

## Round 10

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### Tossups

(1) **Three days before this battle, a skirmish at Blackburn's Ford gave Jubal Early's men crucial experience. This battle ended with the "Great Skedaddle," when civilian picnickers fled home in a panic after an expected easy victory finished instead as a loss. Irvin McDowell was routed in this battle, where Thomas Jackson earned the (\*) nickname "Stonewall." The Battle of Fort Sumter was three months before, for ten points, what July 21, 1861 battle, the first major battle of the Civil War?**

ANSWER: First Battle of Bull Run (accept First Battle of Manassas)

(2) **For the mixing of an ideal solution, this quantity is zero, and it is constant in a Joule-Thomson process. At constant pressure, the derivative of this quantity with respect to temperature yields heat capacity. According to (\*) Hess's law, the change in this quantity for a reaction is independent of the number of steps. This quantity is negative for an exothermic reaction. For ten points, name this state function symbolized H, the total heat content of a system.**

ANSWER: change in enthalpy (accept H before it is read; do not accept or prompt on "entropy")

(3) **This novel's protagonist is told not to judge a book by its cover by Simmons, Harris, and the other members of Granger's gang after the Reverend Padover makes him a "backup Ecclesiastes." In this novel, a (\*) Salamander driven by Captain Beatty stops at the protagonist's house when Mildred reports her husband for possessing literature. The fireman Guy Montag burns books in, for ten points, what novel by Ray Bradbury whose title refers to the temperature at which paper supposedly auto-ignites?**

ANSWER: Fahrenheit 451

(4) **In an open letter celebrating the release of this album's title track, its artist said "i know we promised to die with the secret." Nike sued MSCHF ["mischief"] over sneakers painted with ink supposedly mixed with (\*) human blood; six hundred sixty-six pairs of those sneakers were made to promote this album. The singles "Sun Goes Down" and "Industry Baby" appear on, for ten points, what 2021 album whose title track, subtitled "Call Me By Your Name," was the second number one hit for Lil Nas X?**

ANSWER: MONTERO (accept MONTERO (Call Me By Your Name))

(5) A duet by this composer praises a ruler from “Arabia’s spicy shores” after the “Arrival of the Queen of Sheba.” An anthem by this composer has been used at every British coronation since that of his patron, George II [second]. This composer of the *Solomon* oratorio and (\*) *Zadok the Priest* wrote an oratorio in which the chorus praises the “king of kings” and “lord of lords,” and repeats “and he shall reign forever and ever.” For ten points, the “Hallelujah Chorus” is part of what composer’s *Messiah* oratorio?

ANSWER: Georg Friedrich Handel

(6) This hero is transported by the ferryman Urshanabi [oor-shah-nah-bee] to the home of a man who had survived the Great Flood. This hero immediately falls asleep after he is told by Utnapishtim [oot-nah-peesh-teem] to stay awake for six days and seven nights to achieve immortality. After this hero kills Humbaba in the Cedar Forest and defeats the (\*) Bull of Heaven sent by the goddess Ishtar, the gods kill this king’s “wild man” companion, Enkidu. For ten points, name this mythical king of Uruk, the namesake of a Sumerian epic.

ANSWER: Gilgamesh (accept Bilgamesh)

(7) In a novel from this country, Bamford and Maureen Smales flee to the village of the title Black servant to escape a revolution. In another novel set in this country, Absalom is sentenced to death for the murder of Arthur Jarvis, saddening his father, (\*) Stephen Kumalo. This country is the setting of Nadine Gordimer’s *July’s People* and an Alan Paton novel set during this country’s Apartheid era. For ten points, name this country, the setting of *Cry, the Beloved Country*, which takes place partially in Johannesburg.

ANSWER: South Africa (accept Republic of South Africa; accept RSA)

(8) This psychologist contrasted Todestriebe [TOH-des-TRY-buh], the “death drive,” with libido in an essay, and described wish-fulfilling fantasies in the case study “Irma’s Injection.” This author of *Beyond the Pleasure Principle* proposed the existence of a (\*) “super-ego” that mediates the reasoning “ego” and the instinctive “id,” and described a condition in which a man is attracted to women who are like his mother as the “Oedipus complex.” For ten points, name this Austrian psycho-analyst who wrote *The Interpretation of Dreams*.

ANSWER: Sigmund Freud (accept Sigismund Schlomo Freud)

(9) Each of the two Jelling [“yelling”] stones was raised by a king of these people, Gorm the Old and Harald Bluetooth. These people attacked monasteries in places like Lindisfarne in 793, and they encountered “skraelings” in (\*) Vinland during the expedition of Leif Eriksson. The “Great Heathen Army” was made up of, for ten points, what seagoing Germanic people who often decorated their ships with dragon heads, but did not actually wear horned helmets?

ANSWER: vikings (accept Norsemen; accept Danes)

(10) While determining the “affinity to caloric” of gases, this scientist derived an equation relating specific heats to numbers of particles in a reaction. This scientist proved the correct formula for water, and because of his namesake law, (\*) twenty-two-point-four liters is the molar volume of any gas at standard temperature and pressure. The term *molecule* was coined by, for ten points, which Italian scientist whose namesake number is about  $6.02 \times 10^{23}$  [six point zero two times ten to the twenty-third]?

ANSWER: Amedeo Avogadro (accept Lorenzo Romano Amadeo Carlo Avogadro)

(11) Followers of this religion can place a “gad” on themselves to request a spirit’s protection. Marie Laveau was a mambo and one of this religion’s fifteen “Queens,” who led a branch of this religion in (\*) New Orleans. Spirits in this religion, called lwa [luh-WAH], include Baron Samedi and Papa Legba, who is associated with the Catholic Saint Peter. For ten points, name this Haitian syncretic religion whose namesake dolls are used for healing and communication with the deceased.

ANSWER: Voodoo (accept Haitian Vodou; accept Louisiana Voodoo; accept Vodun)

(12) Installations by this artist include a set of pillow-like, metallic *Silver Clouds* and a set of inked wooden blocks representing *Mott’s Apple Juice* and *Brillo Boxes*. This artist worked with his namesake “Superstars” to create films like *Chelsea Girls* in his studio, The (\*) Factory, and he used silk-screen printing to create re-colored images of Queen Elizabeth II and Mao Zedong. For ten points, name this American pop artist who made mass-produced images of Marilyn Monroe and *Campbell’s Soup Cans*.

ANSWER: Andy Warhol (accept Andrew Warhola, Jr)

(13) This country’s secret police, SAVAK, was blamed for the Cinema Rex fire, which killed hundreds of people in 1979. A year earlier, dozens of people were killed in this country’s Jaleh Square on “Black Friday” by the forces of Reza Pahlavi, who was forced into exile after the rise of (\*) Ayatollah Khomeini [ah-yah-toh-lah koh-may-nee] in an Islamic Revolution. A leader called a “Shah” once led, for ten points, what Asian country where over fifty Americans were taken hostage for four hundred forty-four days in Tehran?

ANSWER: Iran (accept Islamic Republic of Iran; accept Jomhuri-ye Eslami-ye Iran; accept Persia)

(14) The red clump on this diagram is caused by helium flash, and its “instability strip” includes Cepheid variables [seh-fee-id variables]. A color-magnitude chart is one version of this diagram, whose Hayashi track contains pre- (\*) and main-sequence objects. Super-giants are found along this diagram’s top, and white dwarfs form a band at the bottom. For ten points, identify this diagram, named for two astronomers, that shows the relationship between a star’s luminosity and temperature.

ANSWER: Hertzsprung-Russell diagram (accept H-R diagram)

(15) A character in this novel who lives inside of an elephant statue is killed while collecting ammunition, and is named Gavroche. In this novel, the only surviving Friend of the ABC, Marius, marries a girl whose mother sells her front teeth to pay the (\*) Thénardier [teh-nar-dee-ay] family. In this novel, Cosette is taken in by a man who spends nineteen years in prison for stealing a loaf of bread. For ten points, name this novel in which Inspector Javert pursues the convict Jean Valjean, written by Victor Hugo.

ANSWER: Les Misérables (do not accept or prompt on “Les Mis”)

(16) Successive versions of this type of function are known as jerk, snap, crackle, and pop. This function is typically defined using the limit of a difference quotient, and when working with polynomials, the power rule and (\*) chain rule are commonly used to find this type of function. The slope at a point on a curved line can be calculated using this function. The notation “f prime of x” is used to denote, for ten points, what type of function from calculus that is the opposite of an integral?

ANSWER: derivative (accept differentiation; accept differentiate)

(17) **The last remaining structure of this city's 1915 World's Fair is the Palace of Fine Arts. This city's "painted ladies" are Victorian houses repainted in modern colors. The northern tip of this city is home to Ghirardelli Square and (\*) Fisherman's Wharf. The Haight-Ashbury neighborhood in this city was the birthplace of the "Summer of Love." The largest Chinatown outside of Asia is in, for ten points, what California city that is home to the Golden Gate Bridge?**

ANSWER: San Francisco (accept Frisco)

(18) **The Shine-Delgarno sequence initiates this process in prokaryotes, and tetra-cycline antibiotics inhibit this process by targeting the thirty-S subunit. An amino-acyl synthetase enzyme charges the (\*) tRNAs needed for this process, and a transferase enzyme makes new peptide bonds between the A and P sites during it. The codon A-U-G marks the start of, for ten points, what process that scans mRNA to assemble a protein at a ribosome?**

ANSWER: translation (accept polypeptide synthesis; accept protein synthesis before "protein" is read; do not accept or prompt on "transcription")

(19) **A lullaby in this story collection warns "summer gales and Killer Whales / are bad for baby seals," and is set in the Bering Sea. "The White Seal" is in this collection, in which Nag and Nagaina are killed by (\*) Rikki-Tikki-Tavi, a mongoose. Shere Khan, a tiger, is killed in this book by a student of the wise bear Baloo and the panther Bagheera. For ten points, name this collection of stories about the "man-cub" Mowgli and his animal friends, written by Rudyard Kipling.**

ANSWER: The Jungle Book

(20) **This university is home to the Whiffenpoofs, the oldest collegiate a cappella group in the US. Walter Camp, a rugby player for this university, created American football. Former president William Howard Taft and both presidents Bush were members of a (\*) secret society at this school that meets in "The Tomb," the Skull and Bones Society. This university is located near Long Island Sound in New Haven, Connecticut. For ten points, name this Ivy League university that rivals Harvard.**

ANSWER: Yale University