

Scobol Solo 2020

Packet 2 (Round 2)



1. Around a black hole, these objects can orbit on a “sphere” named for them, whose radius is three-halves the Schwarzschild [shvarts-“child”] radius. When these objects strike a charged particle, their energy decreases according to the Compton effect. The existence of these objects was a basis for Albert Einstein’s explanation of why electrons are sometimes emitted when materials are struck by waves. Name these objects that are both the force carrier for the electromagnetic force [pause] and the quantum of light.

Answer: photons

2. In this play, Rebecca is told “This is no silly season” after saying “A child’s spirit is like a child.” Soon after that, a man in this play states “We vote by name in this society, not by acreage” to a wealthy man who has one living child after his seven other children have died. That man is Thomas Putnam, and the person talking to him in this play is John Proctor. This play opens with the slave Tituba [TICH-oo-buh] trying to help Betty, who is the daughter of Reverend Samuel Parris. Name this Arthur Miller play about the Salem witch trials.

Answer: *The Crucible*

3. Much of the area of this country is taken up by West Side National Park, which is on Andros Island. This country’s town of New Plymouth is on Green Turtle Cay, which is one of the barrier islands near the Abaco [AB-uh-koh] Islands. This country’s capital and most populous city is on the island of New Providence. This country takes up most of the Lucayan [loo-ky-un] Archipelago, though the far southeastern part is taken up by Turks and Caicos [KAY-kohss]. A major tourist attraction in this country is Atlantis Paradise Island. Name this former British crown colony near Florida whose capital is Nassau.

Answer: (Commonwealth of) The Bahamas

4. During the February 26 Incident, this person refused to accept the cabinet’s resignation when there were rumors of the prime minister’s death, and he threatened to take over the Imperial Guard. 20 years into this person’s rule, he was forced to admit that he was “the symbol of the state and of the unity of the people“ but not descended from a god. He avoided being tried as a war criminal. This person was his country’s head of state at the same time that Hideki Tojo was the head of government. Name this predecessor of Akihito who was the Emperor of Japan during World War II.

Answer: Hirohito [or the Showa emperor]

5. The Vaseline and Burmese types of this substance contain uranium. The transformation of a substance into either this substance or something similar is called vitrification. An old and decorative way to work with this substance, especially in Venice, is called millefiori [mil-eh-FYOR-ee]. This substance can be etched or frosted using hydro-fluoric [“hide”-roh-FLOR-ik] acid, but mostly it is extremely inert, so it is used to make many types of containers used in laboratories. A common way to make this substance is to quickly cool silica so that it forms an amorphous solid instead of a crystal. Name this substance that is easily breakable and often transparent.

Answer: glass [prompt on amorphous solids before “amorphous”]

Check the score.

6. For movie soundtracks, Dmitri Shostakovich [shuss-tah-KOH-vich] wrote several pieces of this type, the most famous of which is the seventh movement from *Suite for Variety Orchestra* for the film *The First Echelon* [ESH-uh-lahn]. That piece is often called the second of these pieces because it is the second one in the suite. Another piece of this type was originally written for a carnival choir, but its lyrics extolling the title river are rarely sung. That piece, “The Blue Danube”, was written by the so-called “king” of this type of music, Johann Strauss II. Name this type of music that is often danced to and that is written in triple time.

Answer: waltzes

7. In a novel by this author, Ricardo Arana [ah-RAH-nuh] is called “the Slave” because he is more submissive than the other boys. This author portrayed the controversy surrounding the Slave’s death after he tells officers that Porfirio [por-FEAR-ee-oh] Cava stole a chemistry test. That novel by this author is set at the Leoncio [lay-OHN-see-oh] Prado Military Academy and is called *The Time of the Hero*. This author also wrote a novel in which one of the title characters is Pedro Camacho, who writes soap operas for a radio station, and the other title character is the sister-in-law of the protagonist’s uncle. Name this Peruvian author of *Aunt Julia and the Scriptwriter*.

Answer: (Jorge) Mario Vargas Llosa [prompt on partial last name]

8. A content model of this concept uses warmth and competence components. This term is used as an adjective in front of the word “threat” to describe test performances if students are told that tests measure underlying abilities. This term was first used in its modern sense as a noun by Walter Lippmann in the book *Public Opinion*, where it was described as a “preconceived and oversimplified notion”. The thoughts associated with this term often support the attitudes and feelings associated with prejudice. Name this term used to describe biases that are often used against people based on their race or gender.

Answer: stereotypes or stereotyping

9. Apéry's [ah-peh-ree'z] theorem states that taking the Riemann [REE-mon] zeta function of 3 produces this type of number. Inputting these numbers gives an output of 0 for Thomae's [TOH-may'z] function, which is also known as the popcorn function or raindrop function. All transcendental numbers are this type of number, and so are some but not all algebraic numbers. If the discriminant is *not* a perfect square but is positive, then solutions to quadratic equations are this type of number. Decimal representations of these numbers do not terminate or repeat. Name these real numbers that cannot be expressed as a ratio of integers.

Answer: irrational number or irrationals [do not prompt on "rational(s)"]

10. This person's right shoulder never fully healed after he was injured while fighting under Andrew Jackson at the Battle of Horseshoe Bend. In this person's most famous victory, he injured his right ankle when his horse Saracen [SAIR-uh-sen] was shot. That victory was won in 18 minutes, though the slaughter afterwards lasted longer. This person led troops to that victory over Antonio López de Santa Anna at the Battle of San Jacinto [juh-SIN-toh], leading to Texan independence. Name this person who became the first president of the Republic of Texas and the namesake of what is now its most populous city.

Answer: Sam(uel) Houston

Check the score.

11. The only nude by this painter also depicts Cupid wearing a blue ribbon across his chest, holding an object draped in pink ribbons. In that picture, this artist showed Cupid holding up a mirror in front of a red curtain so that Venus can see herself. Another painting by this artist contains a mirror that allows the viewer to see the king and queen. In that painting, this artist also depicted both the queen's chamberlain at a background doorway and himself painting. The foreground of that painting shows a young woman in a white dress being attended to. Name this painter of the *Rokeby* [ROHK-bee] *Venus* and *Las Meninas* [lahss may-NEE-nahss].

Answer: Diego (Rodríguez de Silva y) Velázquez

12. In this novel, the narrator helps his mother hide under a bridge after she faints. The next chapter of this novel begins with the narrator seeing men running towards an inn. That group of men, which includes a blind beggar called Pew, enters the inn and finds Billy's dead body. After those scenes at the Admiral Benbow Inn, this novel moves to a ship called the *Hispaniola*, where Israel Hands tries to kill the narrator. The antagonist of this novel has a parrot named Captain Flint and a missing leg. Name this novel about Jim Hawkins and Long John Silver, written by Robert Louis Stevenson.

Answer: Treasure Island

13. A healthy adult has a little over 1 million of these structures, and the ones closest to the medulla are the source of the vasa [VAY-zuh] recta blood vessels. Sodium-glucose transport proteins are secreted from this object's proximal tubule ["TUBE"-yool]. The tubule section of this structure contains a section used to recover water and sodium chloride, the loop of Henle [HEN-lee]. The corpuscle of this structure contains a glomerulus [gloh-MAIR-yoo-luss] inside a Bowman's [BOE-mun'z] capsule. This structure contains a renal corpuscle and a renal tubule that is used to remove urine from blood. Name this functional unit of the kidney.

Answer: nephrons [NEF-rahnz]

14. Somebody working for this person put out a statement in 2014 stating "If forced to release these inmates early, prisons would lose an important labor pool", which this person criticized. This politician often uses the phrase "Let's speak that truth." This person's memoir, *The Truths We Hold: An American Journey*, says that her name means "lotus flower" and that the first two syllables of it should be pronounced like the name of a punctuation mark. This person used the slogan "For the People" when running in the 2020 Democratic presidential primary. Name this former attorney general of California and U.S. senator who on January 20 will become vice president.

Answer: Kamala (Devi) Harris

15. One person from this country promoted passports for stateless people, which were issued to refugees by the League of Nations between the World Wars. That person also helped negotiate the Integrity Treaty for this country's independence. The first Secretary-General of the United Nations, who pushed for the creation of Israel, was also from this country. During World War II, this country had a pro-Nazi government whose leader was executed for treason soon after the war. Name this home of Fridtjof Nansen [FREET-yawff NAHN-sun], Trygve Lie [TRIG-vuh lee], and Vidkun Quisling whose capital used to be called Christiania [kris-chee-A-nee-uh] but is now called Oslo.

Answer: (Kingdom of) Norway [or (Kongeriket) Norge]

Check the score.

16. This poet wrote the stanza "Our two souls therefore, which are one, / Though I must go, endure not yet / A breach, but an expansion, / Like gold to airy thinness beat." That poem, which compares a couple to "stiff twin compasses", was placed in this writer's *Songs and Sonnets*. In another poem, this person wrote the lines "Thou art slave to fate, chance, kings, and desperate men, / And dost with poison, war, and sickness dwell." That poem tells its title subject "Though some have called thee Mighty and dreadful, for thou art not so". Name this author of "A Valediction: Forbidding Mourning" whose "Holy Sonnet X [10]" is sometimes called "Death Be Not Proud".

Answer: John Donne [dun]

17. These clouds and similar but lumpier clouds are often in the marine layer that Californians blame for the so-called “June Gloom”. These clouds are capable of causing slight rainfall, but they do not contain as much water as nimbus clouds. Because these low clouds are continuous, they often make the weather look more ominous than it is. These clouds can be called “high fog”, though they are not very high. These low clouds are similar to other clouds whose names have the prefixes “alto-”, “cirro-”, and “nimbo-”. Identify these clouds whose name is Latin for “layer”.

Answer: stratus clouds

18. During this holiday an acrostic prayer is said whose first three lines respectively refer to compulsion, ignorance, and publicly. That prayer, the Al Cheit [kayt], is recited on this holiday after the Ashamnu [ah-SHAHM-noo]. The idea of a scapegoat is based on an ancient practice during this holiday of sending a goat into the wilderness. This holiday occurs nine days after the new year, on the 10th day of Tishrei [teesh-ray]. This holiday opens with a declaration absolving people of “all vows” between them and God, called Kol Nidre [nee-DRAY]. Name this Jewish Day of Atonement that occurs after Rosh Hashanah and on which people fast.

Answer: Yom Kippur [yohm kee-POOR] [or Yom ha-Kippurim]

19. In response to Senator Henry Foote, this person gave a speech saying “I know no South, no North, no East, no West, to which I owe any allegiance. My allegiance is to this Union and to my state.” The same year, this person told William Preston “I would rather be right than be President.” This person was John Quincy Adams’ Secretary of State. This person finished fourth in electoral votes in the election of 1824, and he was the losing Whig candidate in 1832 and 1844. Name this Kentucky politician who worked on the Missouri Compromise and Compromise of 1850, earning the nickname “The Great Compromiser”.

Answer: Henry Clay (Sr.)

20. At the beginning of this musical, a character is introduced on stage and sings a song that begins “Come on, babe, why don’t we paint the town?”. Many of the characters in this musical want to be helped by Billy Flynn, who favorably compares love to expensive items in the song “All I Care About”. The system called “reciprocity” is the subject of this musical’s song “When You’re Good to Mama”, which is sung by the person who oversees Velma Kelly and Roxie Hart when they are in prison. Name this Kander and Ebb musical, featuring the song “All That Jazz”, that is named for the city where it is set.

Answer: Chicago

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.

^{TB}21. One painting by this artist shows a bottle of wine and a circular slice of ham, with an open eye in the middle of the ham. Another painting by this artist is black except for a large circle in the center that shows an eye. This creator of *The Portrait* and *The Eye* made another painting showing an eye, except the space where the iris should be is a blue sky with clouds. In another painting by this artist, the corners of a man's eyes can be seen, but most of his face is blocked by a hovering green apple. Name this Belgian artist of *The False Mirror* and *The Son of Man*.

Answer: René (François Ghislain) Magritte

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

^{TB}22. In 1920 in this country, there was an attempt to set up a Soviet republic by the Constitutionalist movement of Gilan. Because the person who led this country from 1925 to 1941 got along with Germany, the Allies replaced him with his son. His son's use of the SAVAK [suh-VAHK] secret police and closeness to the U.S. led to a 1979 revolution in this country in which several Americans were hostages. That revolution turned this country into an Islamic republic led by Ruhollah Khomeini. Name this country whose current Supreme Leader is Ali Khamenei and whose current president is Hassan Rouhani [roo-HAH-nee]. Name this country that recently has been enriching uranium and that has its capital at Tehran.

Answer: (Islamic Republic of) Iran [or Persia or (Jomhuri-ye Eslami-ye) Iran]

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

^{TB}23. During this month in 1980, John Lennon was killed. The Boston Tea Party was in this month in 1773. During this month in 1791, the Bill of Rights were ratified. World AIDS Day takes place during this month. During this month in 1776, George Washington crossed the Delaware River and won the Battle of Trenton. Boxing Day is celebrated during this month, as is Christmas. Name this last month of the year.

Answer: December

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.