

Scobol Solo 2016

Packet 1 (Round 1)



1. A type of injury named for Salter and Harris is caused by damage to this structure. This structure is arranged into the zones of reserve, proliferation, hypertrophy, and two others, including one named for a process that occurs in these structures endochondrally [en-doh-“CON”-druh-lee] as opposed to intra-membran-ously. These structures are found at epiphyses [ih-PIF-uh-seez]. On X-rays, these structures appear as open, but they close up after puberty. These structures, which are composed of hyaline [“HI”-uh-leen] cartilage, are the sites of calcification [CAL-sih-fih-KAY-shun] and ossification [AH-sih-fih-KAY-shun]. Name these structures at the ends of long bones where additional bone is formed.

Answer: growth plates [accept epiphyseal plates or physis; prompt on long bones]

2. This author wrote about Baptista Trewthen accepting a proposal from David Heddegan but marrying Charles Stow in the story “A Mere Interlude”. In one of this author’s novels, Damon Wildevé delays his marriage to Thomasin Yeobright because he is still interested in Eustacia [yoo-STAY-shuh] Vye. In another novel by this author, a young child named Sorrow dies, and his mother — who later goes to work at Talbothays Dairy as a milkmaid — writes a note about Alec to Angel Clare. Name this author of *The Return of the Native*, whose works about Wessex include *Tess of the d’Urbervilles*.

Answer: Thomas Hardy

3. This person’s theory of religion stated that “god and society are one and the same” and was based on the ability of communities to create “collective effervescence”. This person, who often worked with his nephew Marcel Mauss, believed that sociology should focus on “ways of acting” that exert a constraint, which he called social facts. This author of *Rules of Sociological Method* and *Elementary Forms of Religious Life* described a mismatch between individuals and society with the term anomie [AN-uh-mee]. Name this Frenchman who developed the categories “anomic”, “egoistic”, “altruistic”, and “fatalistic” to describe suicides.

Answer: (David) Émile Durkheim

4. This composer used a German translation of Albert Giraud's [al-bair zhee-roh'z] poems in his *Pierrot Lunaire* [pyair-oh loo-nair]. A few months after this composer attended the premier of his *Gurrelieder* [GUR-ruh-"leader"], and a few months before the premier of Igor Stravinsky's *The Rite of Spring*, this composer conducted at the *Skandal-konzert*. At that concert, this composer's *Chamber Symphony No. 1* was performed, and his student's work provoked a riot. His first major work was the string sextet *Verklärte Nacht* [vair-KLAIR-tuh nakht]. Name this composer who taught Anton Webern [AHN-tawn VEB-urn] and Alban Berg [AHL-bahn bairk], and was a leader of the Second Viennese School who developed twelve-tone technique.

Answer: Arnold Schoenberg [shurn-bairk]

5. Some of the ways that this mineral can be twinned are named the Japan Law, Dauphine Law, and Brazil Law. This is the most common mineral that has the same chemical composition as moga·nite and tri·dy·mite. Amethyst can be turned into a green form of this mineral called ver·marine. This is the most common mineral in the *continental* crust, though there is more feldspar if the oceanic crust is included and more bridgmanite if the mantle is included. A crystal oscillator made of this mineral is used in many clocks and watches. Name this mineral, a 7 on the Mohs scale, that is in glass and sand, and is chemically silicon dioxide.

Answer: quartz [prompt on silicate or silicon dioxide or SiO₂]

Check the score.

6. This country became independent from the Ottoman Empire through uprisings led by Milos Obrenović [MEE-losh oh-BREN-oh-vich] and Karadjordje [kar-ah-JOR-jay] in the early 19th century. This country is a candidate to join the European Union due to work by former President Boris Tadić [TAH-dich], but his efforts have been slowed by Tomislav Nikolić [TOH-mee-slav NEE-koh-lich]. Nikolić has stoked nationalism in this country by denying the Srebrenica [s'REH-bren-EET-sah] massacre. This country was part of Yugoslavia, and it later joined with Montenegro to form the Federal Republic of Yugoslavia. Kosovo declared independence from this country in 2008. Name this country that was once led by Slobodan Milosević [SLOH-boh-dahn mee-LOH-seh-vich], and whose capital is Belgrade.

Answer: (Republic of) Serbia [or (Republika) Serbia]

7. In one novel by this author, a man quits his regular job after his father-in-law dies, leaving him a lumber mill and a narrow-gauge railroad. This author wrote about how that man goes back to work after running into Dorothy Wynant, a former client's daughter. In another novel by this author, Casper Gutman — who is often called "G" — is looking for an object that was once given to the King of Spain. In that novel by this author, Brigid O'Shaughnessy kills Miles Archer. Name this author who wrote about Nick and Nora Charles in *The Thin Man*, and about Sam Spade in *The Maltese Falcon*.

Answer: (Samuel) Dashiell Hammett

8. One of the colleges at George Mason University was named for this person in 2016. After the phrase “wet works” was found in an email sent by Hillary Clinton presidential campaign chair John Podesta, some conservative activists called for investigations into this person’s cause of death. Soon after this person died, Donald Trump spoke on Michael Savage’s radio show in support of a rumor that this person was found with a pillow over his face. This person died in February 2016 during a quail-hunting trip in Texas, and President Obama nominated Merrick Garland to replace him. Name this former Supreme Court Justice.

Answer: Antonin Scalia

9. A circle created by this phenomenon has the size of its radius calculated by dividing the least solution of the Bessel function of the first kind by π [“pi”]. That solution works for the far-field type of this phenomenon, which applies when the wavelength times the distance traveled by the light is large and is named for Joseph von Fraunhofer [YOH-seff vawn FRAWN-hoh-fur]. The near-field type of this phenomenon occurs when the Fresnel [fruh-nel] number is large. Spectrometers take advantage of this phenomenon by using a grating. This phenomenon explains the patterns formed during single-slit experiments. Name this phenomenon in which waves bend around an obstacle.

Answer: diffraction [accept diffracting; do not accept or prompt on “refraction”]

10. This person wrote “Capitalism and crime have become almost synonymous terms” in his book *Walls and Bars*. When he was sentenced to prison, he said “While there is a soul in prison, I am not free.” When this man was president of the American Railway Union, he lost a Supreme Court case over whether the U.S. could issue a federal injunction to end the Pullman Strike. Many years later, the Supreme Court ruled that the U.S. could stop his protests over World War I, upholding the Espionage Act. Name this person who ran for President five times as the candidate of the Socialist Party of America.

Answer: Eugene V(ictor) Debs

Check the score.

11. This author wrote about Serezha’s [sair-“ASIA’Z”] tutoring experiences in *The Last Summer*. His poem “In Memory of the Demon” is in the collection *My Sister Life*. In a novel by this author, the title character marries Tonya after the death of her mother Anna Iva-nov-na. In that novel, this author also wrote about a woman who marries Pasha after shooting Kor-na-kov; in that novel, which is set in part during the October Revolution, the title character — Yuri — is later cared for by that woman, Lara. In order to stay in the Soviet Union, this writer refused the Nobel Prize. Name this author of *Doctor Zhivago*.

Answer: Boris (Leonidovich) Pasternak

12. In one song in this musical, one main character tells the other “I’ll teach you the proper ploys when you talk to boys.” In another song, the main character to whom that promise was made sings “It’s time to trust my instincts, close my eyes, and leap!”. In this musical, Dr. Dillamond is intimidated by a message on the chalkboard that says “Animals should be seen and not heard.” Dillamond teaches at Shiz University, where the headmistress is Madame Morrible. In this musical, the song “Popular” is directed at a character who later sings “Defying Gravity”. Name this musical about Elphaba [EL-fuh-buh] and Glinda in the Emerald City that gives a different perspective on *The Wizard of Oz*.

Answer: Wicked

13. A southern suburb of this city features the Bouskoura Forest. This major city is about twenty miles southwest of the Miramar, Sablet, and Mimosa beaches, which are in the town Mohammedia. One of this city’s largest beaches is at Ain Diab. The world’s tallest minaret is at this city’s Hassan II Mosque. Many of its major buildings are located near Mohammed V [5] Square. Its Anfa Hotel was used by Franklin Roosevelt, Winston Churchill, and Charles de Gaulle in a 1943 conference. This is the largest port city in North Africa and is southwest of Rabat. Name this most populous city in Morocco, the namesake of a Humphrey Bogart film.

Answer: Casablanca, Morocco

14. A bond order that is not an integer indicates this phenomenon for the molecule. Compounds that exhibit this phenomenon are said to have contributing structures, commonly seen when drawing conjugated dienes [“DIE”-eenz]. The circle in depictions of the aromatic molecule benzene [BEN-zeen] indicates this phenomenon, as a way of explaining de-localized electrons. This concept is exhibited by the nitrate and carbonate ions, whose bonds are all equivalent. Name this phenomenon in which a molecule is described by multiple Lewis structures.

Answer: resonance (structures) [or mesomerism or mesomeric structures; accept electron delocalization before “delocalized”]

15. According to legend, Muslims under Asad ibn al-Furat conquered this island after a nun was forced to marry Euphemius [yoo-FEE-mee-uss]. On this island, the Spartan general Gylippus [jih-LIP-uss] soundly defeated Demosthenes [deh-MAHSS-thuh-nee-z] and Nicias [NIH-see-us] during the Peloponnesian [pel-uh-puh-NEE-zhun] War. That expedition was the idea of Alcibiades [al-sih-“BYE”-uh-deez], who was recalled on the way to this island, causing him to flee to Sparta. This island was the focus of the First Punic War. George Patton studied Thucydides’ descriptions of fighting on this island before his race against Bernard Montgomery to reach Messina. Name this large island that is part of Italy and contains Palermo, Catania, and Syracuse.

Answer: Sicily [or Sicilia]

Check the score.

16. The only unidentified person in this painting is a bodyguard in the back right who is talking to a chaperone. The person behind them in this painting stands on some steps and has the same last name as the painter of this picture. A red cross was added to this painting after its painter died, and some historians believe that the cross was painted by a king who appears in the back of this painting with his wife Mariana of Austria, probably in the reflection of a mirror. The center of this picture shows the Infanta Margaret Theresa in a white dress between her ladies in waiting. Name this painting in the Prado by Diego Velázquez.

Answer: *Las Meninas* [or *The Maids of Honor*]

17. Priests in this system sometimes write three petitions — of which one is burned, one buried, and one submerged in water — for the Three Officials. Based on the statement “One produced Two; Two produced Three; Three produced all things”, this system supports a trinity called the Three Pure Ones. Adherents of this system also often venerate the Eight Immortals on Mount Peng-lai. This system is based on a text that says “The name that can be named is not the eternal name”, which was written around the fifth century BCE and has been traditionally attributed to Lao Tzu. Name this Chinese system based on the natural “way” of the universe.

Answer: Taoism or Daoism [or Taoist or Daoist]

18. A mapping to the complex plane that includes an additional point at infinity is called this person’s namesake “sphere”. A function named for this person, given an input of n , equals the sum as k goes from one to infinity of k raised to the opposite-of- n power, and is zero at certain points within the “critical strip” of the complex plane. As rectangles become thin, another construct named for this person approaches the value of an enclosed area. Identify this German mathematician who is the namesake of a zeta function with a famous hypothesis about it, as well as those “sums” in calculus that are used to define integrals.

Answer: Bernhard Riemann

19. One poem by this writer states “Thy sermons in unequalled accents flowed” and begins “Hail, happy saint, on thine immortal throne.” That poem by this writer is about the Anglican preacher George Whitefield, and was collected in *Poems on Various Subjects, Religious and Moral*. This poet advised “Proceed, great chief, with virtue on thy side” to a man who was then a general and whom this poet had not yet met. Name this writer of “To His Excellency General Washington”, who was brought to America on a slave ship and became the first published African-American female poet.

Answer: Phillis Wheatley

20. The leaders of these people were called *sapas* [SAH-pahz], and its leaders belonged to the Hurin and Hanan dynasties. These people conquered the Chimú [chee-MOO] people — whose capital was Chan Chan — while under the leadership of Pachacuti [pah-chah-KOO-tee]. These people also conquered the Aymara people, but allowed them to keep their language instead of making them switch to Quechua [KAYCH-wah]. One of its last leaders was Huáscar, who was defeated by Atahualpa, after which Francisco Pizarro conquered them. Name this empire that was centered in Cusco [KOSS-koh] in modern-day Peru.

Answer: Incan

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. This person led American victories at the Battle off Cape Palos and Battle off Cape Gata. This person was part of the panel that court-martialed Commodore Barron after the *Chesapeake-Leopard* Affair; when that trial was over, he was given command of the *Chesapeake*. This person captured the HMS *Macedonian* during the War of 1812, but he was captured at the end of the war. When the USS *Philadelphia* was captured, this person disguised his ship as a Maltese merchant ship so that he could pull up to the ship and burn it as part of the Second Battle of Tripoli Harbor. Name this commodore who often sailed on the USS *United States* and the *Intrepid*.

Answer: Stephen Decatur

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

- ^{TB}22. This organ contains nerve receptors such as Meissner's corpuscles and Pacinian [puh-SIN-ee-un] corpuscles. The outermost layer of this organ is called the stratum corneum [STRAT-um KOR-nee-um], and contains many corneocytes [KORN-ee-oh-"sites"]. The boundary of this organ's two primary layers contains rete ridges and papillae [puh-PILL-ee], and is called the papillary [PAP-uh-lair-ee] layer. Stratified squamous epithelium [SKWAH-muss ep-ih-THEE-lee-um] makes up much of the outer portion of this organ, which contains many keratinocytes [kuh-RAT-in-oh-"sites"] and melanocytes ["MELON-oh-sites"]. This organ consists of the epidermis and dermis. Name this organ that covers the body.

Answer: skin [ask for a less specific answer upon responses of epidermis or dermis before "epidermis"]

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

- ^{TB}23. According to an old saying, remedies that contain a part of the cause of the problem contain this part of the dog that bit you. An old idiom claims that you annoy a person by "getting in" this part of them. Name these filaments that grow on humans, including on the tops of their heads.

Answer: hair

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.