

2020 SCOP A

## Round 9

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### Tossups

(1) **Two members of this family partially mortgaged their plantation, Montpelier, to free their son from debtors' prison. During the Burning of Washington, DC, a woman who married into this family instructed Paul Jennings to save a portrait of (\*) George Washington.** After winning the election of 1808, a member of this family was president during the War of 1812. For ten points, name this American political family that included Dolley and the fourth President of the US, James.

ANSWER: Madisons (accept Madison family; accept Dolley Todd Payne Madison; accept James Madison)

(2) **Damage to this structure triggers production of callose. Diato-maceous earth is the remains of these structures that myco-plasmas notably lack, and which Archaea build from pseudo-murein. Gram staining shows the (\*) peptido-glycan thickness in this structure in bacteria.** This structure resists turgor pressure, and is made of cellulose when found in plants. For ten points, name this protective structure not found in animal cells, located outside the cell membrane.

ANSWER: cell walls

(3) **This artist painted regular white blobs on blue backgrounds in a series titled *Sky Above Clouds*, and painted spotlights and geometric windows in her depictions of New York's *Radiator Building*. This artist painted *Ram's Head*, *White Hollyhock*, and *Little Hills* and (\*) *Cow's Skull: Red, White, and Blue* against the background of a New Mexico desert.** Paintings of *Jack-in-the-Pulpits* and *Red Cannas* were common themes in the work of, for ten points, what American painter who frequently painted skulls and large flowers?

ANSWER: Georgia O'Keeffe (accept Georgia Totto O'Keeffe)

(4) **A character in this novel angrily punches a man who arrests him instead of James Strand, a bank robber, because he thinks Detective Fix has lost him a wager. This novel's protagonist wins a bet with the Reform Club and rescues his eventual wife, (\*) Aouda, from self-immolation with the help of his servant Passepartout [pass-pahr-TOO].** A gentleman in this novel charts a path through India, Japan, and the United States before returning to London. For ten points, name this novel by Jules Verne in which Phileas Fogg circumnavigates the globe.

ANSWER: Around the World in Eighty Days (accept Le tour du monde en quatre-vingts jours)

(5) **These things can be altered by proximity to a rhotic, which can cause these things to imitate a schwa. A change that began in the fifteenth century, known as these things' Great Shift, altered the English values for the (\*) "long" ones of these things.** These things are categorized by the "height" and "openness" of their pronunciation, and can be blended together to form diphthongs. For ten points, name these sounds from speech, contrasted with consonants, that are represented by the letters A, E, I, O, and U.

ANSWER: vowels (prompt on "letters" before it is read; prompt on "(speech) sounds" before it is read)

(6) **This organization was founded due to Henri Dunant's description of the Battle of Solferino, which inspired the formation of a committee based in Geneva. The American branch of this organization was founded by (\*) Clara Barton after the Civil War.** Although it is also symbolized by a crystal and a crescent, this organization's main emblem is a color reversal of the Swiss flag. Three Nobel Peace Prizes have been won by, For ten points, what organization that protects and cares for the victims of war?

ANSWER: International Red Cross (accept American Red Cross after "American" is read)

(7) **In a 2020 Netflix series set during this movie, Yaz, Brooklyn, and Darius try to survive this film's events. Bryce Dallas Howard and Chris Pratt reprised their roles for the LEGO adventure *The (\*) Indominus Escape*,** a satire of this film in which Claire Dearing and Owen Grady breed new creatures on Isla Nublar. *Fallen Kingdom* and *Camp Cretaceous* are successors to, for ten points, what movie set twenty years after a 1993 movie about a disaster at a dinosaur amusement park?

ANSWER: Jurassic World (do not accept or prompt on "Jurassic Park")

(8) **At the end of a novel by this author, an old man considers lying on Mount McCabe with "history for [his] pillow" while sitting on a rock with his bare feet covered in ice-nine. Bokomonism is repressed in San Lorenzo in a novel by this author, who wrote about a man who experiences the (\*) firebombing of Dresden while he's "unstuck in time."** For ten points, name this American author of *Cat's Cradle*, who wrote about fictional writer Kilgore Trout in *Breakfast of Champions* and World War II soldier Billy Pilgrim in *Slaughterhouse-Five*.

ANSWER: Kurt Vonnegut, Jr.

(9) **The song Ma'oz Tzur can be sung during this holiday to celebrate the defeat of Antiochus IV. This holiday is celebrated with an object inscribed with nes, gadol, haya, and sham, and with foods fried in (\*) oil, like latke.** This holiday includes the spinning of dreidels and the lighting of a namesake type of menorah over this holiday's eight nights. For ten points, name this Festival of Lights, a Jewish winter holiday.

ANSWER: Hanukkah (accept Chanukah; prompt on "Festival of Lights" before it is read)

(10) **One of these elements is emitted by the beta decay of potassium-40, and is abundant in Earth's atmosphere. The creation of hexa-fluoro-platinate demonstrated that these elements could be chemically reactive. These elements have (\*) small atomic radii, are monatomic, and are inert because of their filled valence electron shell.** For ten points, name this group of elements on the far right of the periodic table that includes xenon, neon, and helium.

ANSWER: noble gases (accept group 18; accept group 8A; prompt on "inert gases" before "inert" is read)

(11) **This region contains the two-hundred-foot-tall Obsidian Cliff near the Mammoth-Norris section of its Grand Loop. Mats of heat-seeking bacteria cause the bright colors of this park's Morning Glory Pool and Grand Prismatic (\*) hot spring. A feature in this park, named Steamboat, is the world's largest active geyser, and releases steam heated in the caldera of this park's namesake super-volcano. For ten points, name this national park, mostly in Wyoming, known for the regular eruptions of Old Faithful.**

ANSWER: Yellowstone National Park (prompt on "Wyoming" until "this park" is read)

(12) **A "broadening" of spectral lines named for this man can be reduced by the Dicke effect. This scientist's namesake "cooling" slows atoms using detuned light with a controlled frequency. A phenomenon named for this man is observed in astronomy as (\*) redshift, and describes a change in the frequency of a wave produced by a source moving in relation to an observer. For ten points, name this scientist who names a relativistic namesake "effect" that explains the change in pitch heard in a passing siren.**

ANSWER: Christian Doppler (accept Christian Andreas Doppler; accept Doppler effect; accept Doppler cooling; accept Doppler broadening)

(13) **This landmass once held an outpost named for Jean-Baptiste Charcot, a scientist who studied this landmass, and is the site of a research facility named for Archibald McMurdo. A shelf on this landmass named after the British Explorer James (\*) Ross is the final resting place of Robert F. Scott's expedition, and was explored by Roald Amundson. France claims Adélie Land on this continent, a region that is home to a namesake species of penguin. For ten points, name this southernmost continent that is often covered in ice.**

ANSWER: Antarctica (prompt on "Adélie Land" before "McMurdo" is read)

(14) **In this novel, the Akashi Lady's daughter gives birth to Niou [nee-oh], who romantically competes with Kaoru [kah-oh-roo], the legal son of this novel's title character. In a blank chapter, this novel's protagonist (\*) "vanishes into the clouds" at the end of his life, after marrying Lady Aoi [ah-oh-ee], having an affair with Lady Fujitsubo [foo-jee-tsoo-boh], and getting ejected from his father's imperial court. For ten points, name this Heian-era [hay-ahn "era"] novel by Murasaki Shikibu [moo-rah-sah-kee shee-kee-boo] about the title "shining prince," one of the world's first novels.**

ANSWER: The Tale of Genji (accept Genji Monogatari)

(15) **Volker and Strassen proved that the usual way to multiply these objects wasn't the fastest method. These objects do not have commutative multiplication, but their determinants do. The identity type of this object has ones along its main (\*) diagonal and zeroes elsewhere. It requires " $n$  cubed" steps to multiply two of these objects if their sizes are both " $n$  by  $n$ ." For ten points, name these arrays of numbers that are arranged in rows and columns.**

ANSWER: matrix (accept matrices; accept square matrix or square matrices)

(16) **In this group of musical works, Fasolt is killed by his brother, Fafnir, who transforms into a dragon. These works were first performed together at the 1876 Bayreuth Festival [bye-royt festival], and include *Die Walküre* [dee val-kyoor] and (\*) *Götter-damme-rung*. These works collectively begin and end with the title object being guarded in the River Rhine. *Das Rheingold* is the first of, for ten points, what set of four operas composed by Wagner to tell the story of a magical piece of jewelry?**

ANSWER: The Ring Cycle (accept The Ring of the Nibelungs; accept Der Ring des Nibelungen)

(17) **In a novel by this author, Septimus Smith kills himself by jumping out of a window before Clarissa's dinner party. This author described the fictional life of Shakespeare's talented sister while describing what is necessary for women to write fiction. The (\*) Ramsay family visit the Isle of Skye and the title building before and after World War I in another work by this writer. For ten points, name this English author of *Mrs Dalloway*, *A Room of One's Own*, and *To The Lighthouse*.**

ANSWER: Virginia Woolf (accept Adeline Virginia (Stephen) Woolf)

(18) **Like Hathor, this goddess was syncretized with Imentet, the "Woman of the West," through her marriage to the "Foremost Among the Westerners." Nephthys pretended to be this deity to become pregnant with Anubis. This daughter of (\*) Geb and Nut discovered the secret name of Ra, and reconstructed her husband's body after he was dismembered by her brother, Set. For ten points, name this goddess, the sister-wife of Osiris.**

ANSWER: Isis (accept Ase; accept Wusa)

(19) **In 1973, a town in this state was occupied for two months by protesters from AIM, on the site where Spotted Elk and hundreds of Lakota Sioux were killed by the US Army in 1890. The (\*) Wounded Knee Massacre took place in this state's Pine Ridge Reservation, which is southeast of the Black Hills. An incomplete memorial to Crazy Horse and Mount Rushmore can be visited in, for ten points, what US state with capital Pierre?**

ANSWER: South Dakota

(20) **Malaspina is the largest "piedmont" one of these objects, and is merged with ones called Agassiz and Seward. Stresses on these structures can create tall, unstable seracs. An arête can form between two of these structures, which can create (\*) cirques, eskers, and drumlins when their movement erodes landmasses. Moraines are hills formed by debris left behind by these objects' motion. For ten points, name these enormous, slow-moving blocks of ice.**

ANSWER: glaciers