New Trier Scobol Solo 2014
Round 12

1. William of Ockham wrote that this field is the most useful tool of all the arts. Bertrand Russell wrote that "all Mathematics is the Symbolic" type of this field. John Stuart Mill wrote a book titled for *A System of* (this field), and Karl Popper wrote a book encouraging an increased use of this field in scientific discovery, especially the issue of falsifiability. The predicate form of this field uses statements with boolean values. This field includes the study of syllogisms, in which two premises lead to a conclusion. Identify this field of philosophy which addresses the validity of proofs and different forms of reasoning.

Answer: logic

2. One poem by this author is addressed to a character who is in a "lonely, moated grange" from Shakespeare's *Measure for Measure*. This poet also wrote about a "gray shadow, once a man" who made the mistake of asking for immortality. In addition to "Mariana" and "Tithonus", this poet wrote about a character who declares that "we are equal temper of heroic hearts" who are committed to "strive, to seek, to find, and not to yield." This poet also wrote about the 600 who rode into the "valley of death" in a poem about the Battle of Balaclava during the Crimean War. Name this English poet of "Ulysses" and "The Charge of the Light Brigade".

Answer: Alfred, Lord Tennyson

3. On the right side of a painting by this artist, two women furtively whisper into the large ears of a famous mythical figure. Three satyrs play with the weapons of a sleeping war god in his work *Venus and Mars*. This artist portrayed Midas in the *Calumny of Apelles*, and supposedly burned many of his pagan paintings while participating in the Bonfire of the Vanities. On the right side of one of this artist's paintings, the goddess of flowers is next to the nymph Chloris [KLOR-iss], who is being grabbed by Zephyrus [ZEF-uh-russ]. This artist also painted cattails falling next to a nude goddess standing on a conch shell. Name this renaissance artist of *Primavera* and *The Birth of Venus.*

Answer: Sandro Botticelli [boh-tih-CHELL-ee] [or Alessandro (di Mariano) Filipepi]

4. This man was hit by an arrow that penetrated his lungs during the Siege of Multanese Citadel, which took place during his Mallian Campaign. This man learned to use flaming pigs to counter elephants from King Porus, who he defeated at the Battle of Hydaspes ["high"-DAAS-peez] River. After this man's victory at the Battle of Granicus, he personally led his army from horseback at Issus, where his troops captured the mother, wife, and daughters of Darius III. This unusually compassionate conqueror is credited for spreading Hellenistic civilization. Identify this son of Philip II who expanded the Macedonian Empire to India during the fourth century BCE.

Answer: Alexander the Great [or Alexander III of Macedon or Alexander III of Macedonia]

5. Butch Kardum started the colorist movement in this city, which led to the fame of its set of Victorian Houses, the Painted Ladies. This city includes Mount Davidson and the Twin Peaks. A body of water that shares its name with this city is crossed by the Richmond–San Rafael [ruh-FEL] Bridge and contains the Marin [muh-RIN] Islands. This city's "Little Saigon" is located in its Tenderloin district. Its neighborhoods include Nob Hill, which includes Fisherman's Wharf, and the center of the hippie movement, Haight-Ashbury. One of its islands, nicknamed The Rock and former home of a major prison, is Alcatraz. Name this California city that experienced a 1906 earthquake and is at the south end of The Golden Gate Bridge.

Answer: <u>San Francisco</u>, California

6. Several of these shapes appear in a lattice problem, developed in Korea, that is similar to magic squares and is named for tortoises. Each face of a truncated tetrahedron is either a triangle or this shape. This is the fewest-sided regular polygon that is not a face of any Platonic solid, and this is also the fewest-sided polygon with more diagonals than sides. The interior angles of this regular shape each measure 120 degrees, and its diameters divide this shape into equilateral triangles. Name this polygon whose central angles are each sixty degrees, the shape used to make honeycombs.

Answer: regular <u>hexagon</u>s [accept regular <u>6-gon</u>s]

7. Some religious figures believe that this place was located in what is now Jackson County, Missouri, while others place it at firdaws, which is within Jannah. Ezekiel compared the Pharaoh to trees in this location. Pishon, which goes around Havilah, and Gihon, which goes around Cush, are among the four branches of a river flowing out of this location. It is protected by the flaming sword and the cherubim, and is west of the land of Nod. Name this home of the tree of knowledge of good and evil, where Satan disguised himself as a serpent to expel its human inhabitants Adam and Eve.

Answer: Garden of <u>Eden</u> [may be pronounced AY-dun] [prompt on <u>paradise</u> or similar answers; accept <u>Zion</u> or <u>Tsion</u> before "Ezekiel"]

8. In one play by this writer, Vivie complains that she only knows about mathematics, lawn-tennis, eating, sleeping, cycling, and walking. Vivie is later shocked to learn about what her mother does for a living. In another play by this writer, Adolphus Cusins becomes eligible to inherit a munitions family and marries Barbara Undershaft, who had worked for the Salvation Army. Those plays are *Mrs. Warren's Profession* and *Major Barbara*. Name this Irish playwright who wrote about phonetics professor Henry Higgins' attempt to teach Cockney flower girl Eliza Doolittle in his play *Pygmalion*.

Answer: George Bernard <u>Shaw</u>

9. When this value is held constant, the molar heat capacity of a mon·atomic gas is five-halves R. For a reversible adiabatic [ay-dee-uh-"BAT"-ik] process, this value times volume raised to some power gamma is a constant. The integral of this quantity with respect to the volume gives the work. Processes in which this constant is held constant are depicted as horizontal lines and are called isobaric processes. This quantity is plotted against temperature in a phase diagram. Boyle's law states that this quantity is inversely proportional to volume. Name this quantity that can be measured in atmospheres or pascals, and which is defined as force per unit area.

Answer: pressure [prompt on P]

10. In this novel, one character retells a story that he had told at the Golden Inn in Lima about Steelkilt and Radney. That character also claims that a temple in Tranque is made from a skeleton. One character in this work, nicknamed King-Post and exhibiting an "ignorant, unconscious fearlessness", was a native of Tisbury named Flask. Another character, a Gay Head Indian from Martha's Vineyard, was Tashtego. The leader in this novel has a scar along his entire body and is missing a leg. This novel is narrated by Ishmael and set on the *Pequod*. Name this work about Captain Ahab's pursuit of a whale, written by Herman Melville.

Answer: *Moby-Dick(; or, The Whale)*

11. This country fought against the Teutonic Knights during the 14th century until the Treaty of Kalisz [kah-leesh] was signed by King Casimir III, the last king of the Piast dynasty. In 2010, the president of this country died in a plane crash. This country was invaded the day after the Gleiwitz incident and nine days after the Molotov–Ribbentrop Pact was signed, leading to the fall of this country in September 1939. A trade union started in this country in 1980 is credited for hastening the fall of the Soviet Union. That union, Solidarity, was headed by Lech Wasa [LEK vah-WEN-sah]. Name this country that was once united with Lithuania, and that has its capital at Warsaw.

Answer: (Republic of) Poland [or Rzeczpospolita Polska]

12. In one novel by this author, a son warns his father after the body of General Quesnel ["kennel"] is found in the Seine River. This author also wrote about two items that Captain Leclère wanted to have delivered. This author also wrote about a yellow Bearn pony that a father gives to his son but tells him never to sell. That son also receives a letter introducing him to Monsieur de Treville. In *The Vicomte de Bragelonne*, this author wrote about the twin brother of Louis XIV [14], adding to the legend of the Man in the Iron Mask. Name this author who wrote about Edmond Dantès [dahn-tayss] in *The Count of Monte Cristo* and wrote *The Three Musketeers*.

Answer: Alexandre Dumas (Davy de la Pailleterie), père

13. A structural protein discovered in these cells was named for the ghost-like outlines of these cells it left behind, and these cells do not contain class one major histocompatibility complexes. Some deficiencies in these cells can be traced to poor spectrin production. These non-liver cells are infected by plasmodium in a disease commonly transmitted by female Anopheles [uh-NAH-fuh-leez] mosquitoes. These cells, which develop from reticulocytes [reh-TIK-yoo-loh-"sites"], are destroyed in the spleen. A glutamic acid-to-valine mutation can cause these non-nucleated cells to have a sickle shape. Name these cells which contain hemoglobin and transport oxygen, giving color to a fluid found in the arteries and veins.

Answer: <u>red blood</u> cells [or <u>erythrocyte</u>s; accept <u>RBC</u>s; prompt on partial answers]

14. This composer wrote a piece for the dancer Michio Ito that ended with *Dance of the Wolves* and began with *Song of the Fisherman*. In addition to *Japanese Suite*, this composer wrote *Brook Green Suite* for the junior orchestra at St. Paul's Girls School. Another suite by this composer begins and ends with sections in quintuple meter. That piece has a women's choir in a room whose door is closed at the end of the piece, and it seventh and final section is nicknamed "The Mystic". That work, which is based on astrology, begins with "Mars, the Bringer of War". Name this composer of *The Planets*.

Answer: Gustav(us Theodore von) <u>Holst</u>

15. This country's Funcinpec [FUN-sin-pek] Party did well in 1993 elections, leading to the restoration of its monarchy. Those elections were managed by the United Nations Transitional Authority. After covering a crisis in what is now Bangladesh, Sydney Schanberg teamed with a native journalist in this country to report mass killings during the 1970s. Many of the deaths started after Lon Nol came to power following a coup against Prince Norodom Sihanouk. During the Vietnam War, the U.S. bombed North Vietnamese forces located in this country. Name this country that suffered through the "killing fields" under the leadership of Pol Pot and the Khmer Rouge.

Answer: (Kingdom of) <u>Cambodia</u> [or (Preh Réachéanachâk) <u>Kâmpchéa</u>]

16. IPv6 ["I P v six"] addresses consist of two chunks, each with this many bits. MIME often encodes binary into text using an algorithm named for the "base" of this number. Java's `long` type uses this many bits to represent a number, and modern versions of Windows are available for computers that use 32 bits or this many bits to address their memory. This value in hexadecimal is "four zero", and in Minecraft, it is the maximum size of a stack. Give this number that appears in the name of the most successful computer produced by Commodore, as well as a 1996 console from Nintendo.

Answer: <u>64</u> [accept <u>base 64</u> or <u>64-bit</u> or <u>Commodore 64</u> or <u>Nintendo 64</u>]

17. During this man's time as an assistant to Janet Reno, he advised Reno to allow Kenneth Starr to expand his investigation, leading to President Clinton's impeachment. In 2009, this person referred to the United States as a "nation of cowards" regarding its approach to racism. This person was investigated for perjury after his treatment of James Rosen was criticized for curtailing freedom of the press. In June 2012, this person was found in contempt of Congress over the Fast and Furious scandal, a first for a sitting cabinet member. In September 2014, this person announced that he would resign once his successor was named. Identify this attorney general under Barack Obama.

Answer: Eric (Himpton) Holder(, Jr.)

18. Senator Margaret Chase Smith did not name this person in her Declaration of Conscience speech, but it was viewed as a criticism of a speech this person gave in Wheeling, West Virginia. Criticism of this person by Senator Ralph Flanders led to the formation of the Watkins Committee. Roy Cohn worked as this person's chief counsel after prosecuting Julius and Ethel Rosenberg. His popularity rose after Alger Hiss was convicted of perjury, but dropped after Joseph Welch asked if he had no sense of decency. Name this politician who used the House Un-American Activities Committee in the 1950s to investigate suspected members of the Communist Party.

Answer: Joseph (Raymond) "Joe" McCarthy

19. At the premier of this ballet, the choreographer's daughter Marie Petipa played the part of the Lilac Fairy. This ballet includes a difficult dance called the *Rose Adagio* [ah-DAH-joh], and its signature music is *The Garland Waltz*. Its plot revolves around the failure of Catallabutte to invite Carabosse to a christening, causing Carabosse to curse the infant. A movie version of this story included the song "Once Upon a Dream". The Lilac Fairy takes Prince Désiré to a hidden castle, where he kisses the female lead. Name this ballet that was written after *Swan Lake* and before *The Nutcracker* by Tchaikovsky, and which is about a curse on Princess Aurora.

Answer: *The Sleeping Beauty* [or *Spyashchaya krasavitsa*]

20. Roger Penrose hypothesized that the Weyl curvature tensor vanished during this phenomenon, which explains its low entropy. The fact that this phenomenon did not cause magnetic monopoles was explained by Alan Guth, whose theory also accounts for isotropy, or the uniformity of space in different directions. The theory behind this phenomenon gained significant support following Arno Penzias and Robert Wilson's 1964 discovery of the cosmic microwave background, weakening steady state theory. This event was followed by the Planck epoch, grand unification epoch, and electroweak epoch. Name this event that, over thirteen billion years ago, started the universe.

Answer: big bang

TB21. This author ends a poem describing a woman's "intense fragility" with the declaration that "nobody, not even the rain, has such small hands." This poet of "Somewhere I Have Never Travelled, Gladly Beyond" wrote a poem about a person who women and men "cared for not at all." That poem repeats variations of the line "sun moon stars rain". This poet also wrote about a man who is "more brave than me: more blond than you", whose "warmest heart recoiled at war" and who was a "conscientious object-or". Another work by this poet has various arrangements of the letters in the word "grasshopper". Name this poet of "Anyone Lived in a Pretty How Town" and "I Sing of Olaf Glad and Big".

Answer: E(dward) E(stlin) <u>Cummings</u>

TB22. Nicolas Poussin's [nee-koh-lah poo-saan'z] depiction of this scene shows the central figure draped in red while two men lay on a platform on each side of him. The inclusion of "buffoons, drunken Germans, dwarfs and other such scurrilities" prompted Paolo Veronese [vair-oh-NAY-zay] to change the title of his painting of this scene. Angels hover above a version of this scene that takes place at a diagonally oriented table; that version is by Tintoretto. The most famous depiction of this scene hangs in the Santa Maria della Grazie and has caused debates about whether one of the seated people is Mary Magdalene or John the Apostle. Name this painting of Jesus's final meal.

Answer: the <u>Last Supper</u> [accept logical equivalents; accept il <u>Cenacolo</u> or l'<u>ultima cena</u>]

TB23. Identify the body part that prompted a war between Britain and Spain after it was cut off of Robert Jenkins, was asked to be lent to Mark Antony in a speech from *Julius Caesar*, and is the human organ of hearing with outer, middle, and inner parts.

Answer: <u>ear</u>s