Some of these organisms, such as dulse, are eaten by humans. These organisms are the source of agar. Identify these organisms that are named for their color and that can conduct photosynthesis under deeper water than green organisms.

Answer: Rhodophyta or red algae or Rhodophytes [prompt on algae or seaweeds]



Answer: Percy Bysshe Shelley

17. This mountain range is the setting of Harold Bell Wright's novel *The Shepherd of the Hills*. Though this mountain range is not in New England, part of it is called the Boston Mountains. This range's highest peaks include Taum Sauk Mountain, Brannon Mountain, and Turner Ward Knob. A reservoir named as the "Lake of" these mountains was formed by impounding the Osage ["OH-sage"] River. The towns Joplin, Bentonville, Fayetteville, and Branson are in this range. Name this mountain range located primarily in Arkansas and Missouri.

Answer: Ozark Mountains or Ozarks

18. To prepare for this job in the production of *Mudbound*, Rachel Morrison studied the work of Walker Evans and Arthur Rothstein. After special Academy Awards were given to W. Howard Greene in the mid-1930s, from 1939 to 1967 separate Academy Awards for color and black-and-white were given to people who held this job. Gregg Toland, who held this job on *Wuthering Heights* and *Citizen Kane*, was known for his deep focus techniques. Name this position that often works closely with a movie director to select cameras and film while working on a movie.

Answer: <u>cinematographer</u> or <u>cinematography</u>

19. Mathematicians do not know whether it is possible to find a point in the same plane as a unit square, either inside or outside of the square, such that the distances from the point to each vertex are all this type of number. Thomae's [toh-MAY'Z] function gives positive outputs when the input is this kind of number. A spiral-like diagram is used to show that this set of numbers is countably infinite. According to legend, Pythagoreans believed that all numbers were this type of number until Hippasus proved that the square root of 2 is not this kind of number. Give this term for numbers that can be expressed as quotients of integers and can also be expressed as decimals that terminate or repeat.

Answer: <u>rational</u> number or <u>rational</u>s [do not accept or prompt on "irrational(s)"]

20. This leader's diaries and a biography of his son were translated into English by Annette Beveridge. His diaries were written in Turkic but included poems he wrote in Persian. According to those books, this leader died months after walking around his son's bed and praying for his son's illness to be transferred to him. This leader built ten gardens in Kabul and was buried in one of them, even though he died in Agra. This leader gained territory by defeating Rana Sanga at the Battle of Khanwa and Ibrahim Lodi at the First Battle of Panipat [PAH-nee-puht]. Name this father of Humayun and

Answer: <u>Babur</u> [prompt on Zahir-ud-din <u>Muhammad</u>]

grandfather of Akbar who started the Mughal dynasty in India.

This is the end of regulation. Check the score. If it is tied, proceed to overtime tossups. If it is not tied, the game is over.

TB21. This scientist and a French scientist independently discovered that the number of stereo-isomers of an

organic compound depends exponentially on the number of asymmetric carbon atoms. The "factor" named after this person is often very close to 1 and is used to quantify how the dissociation of a solute affects colligative [kuh-LIG-uh-tiv] properties. The equation named for this person gives the

relationship between the change in the natural log of the equilibrium constant in terms of enthalpy change and temperature. Name this Dutch scientist who won the first Nobel Prize in Chemistry.

Answer: Jacobus "Henry" van 't Hoff (Jr.) [prompt on partial last name]

If the score is still tied, continue. If it is not tied, the game is over.

TB22. After Filippo Lippi painted *The Virgin and Child with Two* of these creatures, Sandro Botticelli painted *Madonna and Child with* one of these creatures. A painting by Pieter Bruegel [BROO-gull]

the Elder depicts the fall of these creatures during their rebellion. In a painting by Caravaggio, one of

these creatures guides the hand of St. Matthew as Matthew reads, and one of these creatures is above Matthew in another painting titled *The Inspiration of Saint Matthew*. The depiction of these creatures is often based on depictions of cherubs [CHAIR-ubz], which are a type of this creature. Name these creatures that are often depicted wearing white and having wings.

Answer: angels [do not accept or prompt on answers containing "seraph" or "cherub"]

If the score is still tied, continue. If it is not tied, the game is over.

TB23. The word for this type of building is based on a Greek measure equal to approximately 180 meters. A building of this type in Athens is called the Panathenaic [pan-uh-thuh-NAY-ik]. One of these buildings in Beijing is called the Bird's Nest, and one of these structures in Michigan is nicknamed "the Big House". Name these buildings that host major sporting events.

Answer: <u>stadiums</u> [or <u>arenas</u>; accept <u>stadia</u>; prompt on <u>amphitheaters</u> or <u>coliseums</u> or descriptive answers referring to sports venues]

There are no more overtime questions available. If the score is still tied, contact the control room for further instructions. If it is not tied, the game is over.