

Scobol Solo 2018

Replacement Packet



1. This scientist burned samples with a giant magnifying glass, proving that charcoal and diamond are made of the same element. This person's *Elementary Treatise on Chemistry* incorrectly states that oxygen is a necessary component of acids, but does correctly describe combustion and respiration as the same reaction. This man's work disproving phlogiston [fuh-JIST-un] theory led to the law of the conservation of mass sometimes being named for him. Name this "Father of Modern Chemistry" who demonstrated water was a compound of hydrogen and oxygen before he was executed in the French Revolution.

Answer: Antoine(-Laurent de) Lavoisier [ant-wan lah-vwahz-yay]

2. The "current" or "flux" of this concept is used to derive the continuity equation, and equals $\frac{i\hbar}{2m}$ ["i h-bar over 2m"] times an expression involving wave-functions. The "density" of this concept in a hydrogen atom depends on distance from the center due to spherical symmetry, and can be visualized in a "cloud" named for this concept. According to Max Born, the density of this concept equals the square of the wave-function. Bose-Einstein statistics is a model of a "distribution" of this concept. Name this concept that is important to quantum mechanics because the states of systems are not known with certainty.

Answer: probability

3. Many small organisms practice the clap-and-fling mechanism of this ability. *Quetzalcoatlus* [KET-sul-koh-"atlas"] is the largest animal believed to have had this ability. Ratites [RAA-"tights"] have lost this ability. Reproduction and this ability occur in insects only in the imago [ih-MAY-go] stage. Animals with this ability typically have a thick sternum and hollow bones. *Archaeopteryx* [ar-kee-AHP-tuh-riks] could probably begin using this ability only from a high elevation. Name this ability that is not possessed by kiwis and ostriches, but is possessed by most other birds.

Answer: flight [or flying]

4. The axiom of choice implies that this set can be well-ordered. This is the most inclusionary set such that any unitary matrix with these numbers as entries is also orthogonal. A symmetric or skew-symmetric matrix whose numbers come from this set is also normal. Any Dedekind [DEH-duh-kihnd]-complete ordered field is isomorphic to these numbers, which are sometimes called the continuum. Any complex number can be expressed using two of these numbers, one of which gets multiplied by i before they are added together. The set of these numbers is the union of the sets of rational and irrational numbers. Name this set of numbers that can be depicted by the number line.

Answer: real numbers or reals [accept the continuum or the real line; prompt on \mathbb{R}]

5. On the way to being part of this kind of object, material gets compacted into névé [nay-VAY] and then further into firn. The top of this kind of object may have a ridge called a serac [suh-“ROCK”]. When this kind of object moves, it can leave behind a depression called a cirque [surk]. This kind of object often develops a large crack called a crevasse and can lose mass through ablation [ab-LAY-shun]. Sometimes large chunks of these objects break off in a process called calving. The total mass of these objects in the world is decreasing, causing sea levels to rise. Name these persistent bodies of dense ice.
Answer: glaciers [or ice shelves]
6. John Culpeper led a popular uprising in this colony in response to the British Navigation Acts. This colony passed the Halifax Resolves, which was the first official action taken in the 13 colonies to call for independence from Great Britain. After a pyrrhic [“PEER”-ik] victory at a battle in this colony, Charles James Fox remarked that “Another such victory would ruin the British Army.” The Regulator Movement began in this colony, whose second governor, Thomas Eden, arrested the notorious pirate Blackbeard. Name this colony that contained the site of Sir Walter Raleigh’s failed Roanoke Colony.
Answer: North Carolina [prompt on Carolina or Albemarle province]
7. A newspaper that took a side during this event wrote 100 years later that its editors had “an inexcusable attitude”; the name of that newspaper means *The Cross*. That newspaper opposed the work of Fernand Labori and Edgar Demange [deh-manzh], who at first were unsuccessful during this event. Hubert Joseph Henry killed himself as a result of this event, which was criticized in a letter written for Georges Clemenceau’s [zhorz h klem-en-soh’z] *L’Aurore* [lor-ror] newspaper. Ferdinand Esterhazy fled to England after being convicted during it. This event led to its victim being imprisoned at Devil’s Island. Name this late-19th and early-20th-century event in which a Jewish officer in the French military was accused of espionage.
Answer: Dreyfus Affair [or l’affaire Dreyfus]
8. In defense of homosexuality, this leader stated “There’s no place for the state in the bedrooms of the nation.” This prime minister began the patriation process of the Constitution, which ended partial British control of his country. This person invoked the War Measures Act when Pierre Laporte was killed by the Quebec Liberation Front during the October Crisis. This person was replaced as prime minister by Joe Clark in 1979 but returned to power in 1980. Name this former Liberal Party leader who is the father of the current Canadian prime minister.
Answer: Pierre Trudeau [prompt on Trudeau]

9. During this battle, a nun vowed in her prayer to have a Mass of Thanksgiving sung annually if her side won the battle. The losing side of this battle intended to capture the “Beauty and Booty” of their target. Rodriguez Canal and Chalmette Plantation were sites of heavy fighting in this battle. Lieutenant Colonel Thomas Mullins made the critical mistake of failing to bring ladders and fascines [fass-EENZ] to this battle. Choctaw [“CHOCK”-taw] Indians and the pirate Jean Lafitte [zhahn lah-feet] aided the winning side of this battle, which occurred after the Treaty of Ghent was signed. Name this last battle of the War of 1812.

Answer: Battle of New Orleans

10. In one novel by this author, Luke Gerrish and John Carter kidnap Rob Parker; the kidnappers are pursued by Frank Manton, the title character of this author’s *Silas Snobden’s Office Boy*. In another novel by this writer, the title character meets a man who claims his success came when he developed “a taste for reading and study”. That title character, who lives with Henry Fosdick, saves a child who falls off the Brooklyn ferry, and is rewarded by the child’s father with a job that pays 10 dollars per week, which is better than being a boot-black. Name this 19th-century author of *Ragged Dick* and other “rags-to-riches” stories.

Answer: Horatio Alger (Jr.)

11. When this character sees a flock of injured pheasants, she breaks their necks to ease their pain. A mail-cart man tells this character “You was on the wrong side” after the pointed shaft of the mail-cart kills this character’s horse, Prince. This character’s husband travels alone to the “empire of Brazil” for a year, then starts a farm soon after he marries her. When her husband returns, this character stabs her boyfriend in the heart, killing him. Name this milkmaid at the Talbothays Dairy who marries Angel Clare, and who is the title character in a novel by Thomas Hardy.

Answer: Tess of the d’Urbervilles [prompt on Clare or Durbeyfield or d’Urberville]

12. This author introduced one of his characters by saying “He was staring at me, his eyes dilated with extreme attentiveness.” That character is the Baron de Charlus, a gay member of the Guermantes family. This author’s hometown, which was called Illiers [il-yeh], is now called Illiers-Combray because of him. He wrote about the love affair between Odette de Crécy and Charles Swann. This author’s best-known character recalls his childhood after eating a madeleine dipped in tea. Name this French author who had many of his works collected into *In Search of Lost Time*, a work whose French title is also translated as *Remembrance of Things Past*.

Answer: (Valentin Louis Georges Eugène) Marcel Proust

13. One poem by this writer has 28 lines in a row that begin “with your eyes.” Those lines by this poet are followed by “with your Death full of Flowers” in a poem that ends “Lord Lord Lord caw caw caw Lord Lord Lord caw caw caw Lord”. In another poem, this writer asks Federico García Lorca “What were you doing down by the watermelons?”. That poem begins, “What thoughts I have of you tonight, Walt Whitman.” Another poem by this writer is dedicated to Carl Solomon and begins “I saw the best minds of my generation destroyed by madness.” Name this poet who wrote “Kaddish”, “A Supermarket in California”, and “Howl”.

Answer: (Irwin) Allen Ginsberg

14. A series of works by this artist uses various colors to depict the same electric chair in Sing Sing prison. This artist’s highest-selling painting was from his *Death and Disaster* series and is entitled *Silver Car Crash (Double Disaster)*. A work by this artist shows 50 images of the same person, with the half on the left side presented in bright vibrant colors and the half on the right in black-and-white. This artist is best known for those silkscreen paintings and for his influence on modern art through his work at The Factory. Name this creator of the *Marilyn Diptych* [*“DIP-tick”*] and a series of *Campbell’s Soup Cans*.

Answer: Andy Warhol (Jr.) [or Andrew Warhola (Jr.)]

15. This composer wrote a *Death and the Maiden Quartet* and a song called *Gretchen at the Spinning Wheel*. This composer is known for his song cycles based on poems by Wilhelm Müller [*vil-helm MUR-lur*], such as *Winterreise* [*VIN-tur-“rye”-zuh*]. This composer reworked an earlier song of his for an ensemble comprising a piano, double bass, cello, viola, and violin. Musicologists are unsure of why this composer worked on *Wanderer Fantasy* and *Rosamunde* at the end of his life rather than working on his last symphony. Name this German Romantic composer of the *Trout Quintet* and the *Unfinished Symphony*.

Answer: Franz (Peter) Schubert

16. A musician who played this instrument recorded various quintet albums with Max Roach and wrote the standards “Daahoud [*DAH-ood*]” and “Joy Spring”. Clifford Brown primarily played this instrument, as did a musician who supposedly wrote the tune “Night in Tunisia” while sitting at the bottom of a garbage can. “Salt Peanuts” was written by a musician who played this instrument. An album that includes the tunes “Freddie Freeloader” and “So What” was made by a musician who mainly played this instrument. Name this instrument played by Dizzy Gillespie and Miles Davis.

Answer: trumpet(s)

17. A special form of this practice occurs in a field called a musallah [muh-SUH-luh]. A muezzin [moo-EZ-in] performs the *adhan* [ahd-HAHN] before this practice occurs. This practice must be preceded by a ritual washing called *wudu* [“WOOD”-oo]. This practice must be performed while facing a direction called the qibla [KIB-luh]. The *takbir*, or the declaration that “the Lord is the greatest”, is recited during this practice, which must be performed five times each day as one of the five pillars of Islam. Name this Islamic practice that consists of bowing and professing one’s faith in Allah.

Answer: salat or salah or prayer or praying [or namāz; accept answers that additionally specify the prayer is Muslim or Islamic]

18. In an essay subtitled “Unpacking the Invisible Knapsack”, Peggy McIntosh listed 46 benefits of possessing this trait. Noel Ignatiev described how Irish immigrants were mistreated by people possessing this trait. That work is titled *How the Irish Became* this. In the book *Black Reconstruction in America*, W. E. B. Du Bois argued that the “compensatory” form of this trait was given to certain poor people to prevent dissatisfaction with the elites. Give this common term for people with light skin, generally used for Caucasian people of European ancestry.

Answer: whiteness or being white [accept white privilege; prompt on Caucasian or European before each is mentioned]

19. This person was criticized after he berated a teenager for calling him by a nickname on June 18, 2018, and the criticism grew when the press found plans to build a swimming pool near a private beach at a retreat. This leader is accused of lying about security aide Alexandre Benalla [ah-lek-sahn-dur beh-nah-lah], who used violence against protesters. This person appointed Édouard Philippe [ayd-war fee-leep] as Prime Minister soon after he won the 2017 election over National Front candidate Marine Le Pen. Name this person who replaced François Hollande [fran-swah oh-lahnd] as president of France.

Answer: Emmanuel (Jean-Michel Frédéric) Macron

20. This U.S. state contains Sheep Rock, Painted Hills, and Clarno in its John Day Fossil Beds National Monument. This state’s Little Lava Lake is the source of its Deschutes [deh-SHOOTS] River. This state’s most populous city is near Multnomah Falls. Though California contains Silicon Valley, this state is the home of a collection of hardware companies called Silicon Forest. A fort was set up in the northwest corner of this state in 1811 by the founder of the American Fur Company, John Jacob Astor. Mount Hood is also in this state. Name this western state whose capital is Salem, whose most populous city is Portland, and which is on the Pacific Ocean between Washington and California.

Answer: Oregon

This is the end of the packet.