

2015 SCOP 6 Middle School Edition

## Round 10

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### Tossups

1. **After receiving one of these objects from Madagascar, Charles Darwin correctly predicted the existence of a moth with foot-long mouth parts. This plant structure includes a style and a stigma that may be fertilized by (\*)** cross-pollination thanks to animals like bees. Fruits and seeds are produced by, for 10 points, what reproductive organ of plants, that is often surrounded by colorful petals?

Answer: flower

2. **A 1922 publication of this work credits the Clayton F. Summy Corporation, but was mysteriously blurred in a 2015 court document; because of that document, Warner Music will no longer collect (\*)** royalties for this song, which was written by Patty and Mildred Hill. For 10 points, name this song, originally published as “Good Morning to All” and now sung at parties just before candles on a cake are blown out.

Answer: Happy Birthday To You

3. **Students who wore black armbands to protest this event were protected in *Tinker v. Des Moines*. A photograph captured Mary Ann Vecchio mourning a student who was shot by National Guardsmen while protesting this conflict at Kent State University. (\*)** Muhammad Ali refused to be drafted to fight in, for 10 points, what controversial war, whose U.S. involvement ended with the fall of Saigon in 1975?

Answer: Vietnam War (accept Second Indochina War)

4. **This figure was delivered to Epimetheus after Zephyrus brought her to life. She was taught to weave by Athena and how to speak by Hermes. Hephaestus used clay to make this woman, who was given to Prometheus’s brother by Zeus, because he knew she fill the world with (\*)** evil and misfortune. For 10 points, name this mythological woman who cursed mankind by opening a namesake box.

Answer: Pandora

5. **This poet depicted an “idle king” who resolves “To strive, to seek, to find, and not to yield” in the poem “Ulysses.” This author of “Crossing the Bar” wrote a poem about the Battle of Balaclava, in which men charge (\*)** “half a league, half a league, half a league onward.” For 10 points, name this British lord who wrote about the doomed “Charge of the Light Brigade.”

Answer: Alfred, Lord Tennyson

6. **Functions with this property can be written in the form “f of x plus f of negative x equals zero” and display rotational symmetry when rotated 180 degrees around the origin. No perfect numbers have yet been discovered with this property, but all (\*)** primes except two have this property. For 10 points, name this group of numbers that can’t be divided by two.

Answer: odd numbers

7. This composer mocked Wagner's *Tristan and Isolde* in the last piece from his *Children's Corner* suite, "Golliwogg's Cakewalk." The third movement of this man's *Suite Bergamasque* was used for the iconic "Fountain" scene in the 2001 movie *Ocean's 11* and imitates (\*) moonlight. For 10 points, name this French Impressionist composer of "Prelude to the Afternoon of a Faun" and "Clair de lune."

Answer: Claude Debussy

8. A participant in this event tried to drown himself in the Miljacka River, but failed due to cyanide-induced vomiting. A wrong turn by Leopold Lojka led to the success of this event, during which Duchess Sophie was killed. This attack was carried out by (\*) Gavrilo Princip, a member of the Black Hand, in Sarajevo. For 10 points, name this attack that caused the death of an archduke and led to World War I.

Answer: assassination of Archduke Franz Ferdinand (both underlined words required; accept equivalent descriptions)

9. This work's narrator is beat up by Maurice for hiring Sunny. This novel's protagonist worries about the ducks in Central Park and about his practical sister, Phoebe, and he condemns (\*) "phonies" after being expelled from Pencey Prep in this book. For 10 points, name this novel about Holden Caulfield, written by JD Salinger.

Answer: The Catcher in the Rye

10. This scientist erroneously proposed a triple helical structure for DNA. This man discovered the secondary protein structures of alpha helices and beta sheets, and identified defects in hemoglobin as the cause of (\*) sickle cell anemia. For 10 points, name this Caltech scientist who won Nobel prizes in both chemistry and peace.

Answer: Linus Carl Pauling

11. This team hired the first female NBA assistant coach, Becky Hammon. In the 2015 offseason, they signed David West and Lamarquis Aldridge to join a roster that includes (\*) Tony Parker, Kawhi Leonard, and Tim Duncan. For 10 points, name this Gregg Popovich-coached team that beat the Miami Heat in the 2014 NBA Finals.

Answer: San Antonio Spurs (accept either underlined portion)

12. Operating Thetan can be achieved in this religion after becoming Clear through the use of E-meters and auditing. "The Wall of Fire" in this religion is the hydrogen bombing carried out by galactic dictator Xenu in a story was told by this religion's founder, science fiction author (\*) L. Ron Hubbard. For 10 points, name this religion, whose adherents include John Travolta and Tom Cruise.

Answer: Church of Scientology

13. In this state, Light-Horse Harry Lee commanded troops while putting down the Whiskey Rebellion in this state. At one time, this state's Supreme Executive Council was led by Benjamin Franklin. Slavery was abolished in this state in 1780, a move supported by its (\*) Quaker citizens. The Declaration of Independence was signed in, for 10 points, what state's city of Philadelphia?

Answer: Commonwealth of Pennsylvania

14. This work's protagonist sees a "violet-purple" glow near London, which turns out to be made by a "red weed." The protagonist of this novel encounters creatures with "v-shaped mouths" and large eyes, who kill Ogilvy with a (\*) "Heat-Ray" and use tripod fighting machines to collect humans in this novel. Earth's bacteria destroy the Martian invaders in, for 10 points, what novel by HG Wells?

Answer: The War of the Worlds

15. Francesco Carlini used these devices to determine the density of the Earth. Their periods are nearly 2 pi times the square root of their lengths over gravitational acceleration, but that only holds at small angles for these simple harmonic (\*) oscillators. For 10 points, name these weights suspended on strings that power grandfather clocks.

Answer: pendulums (prompt on “simple harmonic oscillator” or “S. H. O.” before it is read)

16. This civilization’s language, Nahuatl, was recorded in the Florentine Codex. The “Massacre in the Great Temple” occurred in this civilization's capital, and this civilization's Jaguar Warriors wielded swords with obsidian blades. This civilization made use of *chinampas* on Lake (\*) Texcoco, which was also home to Tenochtitlan. For 10 points, name this Mesoamerican civilization who were led by Montezuma.

Answer: Aztecs

17. This city is home to the Qatar-owned “Shard” building and the glass “Gherkin.” A whispering gallery in this city was designed by Christopher Wren, and Monet painted the Houses of Parliament in this city, which is home to the (\*) Albert Hall and a memorial to Horatio Nelson in Trafalgar Square. The Tower Bridge crosses the River Thames [temz] in, for 10 points, what capital city of England?

Answer: London, England, United Kingdom

18. These animals possessed compound eyes with calcite lenses. The nearest living relatives of these creatures are horseshoe crabs. These creatures became the most common animals on Earth during the Cambrian explosion, but these (\*) water-dwelling arthropods went extinct at the end of the Permian period. For 10 points, name this diverse group of insect-like fossil animals named for their three-lobed bodies.

Answer: trilobites (accept Trilobita)

19. This province’s city of Gatineau [ga-tih-NOH] is part of its National Capital Region. This province forms the majority of the Labrador Peninsula. Its largest city, on an island in the confluence of the Ottawa and (\*) St. Lawrence Rivers, hosted the opening ceremonies of the 1976 Summer Olympics in the Stade Olympique. For 10 points, name this French-speaking Canadian province, home to Montreal.

Answer: Quebec

20. Toru Okada searches for one of these creatures in *The Wind-Up Bird Chronicle*, and one of these animals breaks a pickle dish in *Ethan Frome*. In *Romeo and Juliet*, Tybalt is called the “prince” of these animals, and Amy Tan wrote about a (\*) “Chinese Siamese” one of these animals. For 10 points, name these animals which include a “Cheshire” one in *Alice in Wonderland*.

Answer: cats (accept felis catus or felis silvestris catus; accept logical slang for cats, such as kitty; prompt on “feline”)

## Bonuses

1. Sparta has a long history with the rest of Greece. For 10 points each,

[10] Name this leader of the Delian League, the current capital of Greece and a long-time rival of Sparta. Despite being known for its navy, this city still lost the Battle of Aegospotami [EE-juh-SPAH-tah-mee].

Answer: Athens

[10] The Battle of Aegospotami ended this series of wars, which was named for a league led by Sparta. This war was temporarily ended with the Peace of Nicias [NIH-kee-as].

Answer: Peloponnesian War

[10] Before the Peloponnesian War, Sparta had defended all of Greece, including Athens, by fighting this battle. During this battle, three hundred Spartans legendarily held out against Persian forces.

Answer: Battle of Thermopylae

2. This poem begins “Ah broken is the golden bowl! the spirit flown forever! Let the bell toll!” For 10 points each,

[10] Name this Edgar Allan Poe poem named for a title woman, who has “death upon her eyes.” In another of Poe’s poems, this woman is the speaker’s lost love, whom he will meet “nevermore.”

Answer: Lenore

[10] Lenore also appears in this poem, in which the title bird “perches on a bust of Pallas” and repeatedly cries “Nevermore.”

Answer: The Raven

[10] “The wind came out of the cloud by night, / Chilling and killing” the title woman in this Poe poem, which begins “many and many a year ago, / in a kingdom by the sea.”

Answer: Annabel Lee

3. This actor played the title villain in *The Man with the Golden Gun* and acted in numerous Hammer films. For 10 points each,

[10] Name this actor who portrayed Saruman in *Lord of the Rings*. He passed away in June 2015.

Answer: Sir Christopher Frank Carandini Lee

[10] Lee portrayed the Mummy and Frankenstein’s monster, as well as this legendary vampire. Bela Lugosi also played this monster, who titles a namesake book by Bram Stoker.

Answer: Count Dracula

[10] Lee played this other Count, who takes the name Darth Tyrannus, in Star Wars Episodes 2 and 3

Answer: Count Dooku

4. This man observed a Doppler redshift, suggesting that galaxies are moving away from each other. For 10 points each,

[10] Name this scientist, whose namesake space telescope was launched in 1990.

Answer: Edwin Powell Hubble

[10] Hubble’s observation of redshift supports this cosmological model. In this model, the universe rapidly grew from a single point during a namesake “explosion.”

Answer: Big Bang

[10] First observed by Penzias and Wilson at Bell Labs, this residual radiation fills the universe and is derived from blackbody radiation that arose shortly after the Big Bang.

Answer: Cosmic Microwave Background Radiation (accept CBR)

5. This mountain range stretches from Southeastern Canada to Alabama. For 10 points each,

[10] Name this mountain range which separated the Thirteen Colonies from the “Indian Reserve.”

Answer: **Appalachian** Mountains

[10] This proclamation set the Appalachian Mountains as the boundary for the Thirteen Colonies. However, despite this proclamation the colonies expanded westward anyway.

Answer: Proclamation of **1763**

[10] The Proclamation of 1763 was issued by the British King who ruled during the American Revolutionary War.

Answer: **George III**

6. Plants and algae fulfill this role in the ecosystem. For 10 points each,

[10] Name this term, from the Greek for “self-feeding”, that refers to primary producers capable of generating their own nutrient source.

Answer: **autotrophs**

[10] Autotrophs make up the lowest level of this hierarchy that, unlike a similar “chain,” has multiple paths connecting producers to consumers.

Answer: **food web**

[10] These tiny ocean organisms are defined by their place in ecology rather than by their taxonomic classification. They are the primary diet of baleen whales.

Answer: **plankton** (accept **plankter**)

7. One branch of the Christian Reformation rebelled against the use of these papers, which were sold by Johann Tetzel. For 10 points each,

[10] Name these papers, which could be purchased to grant temporal relief from minor sins. The *Ninety-Five Theses* debated the value of these papers.

Answer: **indulgences**

[10] This German religious leader wrote the *Ninety-Five Theses* to refute the sale of indulgences.

Answer: Martin **Luther**

[10] Martin Luther split from the Catholic church to found a religion in this major branch of Christianity, which isn't Orthodoxy or Catholicism.

Answer: **Protestantism**

8. Large marching bands use drum majors to assist this person, often called "maestro" by the members of the orchestra. For 10 points each,

[10] Name this leader of a band or orchestra, who directs the tempo and other aspects of the music, sometimes with a baton.

Answer: **conductor** (prompt on director)

[10] This composer of *West Side Story* conducted the New York Philharmonic for a long-running series of educational, televised "Young People's Concerts."

Answer: Leonard **Bernstein**

[10] The Boston Pops, which play primarily popular classical music, was conducted for over a decade by this composer of movie music for *Star Wars* and *Schindler's List*.

Answer: John Towner **Williams**

9. A character in this novel teaches the protagonist the last words of Simon Bolivar while at Culver Creek Preparatory School. For 10 points each,

[10] Name this novel in which Miles Halter, who goes “to seek a Great Perhaps,” obsesses over the last words of famous people while at his new boarding school in Alabama.

Answer: **Looking for Alaska**

[10] This American Young Adult author’s first novel was *Looking for Alaska*. This author collaborated with David Levithan to write *Will Grayson, Will Grayson*, and also wrote *An Abundance of Katherines*.

Answer: John **Green**

[10] In this John Green novel, Augustus Waters uses his wish to bring Hazel Grace Lancaster to Amsterdam. Its title was inspired by a line in Shakespeare’s *Julius Caesar*.

Answer: The **Fault in Our Stars**

10. After this event, Max Blanck and Isaac Harris were tried for murder. For 10 points each,

[10] Name this event, in which the Asch building was set ablaze. During this event, many garment workers were unable to escape because the exterior doors were locked.

Answer: **Triangle Shirtwaist Factory Fire**

[10] Rose Schneiderman, a member of this ideology, advocated for a “strong, working-class movement,” in the aftermath of the Triangle Shirtwaist fire. This ideology supports workers’ ownership of production.

Answer: **socialism** (accept word forms like **socialists**; do not accept “communism”)

[10] Rose Schneiderman gave her speech in the Metropolitan Opera House in this city. The Triangle Shirtwaist Fire took place in this city’s Greenwich Village.

Answer: **New York** City

11. This painting is named for its background, which shows a white farmhouse with a strangely ornate window. For 10 points each,

[10] Name this painting, which shows the artist’s sister and dentist posing as two Iowa farmers: a grim-faced, apron-wearing woman and a man in overalls holding a pitchfork.

Answer: **American Gothic**

[10] This American Regionalist painted created *American Gothic*.

Answer: Grant DeVolson **Wood**

[10] Grant Wood also painted *Parson Weems’ Fable*, in which the title storyteller pulls back a curtain to reveal a young George Washington admitting to having cut down one of these plants.

Answer: **cherry tree**

12. This synthetic fabric was rationed during World War II because of its use in ropes, tires, and parachutes. For 10 points each,

[10] Name this material, introduced at the 1939 New York World’s Fair as artificial silk. In the 1940s it became synonymous with women’s stockings.

Answer: **Nylon**

[10] Nylon is a synthetic example of this type of chemical, which is built from multiple subunits that repeat as one longer chain.

Answer: **polymer**

[10] This chemical company’s research led to the development of Nylon. This company also developed neoprene and Teflon.

Answer: E.I. **du Pont** de Nemours and Company

13. This novel's title character meets Helen Burns at Mr. Brocklehurst's Lowood School. For 10 points each,  
[10] Identify this Charlotte Brontë novel, in which Thornfield Hall burns down, blinding the title character's love interest.

Answer: Jane Eyre

[10] This character is blinded trying to save his first wife during the Thornfield Hall fire. Jane Eyre marries this character at the end of the novel.

Answer: Edward Rochester (accept either underlined name)

[10] In the novel *Wide Sargasso Sea*, Jean Rhys imagines the early life of this woman, Edward Rochester's first wife, who goes crazy and burns down Thornfield Hall.

Answer: Bertha Mason (accept either underlined name; accept either underlined portion of Antoinette Cosway Mason)

14. In 2013, University of New Hampshire professor Yitang Zhang published a landmark proof regarding the gaps between these numbers. For 10 points each,

[10] Give this term for positive integers that are only divisible by themselves and one.

Answer: prime numbers

[10] Zhang's work suggests that we may soon prove the statement "there are an infinite number of twin primes." That statement is believed to be true, but no proof yet exists; therefore, it is this type of mathematical statement.

Answer: twin prime conjecture

[10] Another important conjecture regarding primes is the Goldbach conjecture, which states that every even integer greater than two can be written as the sum of this many primes. This number is also the gap between a pair of twin prime numbers.

Answer: two

15. After Martin Seligman administered these to dogs, the dogs developed a condition called "learned helplessness." For 10 points each,

[10] Identify this technique often used to treat bipolar disorder and major depression, in which an electric current is passed through the brain.

Answer: electric shocks (accept electroconvulsive therapy or ECT; accept electroshock therapy)

[10] In this American psychologist's "obedience to authority" experiment at Yale, participants were told to give increasingly intense electric shocks to a group of "learners" to test how long they would follow orders.

Answer: Stanley Milgram

[10] In another Milgram experiment, Milgram found that people were more likely to provide aid when they found one of these objects addressed to an individual or an organization than they were if these objects were addressed to "Friends of the Nazi Party."

Answer: lost letters experiment (accept descriptions, such as lost mail)

16. Ancient Greek myths were not kind to misbehavers. Answer the following about some particularly harsh punishments in the underworld, for 10 points each.

[10] This was the name given to the Greek underworld, as well as to its ruler, a brother of Zeus.

Answer: **Hades**

[10] The dead of Hades were separated from the living by rivers representing forgetfulness and oblivion. This mythical figure was the ferryman who guided souls across the rivers.

Answer: **Charon**

[10] This king kept the god Hades prisoner in an attempt to avoid death. As punishment, he was forced to roll a boulder up a hill over and over, only to have it roll back down the other side.

Answer: **Sisyphus**

17. No fictitious forces appear in reference frames named for this property. For 10 points each,

[10] Name this tendency of an object to remain at rest or in motion until it is acted on by an outside force.

Answer: **inertia** (accept **inertial reference frames**)

[10] This English scientist described inertia's "uniform motion" and invented calculus independently of Leibniz.

Answer: Sir Isaac **Newton**

[10] Newton's statement that an object at rest tends to remain at rest comprises this one of his Laws of Motion.

Answer: Newton's **First** Law of Motion

18. Sri Sri Ravi Shankar has mediated peace talks in this country between FARC rebels and Juan Manuel Santos' government. For 10 points each,

[10] Name this South American country where Pablo Escobar's cartel once earned Medellin the title of "most violent city on Earth."

Answer: **Colombia**

[10] Escobar's cartel dominated the trade in this illegal drug, processed from leaves grown in Colombian valleys.

Answer: **cocaine**

[10] In 2012, FARC ended this controversial practice, which it used to create political pressure and generate income. Ingrid Betancourt was notably subjected to this practice.

Answer: **kidnapping** (accept descriptions like **taking hostages**)

19. In the short story "Everything That Rises Must Converge," Julian takes his mother to a weight loss class at his local branch of this institution. For 10 points each,

[10] Name this institution, where the Village People say it is fun to stay.

Answer: **Young Men's Christian Association** (accept The **Y**)

[10] This American author of "Everything that Rises Must Converge" wrote about Bailey's family being murdered in "A Good Man is Hard to Find."

Answer: Mary Flannery **O'Connor**

[10] Flannery O'Connor was a member of the "Southern" version of this literary genre. Horace Walpole's *The Castle of Otranto* is an early novel in this florid literary genre.

Answer: **Gothic** (accept **Southern Gothic**)



20. For three decades, the Free Aceh [AH-chay] Movement campaigned for independence of a province on this island. For 10 points each,

[10] Name this island containing the cities of Medan and Palembang. A massive 2004 earthquake off its west coast caused the Boxing Day tsunami.

Answer: **Sumatra**

[10] Sumatra is an island in this country with capital Jakarta. This country is home to the highest population of any Muslim-majority nation, and shares the island of Kalimantan with Malaysia and Brunei.

Answer: Republic of **Indonesia**

[10] Though Malaysia itself has a few islands, its capital, Kuala Lumpur, is on a Southeast Asian mainland peninsula, on which Malaysia borders this country, formerly known as Siam.

Answer: Kingdom of **Thailand**