

# SCOP Novice 4 | Round 5

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## Tossups

1. This figure is known as the “source of the Eumenides,” though she is more commonly called Kore [KOH-ray], the maiden. This subject of the Eleusinian Mysteries [ell-yoo-zih-nee-an Mysteries] raised Adonis, and was kidnapped from the plains of Ennis. Her symbol is the (\*) wheat sheaf, since the time she spends with Demeter causes plants to grow. For 10 points, name this Greek goddess, who became the Queen of the Underworld when she ate some pomegranate seeds.

Answer: Persephone

2. Massacres during this nation’s 228 Incident led to the start of the White Terror. Japan controlled this country from the 1895 Treaty of Shimonoseki until World War II. In 1949, the Kuomintang crossed the (\*) Formosa Strait to this island to avoid the Communist army of Mao Zedong. For 10 points, name this Asian island country, claimed as a province by the People’s Republic of China, whose capital is Taipei.

Answer: Taiwan (accept Republic of China; accept Chinese Taipei before mentioned; do not accept or prompt on (People’s Republic of) China)

3. Half the sum of the side lengths times the inradius gives this quantity. This value is equal to half the product of two side lengths with the sine of the opposite angle. It is also given by the square root of the (\*) semiperimeter times the difference between the semiperimeter and each side, which is called Heron’s formula. The most common formula to find this value uses an altitude of the shape. For 10 points, name this quantity equal to one-half base times height.

Answer: area of a triangle (both parts required; prompt on area; accept logical equivalents including both underlined parts)

4. One character in this play muses “Life’s but a walking shadow” in his “Tomorrow, and tomorrow, and tomorrow” speech. One woman in this play sleepwalks and washes invisible blood off her hand. Three witches tell the title character he will be (\*) king, leading him to kill Banquo and Duncan and be killed by a man “not of woman born,” Macduff. For 10 points, identify this Shakespearean tragedy about the title murderous king of Scotland.

Answer: Macbeth (prompt on “The Scottish Play”)

5. The Hadith of Gabriel outlines this set of acts. Wudu occurs prior to reciting the kalima in order to satisfy the “prayer” requirement of these practices. Mandatory almsgiving is one of these acts called (\*) Zakat and one portion of these acts commands Sawm, fasting during Ramadan. It also mandates the Hajj, a pilgrimage to Mecca. For 10 points, name this set of rules that Muslims must follow.

Answer: Five pillars of Islam (accept Arkān al-Islām or Arkan al-dīn)

6. AZT was the first drug used to inhibit the replication of this lentivirus. Its macrophage-tropic “1” strain hurts the host indirectly by attacking CD4-plus “helper” T-cells, which usually protect against diseases like (\*) Kaposi’s sarcoma. First discovered in 1981, it can be transmitted by reusing needles or through unprotected sex. For 10 points, name this as-yet uncured retrovirus that causes AIDS.

Answer: HIV or H(uman) I(mmunodeficiency) V(irus) (prompt on “AIDS” or “acquired immune deficiency syndrome” before “lentivirus” is read)

7. In this painting, a building with half-drawn window shades and a cash register in the first-floor display window stands across from the central location. Two silver canisters sit on a wood counter in this work, which features an (\*) advertisement for five-cent Phillies. Two men in dark hats and a woman in a red dress sit inside an entryless diner in, for 10 points, what painting by Edward Hopper?

Answer: Nighthawks

8. In this work, the protagonist’s horse is stolen by Comte de Rochefort, whom he later duels. In this novel, a diamond necklace given to the Duke of Buckingham is used in an attempt to expose Anne of Austria to (\*) Louis XIII [the thirteenth] by Cardinal Richelieu. A fleur-de-lis [floo-r duh lee] brand reveals Milady de Winter’s past to d’Artagnan [dahr-tan-yon], who aspires to join the title group. For 10 points, name this novel about Aramis, Athos, and Porthos, a work by Alexandre Dumas.

Answer: The Three Musketeers (or Les Trois Mousquetaires)

9. A "butterfly diagram" graphs the Royal Greenwich Observatory’s data on the latitude of these phenomena. A lull in their frequency in the 17th century corresponds to the Little Ice Age and is called the (\*) Maunder minimum. The number of these objects rises and falls in a roughly 11-year cycle, and they have a temperature roughly a thousand Kelvin cooler than their surroundings. For 10 points, name these small, dark regions on the surface of the Sun.

Answer: sunspots

10. This empire captured the Spanish port city of Ceuta [THAY-oo-tah] in 1415 and the Indian port city of Goa in 1510. When this country's explorer, Bartolomeu Diaz, discovered the Cape of Good Hope, its king, Joao II [joh-ow "the second"], refused to fund (\*) Christopher Columbus' first voyage across the Atlantic. In 1494, this country signed the Treaty of Tordesillas with its Iberian neighbor, Spain. For 10 points, name this country with capital Lisbon.

Answer: Portugal (accept Portuguese Republic or Empire)

11. This composer wrote about Lieschen's love of the title drink in his *Coffee Cantata*. Glenn Gould is known for playing the works of this man, whose *Musical Offering* cured Count Keyserling's insomnia. This composer of nearly 200 chorales wrote fourteen (\*) contrapunctal pieces around a single D-minor theme in his *Art of Fugue*. For 10 points, name this German Baroque composer of *The Well-Tempered Clavier* and six *Brandenburg Concerti*.

Answer: J(ohann) S(ebastian) Bach (prompt on "Bach;" prompt on "Johann Bach")

12. Norman Good described ten criteria for choosing biological examples of these substances, such as high solubility and not forming complexes with other components of a solution. By adding pKa [P-K-A] to the log of the (\*) base concentration over the acid concentration in the Henderson-Hasselbalch equation, one can find the pH of one of these solutions. For 10 points, name these solutions made of a weak acid and its conjugate base, exemplified by bicarbonate in the blood, which resist changes in pH.

Answer: buffer(s)

13. Operation Fortitude South convinced one side in this battle that the First US Army Group would attack at Pas de Calais [pah duh cah-LAY]; that army, led by George Patton, did not exist. An "In case of failure" note was written by the Supreme Commander of this battle, (\*) Dwight Eisenhower. Utah and Omaha were two of five beaches of the Atlantic Wall attacked in, for 10 points, what June 6, 1944 invasion of Normandy in France?

Answer: D-Day or Operation Overlord (accept Operation Neptune; accept Normandy invasion, Normandy landings, or similar before "Normandy" is mentioned)

14. Before becoming Minister to Spain, this man published a set of *Tales of the Alhambra*. The Kaatskills are haunted by Henry Hudson's crew, who are seen playing ninepins in one of this author's stories written as (\*) "Geoffrey Crayon." In another of his tales, Brom Bones marries Katrina van Tassel after Ichabod Crane meets the Headless Horseman. For 10 points, name this author of "Rip Van Winkle" and "The Legend of Sleepy Hollow."

Answer: Washington Irving

15. This school plays against Michigan State for the Megaphone Trophy but recently ended its rivalry with Michigan. Its home stadium is overlooked by a mural named "The Word of Life." One of this school's linebackers was (\*) "catfished" during the 2012 season. Rudy was a walk-on player for this school, whose football games are televised on NBC. Manti Te'o ["MAN"-tie" TAY-oh] graduated from, for 10 points, what Catholic university whose Fighting Irish play in South Bend, Indiana?

Answer: University of Notre Dame

16. For a body in simple harmonic oscillation, this quantity equals negative the square of angular speed times displacement. One form of this quantity equals velocity squared divided by the radius. It is the second derivative of (\*) position with respect to time, and by Newton's second law, is equal to net force over mass. For 10 points, name this physical quantity, the rate of change of velocity, symbolized a.

Answer: (linear or translational) acceleration (prompt on a)

17. This city is home to the cylindrically-shaped Hirshhorn Art Museum, just west of the National Museum of the American Indian on Independence Avenue. Robert Mills and Maya Lin designed memorials in this city, which lies on the junction of the (\*) Anacostia and Potomac Rivers. Eleven of the Smithsonian Institution's museums are on the National Mall in this city, west of the Capitol Building. For 10 points, name this city, home of the White House.

Answer: Washington, D.C. (or District of Columbia, prompt on "D.C.")

18. This work notes that men "will offer you their blood, property, life and children" when the sacrifice is not needed. This work argues that greed and poverty result when rulers are overly generous to their subjects. This work, dedicated to (\*) Lorenzo di Medici, claims it is better for a leader to be feared than to be loved. For 10 points, name this work of political philosophy written as a guide to the title type of ruler by Niccolo Machiavelli.

Answer: The Prince (or Il Principe)

19. The protagonist of this work becomes king following the death of Hygelac's [HIGG-eh-lack's] son and wins a swimming contest with Breca. This poem's title character fights a dragon with Wiglaf and battles a monster's (\*) mother at the bottom of the sea. In this epic poem, the title Geat ["gate"] defends King Hrothgar's [hROTH-gahr's] mead hall, Heorot [HAY-oh-roht], against a descendent of Cain. For 10 points, name this Old English epic poem about a warrior who slays Grendel.

Answer: Beowulf

20. This work's last "Fact" notes that the enemy has recruited "merciless Indian Savages." It ends with 56 people mutually pledging "our Lives, our Fortunes, and our sacred Honor." This work holds that all men are endowed with (\*) "certain unalienable Rights," including "Life, Liberty, and the pursuit of Happiness," and that "all men are created equal." For 10 points, name this document, adopted on July 4, 1776, in which the U.S. broke away from Great Britain.

Answer: U.S. Declaration of Independence

## Bonuses

1. Sequoyah developed a syllabary for the language of these people. For 10 points each, [10] Name this Native American tribe, whose land had been unscrupulously transferred by the Treaty of New Echota in 1835, a few years after the Supreme Court invalidated Georgia's claim to this tribe's land.

Answer: Cherokee (or Keetoowah; or Tsalagi)

[10] After the Court's decision was essentially ignored, the Cherokee and four other tribes were forcibly marched west in a journey that has been given this name.

Answer: Trail of Tears

[10] Their removal was forced by a military expedition led by this man. During the Mexican-American War, this general, known as "Old Fuss and Feathers," captured Veracruz and Mexico City.

Answer: Winfield Scott

2. This album's four parts are titled "Acknowledgement," "Resolution," "Pursuance," and "Psalm." For 10 points each,

[10] Name this 1965 album, in which John Coltrane praises God for his spiritual awakening.

Answer: A Love Supreme

[10] The fourth section of A Love Supreme ends with Coltrane playing the "words" of a psalm, including the line "All from God. Thank you God. Amen." on this woodwind instrument.

Answer: (tenor) saxophone

[10] Coltrane's "sheets of sound" seem to blend notes together, giving the illusion that Coltrane is playing these sets of multiple notes played together. In reality, he is playing rapid arpeggios, which are sometimes called the "broken" type of these.

Answer: chord

3. Larry Donovan leaves one character in this novel the night before their wedding, and another character has a fling with Lena Lingard. For 10 points each,

[10] Identify this novel, which narrates the life of the title Bohemian girl in Nebraska through the eyes of Jim Burden.

Answer: My Ántonia

[10] *My Ántonia*, along with *O! Pioneers!* and *The Song of the Lark*, is part of this author's Prairie Trilogy. She also wrote about Jean Marie Latour establishing a diocese in New Mexico in *Death Comes for the Archbishop*.

Answer: Willa Sibert Cather

[10] In Cather's short story "A Wagner Matinee," a woman is moved to tears at a concert when she revisits this city after decades in Nebraska. *The Sound and the Fury* is partially set in this city, as Quentin Compson attends Harvard University.

Answer: Boston, Massachusetts

4. This man issued the Decree of War to the Death, condoning the murders of Spanish civilians who did not aid in his war of independence. For 10 points each,

[10] Name this man, known as "The Liberator" for his successful campaigns for independence in South America. A South American nation is named for him; one of its capitals is named for this man's compatriot, Antonio Jose de Sucre.

Answer: Simon Bolivar

[10] The Decree of War to the Death was issued by Bolivar during the Admirable Campaign in this country's war for independence. The Battles of Carabobo and Lake Maracaibo secured this nation's independence.

Answer: Venezuela

[10] Bolivar met with Jose de San Martin at the Guayaquil Conference in Ecuador to discuss what should happen in this country after the fall of the Spanish fort on the Pacific coast at Lima.

Answer: Peru

5. It was accidentally discovered in 1938 at DuPont, who manufactures it under its most common trade name. For 10 points each,

[10] Name this waxy white chemical also known as PTFE. It has a very low coefficient of friction and is often used in coatings for non-stick frying pans.

Answer: Teflon (accept, but do not otherwise reveal, polytetrafluoroethylene)

[10] Teflon is one of these materials that consist of large, repeating chains of monomers. Other examples of these include plastics, rubber, and nylon.

Answer: polymers

[10] Each Teflon monomer is an ethylene molecule with atoms of this element instead of hydrogen. Teflon's inertness is caused by the strong bonds between carbon and this element with chemical symbol F.

Answer: fluorine

6. Answer the following about mythological plants for 10 points each.

[10] Virgil's "golden bough" was almost certainly made of this plant. In Norse mythology, this plant forms the tip of a dart that kills Balder. In modern times, it's known for a tradition involving Christmastime kissing.

Answer: mistletoe

[10] In Greek tradition the nymph Daphne transforms into this plant to escape Apollo, and wreath of this plant was given to victors in artistic or athletic competitions.

Answer: bay laurel

[10] This mysterious class of Celtic, Gallic, and British priests held the yew tree sacred. Caesar's *Commentary on the Gallic War* related tales of these people making sacrifices of a wicker man.

Answer: druids (accept logical equivalents)

7. In 2013, this band celebrated the 10th anniversary of their only album, *Give Up*, by releasing the song "A Tattered Line of String." For 10 points each,

[10] Ben Gibbard sings lead vocals on "Such Great Heights" for this band, which takes its name from their collaborative method of sending tapes to each other.

Answer: The Postal Service

[10] The Postal Service recorded a cover of this singer's "Against All Odds." This former Genesis drummer also sang the hit "In the Air Tonight," and the themes to the Disney movies *Tarzan* and *Brother Bear*.

Answer: Phil Collins

[10] Phil Collins appears, singing "In the Air Tonight," in the Vice City Stories edition of this controversial Rockstar video game franchise. The fifth numbered game in this series was released in 2013.

Answer: Grand Theft Auto (accept GTA)

8. The 2013 Supreme Court case Association for *Molecular Pathology v. Myriad* questioned the legality of patents on BRCA1 ["bur-kah" one] and BRCA2 ["bur-kah" two], which are examples of these. For 10 points each,

[10] Name this unit of heredity, comprised of nucleic acids, which distinguishes different alleles [uh-LEELZ].

Answer: genes

[10] This justice wrote a concurring opinion to the Court's unanimous decision, acknowledging that he did not understand the "fine details of molecular biology" in the case. With Clarence Thomas, this Reagan appointee forms the conservative backbone of the current court.

Answer: Antonin Scalia

[10] In 2013's *Hollingsworth v. Perry*, Scalia was the only conservative justice in a 5-to-4 ruling striking down Proposition 8, this state's ban on same-sex marriage. The case was originally brought as *Perry v. Schwarzenegger*, after this state's former governor.

Answer: California

9. Most of this sonnet is spoken by "a traveller from an antique land," who describes a pedestal inscribed with the words "Look on my works, ye Mighty, and despair!" near a "colossal wreck" in the desert. For 10 points each,

[10] Name this 1818 poem about a "king of kings."

Answer: Ozymandias

[10] "Ozymandias" was written by this British poet of "Ode to the West Wind" and "To a Skylark." His wife, Mary, was also an acclaimed author.

Answer: Percy Bysshe Shelley

[10] Mary Shelley is best known as the author of this novel. In it, the title scientist sews corpses together to create a creature that kills Elizabeth Lavenza.

Answer: Frankenstein: or, The Modern Prometheus

10. This process has three phases that occur in the stroma of chloroplasts. For 10 points each, [10] Name this process, also called the light-independent reactions, that results in 2 molecules of G3P.

Answer: Calvin(-Benson-Bassham) cycle (accept CBB cycle or reductive pentose phosphate cycle or C3 cycle)

[10] The Calvin cycle is a part of this process that converts light energy into chemical energy.

Answer: photosynthesis

[10] The carbon fixation part of the Calvin cycle uses this enzyme, the most abundant enzyme on earth, to split six-carbon molecules into two 3-member pieces.

Answer: RuBisCo (accept Ribulose-1,5-bisphosphate carboxylase oxygenase)

11. For 10 points each, give the following about sunken ships.

[10] Robert Ballard re-discovered this British luxury liner in 1985. It hit an iceberg and sunk on her maiden voyage in 1912.

Answer: RMS Titanic

[10] This battleship was sunk during the attack on Pearl Harbor and, unlike the *USS West Virginia* and *USS California*, was unable to be salvaged. A memorial commemorating those lost was built over this ship's hull.

Answer: USS Arizona

[10] This ship, the U.S. Navy's first ironclad, faced a Confederate ironclad once named the *USS Merrimack* at the Battle of Hampton Roads. It later sunk off the coast of North Carolina and was re-discovered in 1973.

Answer: USS Monitor

12. Give the following about Derek Walcott's epic poem, *Omeros*, for 10 points each.

[10] Though it's set in the Caribbean Sea, *Omeros* is an adaptation of this Homeric epic poem, which begins "Sing, O goddess, of the rage of Achilles..."

Answer: The Iliad

[10] In *Omeros*, a character with this name has a rivalry with Achille [ah-KEEL] over the love of Helen. In The Iliad, Achilles chases a man with this name around the walls of Troy three times before killing him with a spear.

Answer: Hector

[10] In *Omeros*, Hector and Achille [ah-KEEL] are members of this profession, shared by Santiago in *The Old Man and the Sea*.

Answer: fisherman (do not accept sailor)

13. Taking its name from the Old English for “one-tenth,” this practice takes its scriptural justification from Genesis 14:18 [“chapter fourteen, verse eighteen”]. For 10 points each, [10] Name this religious practice, the giving of a tenth of one’s income to one’s church or to charity.

Answer: **tithe** (accept word forms; prompt on “tax”)

[10] Tithing is required for adherents to this American religion, which was founded by Joseph Smith after his revelation from the Angel Moroni. Contrary to the practice of some fundamentalist groups, this church has officially banned polygamy since 1890.

Answer: **Mormonism** (accept Church of Jesus Christ of Latter-day Saints)

[10] This namesake of a Utah university succeeded Joseph Smith as President of the Mormon Church after Smith’s death in 1844. He may have been responsible for the Mountain Meadows massacre but is best remembered for leading the Mormon migration to Utah.

Answer: Brigham **Young**

14. For 10 points each, name these types of angles:

[10] An angle that measures pi over 2 radians, or 90 degrees, is called this; all angles in a rectangle are this type of angle.

Answer: **right** angle

[10] A pair of angles that sum to 90 degrees are called this. If two angles  $A$  and  $B$  have this relationship, then the sine of  $A$  is equal to the cosine of  $B$ .

Answer: **complementary** angles (accept **complements**)

[10] Two angles whose measures differ by an integer multiple of 360 degrees are called this.

Answer: **coterminal** angles

15. This British politician defeated coal miner strikes in 1985, severely cutting the power of the trade unions and leading to the privatization of the coal mines. For 10 points each,

[10] Name this leader, nicknamed the "Iron Lady," who died in April 2013.

Answer: Margaret **Thatcher**

[10] Thatcher served in this position from 1979 to 1990; she was succeeded by John Major. This position, the British head of government, is currently held by David Cameron.

Answer: **Prime Minister** of the United Kingdom (of Great Britain and Northern Ireland) (do not accept Prime Minister of England, as no such thing exists)

[10] Thatcher's government received a popularity boost during this 1982 war against Argentina over an island group that is called Islas Malvinas in Argentina.

Answer: **Falklands** War

16. This scale is logarithmic with base ten; therefore, an event that reaches 8.0 on this scale has 10 times the magnitude of an event that reaches 7.0. For 10 points each,

[10] Name this scale used by seismographs that describes the energy of seismic waves. The air blast from the 2012 Chelyabinsk meteor recorded a 2.7 on this scale.

Answer: **Richter** scale

[10] Seismographs are more commonly used to measure the seismic waves released by these events in which the Earth's crust moves. These events usually occur along faults.

Answer: **earthquake** (prompt on quake)

[10] Quakes can also occur on the surface of this type of star, which forms from the remnants of some supernovae. A pulsar is one of these stars that emits a beam of radiation and rotates, creating a pulsing lighthouse effect.

Answer: **neutron star**

17. Give the following about French thinker Pierre-Joseph Proudhon for 10 points each.

[10] Proudhon's work *The Philosophy of Poverty* was criticized by this German thinker's *The Poverty of Philosophy*. This author is better known for a collaboration with Friedrich Engels, *The Communist Manifesto*.

Answer: **Karl Marx**

[10] Proudhon asked "What is" this concept in the title of an 1840 book, answering "it is theft!" This concept, which Locke associated with "life and liberty," refers to things that are owned.

Answer: **property** (accept **What is Property?**; prompt on "estate" from someone who really knows his/her Locke)

[10] In *What is Property?*, Proudhon defined this philosophy as "the absence of a master." This philosophy, whose name comes from the Greek for "without leaders," often advocates for the overthrow of governments.

Answer: **anarchism** (accept word forms)

18. This statue was originally meant to sit near the top of its artist's work *The Gates of Hell*. For 10 points each,

[10] Name this statue, originally entitled *The Poet*, which depicts a man resting his elbow on his knee while deep in contemplation.

Answer: The **Thinker** (or **Le Penseur**)

[10] This French sculptor of *The Thinker* was accused of casting from a live model when he unveiled his statue *The Age of Bronze*. He also sculpted six men with nooses around their necks in *The Burghers of Calais* [kah-LAY].

Answer: Auguste **Rodin** [roh-DAAN]

[10] This Rodin [roh-DAAN] sculpture from *The Gates of Hell* depicts Francesca da Rimini and Paolo Malatesta frozen in the title action. It shares its title with a Gustav Klimt work.

Answer: The **Kiss** (accept **Le Baiser** or **Der Kuss**)

19. Materials stop displaying this property at the yield point. For 10 points each,  
[10] Name this property exhibited by materials that will return to their original shape after a deformation, like rubber bands.

Answer: elasticity (or elastic behavior; accept elastic flow)

[10] If elastic behavior follows a linear relationship, it can be described by this law. It is particularly commonly applied to springs, stating that the force exerted by a spring is directly proportional to the displacement from equilibrium.

Answer: Hooke's Law

[10] The constant of proportionality in Hooke's law is this quantity, the ratio of stress to strain.

Answer: Young's modulus (accept tensile modulus; prompt on elastic modulus)

20. The death of this poet's mother, Naomi, led him to write his elegy "Kaddish." For 10 points each,

[10] Name this Beat Generation poet who dedicated his poem "Howl" to Carl Solomon, whom he met during his stay in a mental hospital.

Answer: (Irwin) Allen Ginsberg

[10] Another Beat writer, Jack Kerouac, wrote this autobiographical novel about the travels of Sal Paradise and Dean Moriarty.

Answer: On the Road

[10] In *On the Road*, Sal Paradise repeatedly travels to this California city, across a namesake bay from Oakland. Lawrence Ferlinghetti founded the City Lights Bookstore near this city's Chinatown.

Answer: San Francisco, California