

2015 SCOP Middle School 5

Round 8

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Tossups

1. **The descamisados gathered outside this country's Casa Rosada to support one of its leaders. Thousands of people were "disappeared" in this country's Dirty War, which ended after its military was ousted from power following their invasion of the Malvinas and ensuing loss to (*) Great Britain in the Falkland War. For 10 points, name this South American country, whose president Juan Peron and wife Eva, known as Evita, ruled from its capital of Buenos Aires.**

Answer: Republica Argentina (accept Argentina Republic)

2. **One performer on this instrument used three measures of 2, 2, 2, 3, then a measure of 3, 3, 3, to open his "Blue Rondo a la Turk." This instrument, played by the composer of "Take Five," Dave Brubeck, was also played by the composer of "Mood Indigo," (*) Duke Ellington. For 10 points, name this musical instrument that combines with bass, guitar, and drums to form the jazz rhythm section and whose keyboard has 88 keys.**

Answer: (jazz) piano

3. **The Kirkwood gaps are predictably empty sub-regions of this region of space, to which the Dawn spacecraft traveled to study Vesta in 2011. The largest body in this area was classified as a dwarf planet in 2006; that body, (*) Ceres, is roughly 3 astronomical units from the Sun and is the nearest dwarf planet to Earth. The inner and outer solar systems are separated by, for 10 points, what region of small rocky bodies found between Mars and Jupiter?**

Answer: asteroid belt (be lenient and prompt on solar system, Milky Way, universe, or similar regions of space that encompass the asteroid belt before "Dawn spacecraft" is mentioned)

4. **Two of this scientist's research subjects were the polio-stricken Mr. McGregor and David Graybeard. Important discoveries by this anthropologist was that her subjects ate meat, even hunting colobus monkeys, and used tools, such as using straws to pick up (*) termites to eat. Goliath was the alpha male in her community at Gombe Stream National Park. For ten points, name this woman who spent over four decades in Tanzania studying chimpanzees.**

Answer: Jane Morris Goodall

5. A large force of soldiers using this weapon devastated Charles d'Albret's cavalry in a battle on St. Crispin's Day. This weapon, most commonly made of yew, does not recurve and reaches from the ground to the height of its user. It was most successfully used by (*) English archers against the French at the Battles of Crecy and Agincourt during the Hundred Years' War. For 10 points, name this specific type of arrow-firing weapon.

Answer: longbow (prompt on "bow;" accept additional mention of "arrows," but do not prompt or accept "arrows" alone)

6. In this work, Heck Tate orders the shooting of Tim Johnson, and the protagonist discusses entailment to calm down Walter Cunningham's father. This novel's narrator frightens Calpurnia by sitting in a balcony with (*) Dill to watch her father defend Tom Robinson against the Ewells. Atticus Finch appears in, for 10 points, what novel about Jem and Scout, written by Harper Lee?

Answer: To Kill a Mockingbird

7. This force can decrease with increasing velocity in an effect named for Stribeck, and it is described by Amonton's laws. Magnetic levitation avoids the "rolling" type of this force typically experienced by cars. The (*) coefficient for this force, symbolized μ [mew], relates the magnitude of this force to the normal force. For 10 points, name this force, whose static and kinetic types arise from resistance to motion.

Answer: friction

8. This author called Indira Gandhi "the Widow" in a work that features the Brass Monkey, Shiva, and a boy with an enormous nose. In another work by this author, Bollywood star Gibreel Farishta has a dream about a series of entries temporarily added to the Qur'an; Ayatollah Khomeini ordered a (*) fatwa on this author for that controversial novel, The Satanic Verses. For 10 points, name this Indian-English author of Midnight's Children.

Answer: Sir (Ahmed) Salman Rushdie

9. This god's mother was often depicted as either a hawk or a woman with falcon's wings. This son of Nephthys is assisted by the crocodile-headed Ammit in his most famous task. This "Guardian of the Scales" weighs humans' (*) hearts against the feather of Ma'at to determine passage to the afterlife. He is often depicted with the head of a jackal. For 10 points, name this Egyptian god of the afterlife and mummification.

Answer: Anubis

10. This state's MLS team plays in the former Multnomah Stadium. Its flagship state university is home to the legendary track-and-field venue Hayward Field and is supported by Phil Knight, the co-founder of Nike. This state's NBA team was led by Bill Walton to a 1977 title and is currently led by (*) Damian Lillard and LaMarcus Aldridge. College football's Ducks play in, for 10 points, what Pacific Northwest state home to the Timbers and Trail Blazers, based in Portland?

Answer: Oregon (accept University of Oregon)

11. **This man was Christian Doppler’s most significant student at the University of Vienna, and to date, genes coding for four of the seven traits he studied have been sequenced. His most influential paper, Experiments on Plant Hybridization, contained the laws of (*) segregation and independent assortment. For 10 points, name this Austrian monk who coined the terms dominant and recessive while discovering the laws of heredity using pea plants.**

Answer: Gregor Johann Mendel

12. **Frank Gehry designed a building with a monorail through it for the Experience Music Project in this city. Its open-air CenturyLink Field was designed to reflect crowd noise toward the field like a domed stadium would. It hosted the 1962 World's Fair, for which a 605-foot tall (*) tower, topped by the SkyCity restaurant, was built. The Columbia Center is the tallest building in, for 10 points, what Washington city, the home of the Space Needle?**

Answer: Seattle

13. **South Padre Island lies just north of the mouth of this river near the city of Matamoros. This river meanders through, and inspires the name of, Big Bend National Park. Cities on it include Brownsville, Laredo, and (*) El Paso, the last of which lies across this river from Ciudad Juarez. For 10 points, name this river, also known as the Rio Bravo, that forms the border between Texas and Mexico and whose name is Spanish for "Big River."**

Answer: Rio Grande (accept Rio Bravo before mentioned)

14. **The Farey type of these objects include only proper, reduced fractions. These objects are often described as functions with domains restricted to the natural numbers. When their terms are combined by addition, they are called (*) series, and they are called “convergent” if their terms approach a limiting value. One of these that begins 0, 1, 1, 2, 3, 5, 8, 13 is named for Fibonacci. For 10 points, give this mathematical term for an ordered list of numbers.**

Answer: sequences (prompt on “series” before it is read)

15. **This author wrote about two acquaintances of Tiny Cooper in collaboration with David Levithan, and in one of this man’s novels, a pair of characters leave blue “M”s and fish at the homes of their enemies. One of this author’s protagonists has dated nineteen girls with the same name, and another meets (*) Augustus Waters through a cancer support group. For 10 points, name this co-author of *Will Grayson, Will Grayson* who also wrote *An Abundance of Katherines* and *The Fault in Our Stars*.**

Answer: John Michael Green

16. **Temporary or limited versions of these buildings are known as musalla. Their qibla wall is indicated by a semi-circular mihrab. These buildings do not have icons or statues, though blue tiles decorate a famous one of these in Istanbul, which has six tall (*) minarets. The Kaaba [kah-ah-bah] is found in the world's largest and oldest one of these places, the Masjid al-Haram in Mecca. For 10 points, name these places of Islamic worship.**

Answer: mosque (accept masjid before it is read; accept Blue Mosque or Sultan Ahmed Mosque)

17. **After the Johnstown Flood, this man rebuilt the city's library. He advocated large scale philanthropy to fight wealth inequality in "The Gospel of Wealth;" this industrialist made his fortune from a company purchased in 1901 by (*) J.P. Morgan.** For 10 points, name this Scottish-American founder of U.S. Steel, whose charity work included building numerous museums and libraries, as well as a namesake concert venue in New York City.

Answer: Andrew Carnegie

18. **By the Eotvos [UT-vush] rule, surface tension decreases when this quantity is increased. The van't Hoff equation relates the equilibrium constant to this quantity. Gibbs free energy is equal to (*) enthalpy minus entropy times this quantity, which represents the average kinetic energy of a system. It is inversely related to pressure and volume by the ideal gas law.** For 10 points, name this quantity measured in Kelvins.

Answer: temperature

19. **This author wrote about Peter, Martin, and Jack each inheriting a coat in *Tale of a Tub*, and he satirically suggested that starving Irish children should be sold as food. This man described a conflict over whether eggs should be (*) broken on the big or little end in another work, in which the title doctor is tiny in the land of Brobdingnag and a giant in Lilliput.** For 10 points, identify this author of *A Modest Proposal* and *Gulliver's Travels*.

Answer: Jonathan Swift

20. **Franklin Sanborn was one of the "Secret Six" who funded this man's actions. He reacted to the sacking of Lawrence by committing the Pottawatomie Massacre, a pivotal moment during the "Bleeding Kansas" conflict. In October 1859, Marines led by (*) Robert E. Lee stopped him from inciting a slave revolt by capturing him in an armory.** For 10 points, name this violent abolitionist whose raid on the armory at Harpers Ferry presaged the Civil War.

Answer: John Brown

Bonuses

1. Aphrodite helped start the Trojan War when she offered Helen of Troy to the judge of a divine beauty contest. For 10 points each,

[10] The beauty contest was lost by Hera and this Greek goddess of wisdom.

Answer: **Athena** (accept **Athene**; do not accept or prompt on "Minerva")

[10] Helen's husband started the Trojan War in an attempt to save Helen from this Trojan prince, who judged the goddesses' beauty contest.

Answer: **Paris**

[10] Angry about the death of his son the cyclops Polyphemus [pah-lih-feh-muss], this god made Odysseus's sail home from the Trojan War much more difficult.

Answer: **Poseidon** (do not accept "Neptune")

2. The title event of this poem happens because "Someone had blundered." For ten points each:

[10] Name this poem commemorating the Battle of Balaclava, in which six hundred soldiers rode "Half a league, half a league/ Half a league onward" "Charging an army/ While all the world wondered."

Answer: The **Charge of the Light Brigade**

[10] This British poet wrote *The Charge of the Light Brigade*. He wrote "'Tis better to have loved and lost / Than never to have loved at all" in his poem *In Memoriam*.

Answer: Alfred, Lord **Tennyson**

[10] This author condemned poor treatment of British veterans in his poem *The Last of the Light Brigade*. He won a Nobel Prize in Literature for works like *The Jungle Book* and the novel *Kim*.

Answer: Rudyard **Kipling**

3. In a classic episode of *Monsterpiece Theatre*, the play "Waiting for Elmo" is performed, in which Grover and Telly Monster represent these two characters standing near a tree. Elmo doesn't arrive, so the tree complains that the play doesn't make any sense and walks away. For 10 points each,

[10] Name these two main characters from Samuel Beckett's play *Waiting for Godot*.

Answer: **Vladimir** and **Estragon** (accept in either order; accept **Didi** and **Gogo** in either order)

[10] This children's TV show has featured Muppets in pop culture parodies like *Upside Downton Abbey*, *Preschool Musical*, and the aforementioned *Monsterpiece Theatre*, which is introduced by Cookie Monster.

Answer: **Sesame Street**

[10] On a different TV show, Vladimir and Estragon are fish owned by Mr. Ratburn, the 3rd grade teacher of Francine, Buster, and this title aardvark.

Answer: **Arthur** Read (prompt on "Read")

4. This nation's economy is dominated by agriculture, as the Meghna, Brahmaputra, and Padma Rivers form the Ganges Delta, which makes up roughly half of this country's area. For 10 points each, [10] Name this country on the Bay of Bengal, whose capital is Dhaka.

Answer: **Bangladesh**

[10] Bangladesh was known as the "East" region of this country after a 1947 partition; Bangladesh gained its independence from this country in 1971.

Answer: **Pakistan**

[10] Bangladesh is bordered on the east and west by this country, which, with Pakistan, was formed from the partition of the British Raj in 1947.

Answer: **India**

5. For 10 points each, give the following about important uses of the number 1 in mathematics.

[10] Because multiplying a real number by 1 does not change the value of the real number, 1 has this property for multiplication. This property is also held by 0 for addition.

Answer: **identity** property (or **identity** element, or phrasings like "1 is the multiplicative **identity**")

[10] A polynomial is called "monic" if the term of highest degree has a value of 1 for this quantity, the constant multiplier on a variable term. Five serves this role for the expression five x squared.

Answer: **coefficient**

[10] According to Euler's Identity, 1 plus this exponential expression is equal to zero.

Answer: **e to the i** times **pi** power (or **e to the pi** times **i** power)

6. One plot point in this film is the possession of "letters of transit" that allow the holder to freely travel throughout Nazi Europe; in reality, such a thing never existed. For 10 points each,

[10] Name this classic 1942 film set at Rick's American Cafe in the title Moroccan city.

Answer: **Casablanca**

[10] *Casablanca's* lead role, Rick Blaine, was played by this legendary actor, who also starred in *The Maltese Falcon* and *The Treasure of the Sierra Madre*.

Answer: Humphrey **Bogart**

[10] The "letters of transit" aren't particularly important to the plot of *Casablanca*; they simply get the plot moving. This director of *Vertigo*, *Rear Window*, and *Psycho* coined the term "MacGuffin" for such plot devices.

Answer: Alfred **Hitchcock**

7. Mata Hari was executed by the French for this action in 1917, as were Julius and Ethel Rosenberg in 1953. For 10 points each,

[10] Give this term for illegal secretive intelligence gathering, as often done in wartime.

Answer: **espionage** or **spying** (or word forms)

[10] In 1776, this colonial soldier and spy volunteered to scout British troop movements, but was caught and hanged. At his hanging, he legendarily said "I only regret that I have but one life to lose for my country."

Answer: Nathan **Hale**

[10] In 1948, a series of classified documents found in one of these plants implicated Alger Hiss in spying for the Soviet Union.

Answer: **pumpkin** (accept **Pumpkin Papers**)

8. The Alvarez hypothesis states that this event was caused by an asteroid impact roughly 66 million years ago. For 10 points each,

[10] Name this catastrophic biologic event that marks the end of the Mesozoic Era.

Answer: **Cretaceous-Tertiary** (or **Cretaceous-Paleogene**) mass **extinction** event (accept **K-T** (or **K-Pg**) mass **extinction** event; accept **extinction of the dinosaurs**, and prompt on related answers that don't use the term "extinction"; prompt on "extinction event" alone)

[10] The main evidence in favor of the Alvarez hypothesis is the abundance of this metal element in layers of clay and rock formed at boundary of the Cretaceous and Paleogene periods. This metal is very uncommon in Earth's crust, but commonly found in asteroids and meteorites.

Answer: **iridium** (accept **Ir**)

[10] The estimate that the asteroid collision occurred 66 million years ago was made by analyzing the levels of the 40 and 39 isotopes of this noble gas with atomic symbol Ar.

Answer: **Argon** (accept **Argon-Argon** radiometric **dating**)

9. He wrote "All animals are equal, but some are more equal than others" in one work. For 10 points each,

[10] Identify this author of *Animal Farm* who wrote about Winston Smith, O'Brien, and Big Brother in 1984.

Answer: George **Orwell** or Eric Arthur **Blair**

[10] Orwell wrote about shooting this animal in Burma. Rudyard Kipling created Hathi, one of these animals, in *The Jungle Book*; in Kipling's *Just So Stories*, one of these animals elongates its trunk to escape a crocodile.

Answer: **elephant**

[10] Orwell called this author's *A Passage to India* "the best [novel about India] we are likely to get." This author also wrote *A Room with a View* and *Howard's End*.

Answer: E(dward) M(organ) **Forster**

10. For 10 points each, give the following about the Battle of Alesia.

[10] This group of tribes, led by Vercingetorix, lost at Alesia when the attackers surrounded their hilltop fort. These people dominated what is modern France for the last few centuries BC.

Answer: **Gauls** (accept word forms like **Gallic** people)

[10] This civilization won the battle of Alesia to conquer Gaul. A set of Commentaries detailing the victory was written by a future dictator of this republic, Julius Caesar.

Answer: **Rome** (accept **Roman** Republic)

[10] After the Battle of Alesia, Caesar was denied a triumph in Rome by Pompey, who had formed this political alliance with Caesar and Crassus. A similar, later alliance would form between Marc Antony, Lepidus, and Octavian.

Answer: **First Triumvirate** (prompt on Triumvirate; do not accept Second Triumvirate)

11. This quantity is the second time derivative of position. For 10 points each,

[10] Give this quantity, measured in meters per second squared, equal to the rate of change of velocity.

Answer: **acceleration**

[10] By Newton's second law, force equals this quantity times acceleration. For an object in free fall in a vacuum, gravitational acceleration is not dependent on this quantity.

Answer: **mass**

[10] Displacement equals one-half times acceleration times time squared, plus this quantity times time. Displacement also equals the average of this quantity and final velocity, times time.

Answer: **initial velocity** (accept equivalents, like **beginning velocity**; prompt on velocity)

12. One re-telling of this novel, *The House on Eccles Street*, was "written" by the fictional author Elizabeth Costello. For 10 points each,

[10] Name this James Joyce novel, which follows Leopold Bloom on June 16, 1904, as his life parallels the events of Homer's *Odyssey*. Its title is the Latin version of the name Odysseus.

Answer: **Ulysses**

[10] Elizabeth Costello is the title character of a novel by this South African author of *Disgrace* and *Life & Times of Michael K*. This man, who lives in Australia, has won two Booker Prizes and the 2003 Nobel in Literature.

Answer: J(ohn) M(axwell) **Coetzee**

[10] Another retelling of the *Odyssey*, this time from Penelope's view, was written by Margaret Atwood, an author from this nation. Atwood's novel *The Blind Assassin* is set in Port Ticonderoga, a fictional city in Ontario.

Answer: **Canada**

13. In 1901, a U.S. President invited an African American scholar to dinner, and was so loudly criticized that no President invited a black man to dinner for more than three decades. For 10 points each, [10] This African-American leader of the Tuskegee Institute, orator of the "Atlanta Compromise," and author of *Up From Slavery* was the honored guest.

Answer: Booker T. **Washington**

[10] Washington was invited by this President, who took office after the death of William McKinley. In his military career, this man fought with the "Buffalo Soldiers" as leader of the Rough Riders.

Answer: **Theodore Roosevelt**

[10] Prior to becoming President, Teddy Roosevelt served as this state's Governor; during his two year term, he ended segregation of this state's public schools.

Answer: **New York**

14. This is the type of bonding that occurs in carbon dioxide. For 10 points each,

[10] Name this type of bonding in which electrons are shared between atoms.

Answer: **covalent** bonding

[10] This rule states that bonds tend to give the atoms of a compound exactly eight valence electrons. In the case of hydrogen and helium, it is replaced with a simpler "duet" rule.

Answer: **octet** rule

[10] This diatomic compound, with formula NO, violates the octet rule, as its two atoms only combine to have seven valence electrons. In a famous accident, Sir Humphrey Davy inhaled this reactive gas, which combined with the common air to form nitric acid in his mouth.

Answer: **Nitric oxide** or **Nitrogen monoxide** (do not accept nitrous oxide or laughing gas)

15. The "Bring Back Our Girls" hashtag was created in response to one of this group's actions. For 10 points each:

[10] Identify this Nigerian terrorist organization that gained international attention for abducting over 200 teenage girls from a secondary school in Chibok in April 2014. Their name is often translated as "Western education is forbidden."

Answer: **Boko Haram** (or **People Committed to the Prophet's Teachings for Propagation and Jihad** or **Jama'atu Ahlis Sunna Lidda'Awati Wal-Jihad**)

[10] On the same day as the Chibok abduction, Boko Haram bombed a bus station in this Nigerian capital, causing nearly 300 casualties.

Answer: **Abuja**

[10] Boko Haram is funded and supported by a North African arm of this terrorist organization, currently led by Ayman al-Zawahiri, which orchestrated the attacks on September 11th, 2001.

Answer: **al-Qaida** (or **al-Qaeda**)

16. The protagonist of this work has dreams of sending his sister, Grete, to conservatory to study violin.
For 10 points each,

[10] Identify this novella about Gregor Samsa, who awakes to find himself transformed into a monstrous vermin.

Answer: The **Metamorphosis** (accept Die **Verwandlung**)

[10] *The Metamorphosis* was written by this Czech author of *Amerika*, *The Castle*, and *In the Penal Colony*.

Answer: Franz **Kafka**

[10] In this Franz Kafka work, Titorelli sells the protagonist identical copies of the same landscape, and the bank clerk Joseph K. dies "like a dog!"

Answer: The **Trial** (accept Der **Process**)

17. For 10 points each, name the following popular American composers.

[10] This longtime conductor of the U.S. Marine Band earned the title "The March King" for works like "The Liberty Bell" and "The Stars and Stripes Forever." He also invented a marching tuba that is now named for him.

Answer: John Philip **Sousa** (accept **Sousaphone**)

[10] This composer's "Hoe-down" from his ballet *Rodeo* was used in commercials for beef; he also wrote the *Fanfare for the Common Man* and the music for the ballet *Appalachian Spring*.

Answer: Aaron **Copland**

[10] This king of Ragtime music wrote classic piano rags like *The Entertainer* and the *Maple Leaf Rag*.

Answer: Scott **Joplin**

18. Ragnar Lodbrok was a legendary ruler of these people, who defeated Charles the Bald's army on the Seine River in 845 AD. For 10 points each,

[10] Name this group of exploring Norse seafarers, often depicted in modern culture as rampaging berzerkers who sacked European cities like Paris.

Answer: **Vikings**

[10] Viking expansion beyond Scandinavia included the founding of a permanent colony on Greenland by this father of Leif Erikson.

Answer: **Erik the Red** (or Erik **Torvaldsson**; prompt on Erik)

[10] Leif Erikson's exploration included the founding of Vinland, which included a settlement at L'anse aux Meadows [lahnz oh meadows] in this modern Canadian island province.

Answer: **Newfoundland** and Labrador

19. This term is most often associated with Vishnu, who has had ten of them. For 10 points each:

[10] Name this Hindu term for a deity's descent to Earth, as well as the form they take for that descent.

Answer: **avatar**

[10] The first avatar of Vishnu is Matsya, a giant one of these animals. In this form, he saves Manu, the first man, from the great flood.

Answer: **fish**

[10] Vishnu's eighth avatar is this blue-skinned hero of the *Bhagavad Gita*, the charioteer of Arjuna who is venerated by a certain "Hare" [hah-ray] movement in the US.

Answer: **Krishna**

20. Peptidoglycan in the cell wall of these organisms can be observed by Gram staining. For 10 points each,

[10] Name this domain of microorganisms. Humans have beneficial types living in the gut and on skin.

Answer: **bacteria**

[10] Some harmless strains of this bacteria are found in the lower intestines, where they help produce vitamin K. Unfortunately, other strains can cause food poisoning.

Answer: **Escherichia coli**

[10] E. coli is classified as a bacillus, which has this shape. This shape is in contrast to the spherical shape of cocci [COX-i].

Answer: **rod**-shaped