

## Round 4

### Tossups

(Tossup 1) While visiting a rural area, this work's main character kidnaps a ten-year old girl who he educates to be his "ideal lady". The wives of this work's main character include the "Third Princess" and Lady Aoi. A blank chapter in this work implies the death of this work's main character and is named "Vanished into the Clouds". For the point, name this work about a "shining" prince by Murasaki Shikibu.

ANSWER: **The Tale of Genji**

(Tossup 2) The Dragonfly mission aims to send a drone to explore the atmosphere of this entity. Ligeia Mare and Kraken Mare are hydrocarbon lakes on this entity's surface, which also contains the Hubert Curien Memorial Site, the landing site of the 2004 Cassini-Huygens mission. The only known moon with a dense atmosphere and the second largest moon in the system after Ganymede, this is, for the point, which largest moon of Saturn?

ANSWER: **Titan**

(Tossup 3) This man was killed by Boston Corbett after being found in a barn. Mary Surratt let this man and David Herold stay at her house. Dr. Samuel Mudd helped this man recover after his most famous action, which occurred during a performance of "Our American Cousin". This man jumped from a balcony and shouted "Sic semper tyrannis!" before committing his most famous action. For ten points, name this man who assassinated Abraham Lincoln.

ANSWER: John Wilkes **Booth**

(Tossup 4) An early work by this artist was a large sculpture of St. John the Evangelist. This artist created a sculpture of the Venetian condottiere Erasmo da Narni titled *The Equestrian Statue of Gattamelata*. This artist's most famous work depicts a biblical hero with a laurel hat and a sword posed with his foot on the head of a defeated enemy. That work by this artist was the first free-standing nude statue since antiquity. For the point, name this sculptor of a bronze *David*.

ANSWER: **Donatello**

(Tossup 5) This number appears in a formula where raising it to a certain power equals "cosine theta plus i sine theta." That formula shares a name with this number, which when raised to the "i pi" power is equal to negative one. The derivative of the function, "this number to the x," is equal to itself, and the natural log has this base. For the point, name this irrational number that is named after a Swiss mathematician and equal to approximately 2.718.

ANSWER: **e** or **Euler's** number (do not accept "Euler's constant" since that is a different number)

(Tossup 6) In this work, Jessica takes a turquoise ring with her when she elopes with Lorenzo. Caskets made of gold, silver and lead are used to test suitors such as the Prince of Morocco and Prince of Aragon in this work. A speech about “the quality of mercy” is given by Portia in this play during the trial of Antonio. For the point, name this Shakespeare play in which Shylock demands “a pound of flesh” from the title character.

ANSWER: The Merchant of Venice

(Tossup 7) The *USS Arkansas* was destroyed during one of these events. The Vela incident has been speculated to be one of these events. Cases of these events in Asia include Project 596 at Lop Nur and India’s Operation Smiling Buddha. “Able” and “Baker” were two of these events that occurred as part of Operation Crossroads while the first one of these events was named Trinity. For the point, name these events involving nuclear weapons.

ANSWER: Nuclear Tests (Accept clear-knowledge equivalents, accept Operation Crossroads before Vela incident)

(Tossup 8) Modifications to this scale by Ridgway and Wooddell have extended its maximum value to over 40. The Vickers test has largely ended the industrial use of this scale, which has no units and is not reliable for fine-grained materials. A ceramic scratch plate is used for identification with this scale, whose index substances include apatite, gypsum, and topaz. For the point, name this scale of mineral hardness that assigns 1 to talc and 10 to diamond.

ANSWER: Mohs scale of mineral hardness

(Tossup 9) This politician’s cabinet ministers Jane Philpott and Jody Wilson-Raybould resigned due to the SNC-Lavalin affair. In the October 2019 federal election, he will run for re-election against Conservative leader Andrew Scheer. This politician defeated Stephen Harper in the 2015 election and, along with his Foreign Affairs Minister Chrystia Freeland, he renegotiated NAFTA. For the point, name the Prime Minister of Canada?

ANSWER: Justin Trudeau

(Tossup 10) Some individuals go into seclusion, called i’tikaf, during this holiday. A meal of suhoor is eaten before the fajr prayer of this holiday. This holiday is when the Night of Power occurs. During this holiday, a sunset meal called itfar is consumed before the act of sawm. During this month, the angel Gabriel first revealed the Qu’ran to Muhammad. For the point, name this holy month of the Islamic calendar, the month of fasting.

ANSWER: Ramadan

(Tossup 11) The Cordillera Central is the highest mountain range on this island. This second-largest island in the Greater Antilles was the site of a French colony known as Saint-Domingue. A settlement established on this island in 1492 was called La Navidad. In 2010, this island was hit by a major earthquake which devastated the city of Port-au-Prince. For the point, name this Caribbean island divided between Haiti and the Dominican Republic.

ANSWER: Hispaniola

(Tossup 12) A character in this novel runs away to Jackson's island to live as a pirate but reappears at his own funeral. This novel's antagonist dies after being trapped in McDougal's Cave. The protagonist of this novel convinces his friends to give him trinkets in return for the privilege of whitewashing Aunt Polly's fence. A murder by Injun Joe is witnessed by Huckleberry Finn and the titular character of, for the point, what Mark Twain novel?

ANSWER: The Adventures of Tom Sawyer

(Tossup 13) This river has been thought to begin at the confluence of the Madison, Jefferson and Gallatin rivers at the city of Three Forks, although Jacob V Brower disproved it. The Yellowstone and Platte are the main tributaries of this river, which has the nickname "Old Muddy" for its large amount of silt. For the point, name this longest tributary of the Mississippi River, also the longest river in North America.

ANSWER: Missouri River

(Tossup 14) This man started a campaign to kill sparrows among other creatures in his Four Pests Campaign. The Hundred Flowers campaign was pursued by this man, who later purged one of his officials during the Lushan Conference. This man published his own 'Red Book' with his quotations and was widely distributed during the Cultural Revolution. For the point, name this first Communist leader of China who ruled for nearly three decades.

ANSWER: Mao Zedong

(Tossup 15) This unit of energy names an object whose "bomb" version uses a constant volume and withstands high pressures to measure heat. One of these units is equal to 4.184 Joules of energy. This unit is a measurement of the heat required for a gram of water to increase its temperature by 1 degree Celsius. For 10 points, name this unit of thermal energy whose dietary type measures the nutrition and energy of food.

ANSWER: calorie

(Tossup 16) This musician created the "gesamtkunstwerk" [guh-ZAMT-koonst-verk], or "total artwork," in which all musical and theatrical elements merge to form a complete artistic experience. Ludwig II built a theatre for the exclusive production of this man's music dramas known as the Bayreuth Festspielhaus. This German wrote a tetralogy that follows Norse mythology as it retells the saga of the Nibelung [NEE-buhl-oong]. For the point, what composer wrote Die Meistersinger von Nurnberg and the Ring Cycle?

ANSWER: Richard Wagner

(Tossup 17) After this man wrote the publication *Defence of the Seven Sacraments*, Pope Leo X bestowed upon him the title of Fidei Defensor. Thomas Wolsey was charged with praemunire after failing to negotiate an annulment of this man to Catherine of Aragon. This man executed Thomas More for going against his Acts of Supremacy. Ftp, name this second Tudor king most well known for establishing the Church of England and had six wives.

ANSWER: Henry VIII

(Tossup 18) Two characters in one of this man's works find the name Arne Saknussemm alongside a coded note in runic script. That work by this man features the "Lidenbrock sea" and "Axel island". In another work by this man, the *Abraham Lincoln* is sent to hunt a sea monster later revealed to be a submarine. The *Nautilus* and Captain Nemo appear in the works of, for the point, what author of *Journey to the Center of the Earth* and *20000 Leagues under the Sea*?

ANSWER: Jules Verne

(Tossup 19) With Leonard Mlodinow, this scientist discussed God's role in the universe in the book *The Grand Design*. With Kip Thorne, this scientist made a bet with John Preskill about the nature of singularities. This scientist, who names a form of radiation emitted by black holes, wrote the popular science book *A Brief History of Time*. For the point, name this physicist who in 2018 died of complications due to ALS.

ANSWER: Stephen Hawking

(Tossup 20) In Sikhism, 24 avatars are ascribed to this deity including the Arihants of Jainism. Buddhists in Sri Lanka consider this deity the protector of Buddhism and refer to this deity as Upulvan. An avatar of this god was a charioteer who gave counsel to the archer Arjuna. The most famous avatars of this god include Krishna and Rama. The husband of Lakshmi was, for the point, what four-armed preserver deity in the Hindu Trinity?

ANSWER: Vishnu

(Tossup 21) The first surviving description of this object appears in a reference to the Staircase of Mount Meru. The pattern obtained by colouring only the odd numbers in this object will resemble the Sierpinski sieve. Binomial coefficients make up the entries in this object, where every number is the sum of the two numbers above it. For the point, name this expanding geometric arrangement of numbers named after a French mathematician.

ANSWER: Pascal's triangle

(Tossup 22) One book describes how this man teaches a slave to double the area of a square by drawing a diagonal. This man is the subject of "The Symposium" and "The Apology" and describes himself as a "gadfly of the state". As punishment for corrupting the youth of Athens, this man was ordered to drink hemlock. For the point, name this Ancient Greek philosopher, the teacher of Plato and the subject of many of his dialogues.

ANSWER: Socrates

(Tossup 23) In this work, the crew of the *Demeter* vanish one by one after it runs aground near Whitby. This work's antagonist purchased multiple estates where he hid 50 boxes of earth. A "bloofer lady" in this work is later revealed to be Mina Murray's friend Lucy Westenra. Quincey Morris, Abraham Van Helsing and Jonathan Harker journey to Transylvania to defeat this novel's antagonist. For the point, name this Bram Stoker novel about a title vampire.

ANSWER: Dracula

(Tossup 24) This man's early paintings include *The Old Guitarist*. A painting by this artist features five young women, two of whom are depicted with African mask-like features. The aforementioned painting was created during this artist's African period, which followed his Rose period. This artist's most famous work includes a screaming horse and a shattered sword. The Condor Legion's bombing of a Basque town is depicted by, for the point, what painter of *Guernica*?

ANSWER: Pablo Picasso

(Tossup 25) Remains found at this location have been conjectured to belong to either Bartholomew Gosnold or the 3rd Baron de la Warr. During its third winter, most of this location's inhabitants died during its "Starving Time," although this location's economy would later improve after tobacco was grown here by John Rolfe, who later married a member of a tribe which lived near this location. For the point, name this settlement in Virginia which was at one time led by Captain John Smith.

ANSWER: Jamestown

(Tossup 26) This man died after he was thrown off a cliff by Lycomedes of Skyros. This Husband of Phaedra also fathered a son with the Amazon Hippolyta. This man's father committed suicide after he forgot to change the color of his sails. This son of Aegeus was aided in his most famous task by a princess who gave him a ball of thread. This man later abandoned that princess, Ariadne, on Naxos. For the point, name this mythical king of Athens who slew the Minotaur.

ANSWER: Theseus

(Tossup 27) Freshwater species of this organism are the intermediate hosts for schistosomiasis blood flukes. Prialt, a painkiller one thousand times more potent than morphine, is derived from the venom of a cone species of this animal. The ancient dye Imperial purple and the conch horn are all obtained from this animal. For the point, name this type of animal, a gastropod that can retreat inside its shell and is used to make escargot.

ANSWER: snail

(Tossup 28) Hereditary spherocytosis is caused by defects in the cell membrane of these entities, while abnormal production of a protein this entity carries causes thalassemia. These entities are produced through erythropoiesis in the bone marrow of large bones. Lacking nuclei, these entities are shaped like biconcave disks, depressed in the centre to carry hemoglobin. For the point, name these cells that carry oxygen throughout the body.

ANSWER: Red blood cells

(Tossup 29) A character in this work says that "The one thing that doesn't abide by majority rule is a person's conscience". This novel's protagonist befriends a boy named Dill. Two characters in this novel are attacked on their way home from the Halloween pageant by Bob Ewell. Tom Robinson is accused of rape in this novel and he is defended by the narrator's father Atticus. Scout Finch narrates, for the point, what novel by Harper Lee?

ANSWER: To Kill a Mockingbird

(Tossup 30) During this battle, all the aircraft of VT-8 were shot down. The attacking side during this battle simultaneously launched Operation AL against the Aleutians. The losers of this battle did not know that their opponents had broken the JN-25 code. During this battle, dive bombers from the USS Enterprise and USS Yorktown successfully destroyed three Japanese aircraft carriers. what crucial US victory that turned the tide of the Pacific war?

ANSWER: Battle of Midway

## Backups

(Tossup 31) Joseph Pulitzer was responsible for raising \$100,000 in order to fund the base of this structure. Before the construction of his namesake tower, Gustave Eiffel was responsible for engineering this structure's steel skeleton, and Emma Lazarus wrote the poem "The New Colossus" to commemorate its construction. For the point, name this structure sculpted by Auguste Bartholdi which sits on an island in New York Harbor.

ANSWER: Statue of Liberty (or Liberty Enlightening the World)