**The 2021 Scottie**



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**Round Three**

1. **In Chinese mythology, one of these animals which took the guise of a human is credited with creating a torture device and corrupting King Zhou. Another of these animals was placed in the sky as a constellation after it and its pursuer were turned to stone by Zeus. One of these animals frequently clashes with a wolf named** **(\*)** Isengrim in medieval literature, while an Aesop fable about one is the origin of the term “sour grapes.” The trickster Reynard is one of these animals, as are Japanese spirits called *kitsune*. For 10 points, name these animals, which in Shinto myth can have up to nine tails.

ANSWER: **fox**es <SK>

1. The final electron acceptor of the light-dependent reactions in this process is NADP. For 10 points each:

[10] Name this process that occurs in the chloroplast and is used by plants to synthesize glucose.

ANSWER: **photosynthesis**

[10] This “light-independent” cycle of photosynthesis produces glyceraldehyde-3-phosphate, a subunit of glucose. It takes place in the stroma of chloroplasts.

ANSWER: **Calvin**-Benson-Bassham Cycle

[10] This most abundant enzyme on Earth performs carbon fixation at the beginning of the Calvin Cycle. This enzyme is located only in the bundle-sheath cells in C4 plants.

ANSWER: **RuBisCO** [or **Ribulose-1,5-Bisphosphate Carboxylase/Oxygenase**] <CW>

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2. **In one story by this author, Petro picks up a fern on Kupala night and finds a treasure that requires him to decapitate the child Ivas to open. That work, “St John’s Eve,” is found in this author’s collection *Evenings on a Farm Near Dikanka*. In a play by this author, residents of a small town offer bribes to Khlestakov after he is mistaken for a (\*)** government official. In a short story by this author, Akaky Akakievich haunts St. Petersburg after the title piece of clothing is stolen. For 10 points, name this author of *The Inspector General* and “The Overcoat.”

ANSWER: Nikolai **Gogol** <RO>

2. This novel ends with Christian consigned to an insane asylum and Johann dead of typhoid. For 10 points each:

[10] Name this novel that chronicles the slow decline of a wealthy family from Northern Germany.

ANSWER: ***Buddenbrooks***

[10] *Buddenbrooks* was written by this German author, whose novella *Death in Venice* ends with Gustav von Aschenbach’s death, possibly from cholera.

ANSWER: Thomas **Mann**

[10] In Mann’s *The Magic Mountain,* this protagonist spends years in a sanitarium to cure his tuberculosis.

ANSWER: **Hans** **Castorp** [accept either name] <OK>

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3. **While working with coal, this person coined the terms graphitising and non-graphitising carbon, and in 1951 began working at King’s College London under John Randall. This scientist’s study of the structure of the tobacco mosaic virus was cut short after her death from (\*)** ovarian cancer, and she was excluded from the group nominated for the 1962 Nobel Prize in Physiology or Medicine. For 10 points, name this biochemist who used x-ray crystallography to take Photo 51, an image showing proof that DNA had a double-helix shape.

ANSWER: Rosalind **Franklin** <CW>

3. A thick layer of red ash has been found in the soil of London from when it was destroyed during this woman’s revolt. For 10 points each:

[10] Name this Iceni queen who led a revolt after Rome ignored her husband's will and annexed her lands.

ANSWER: **Boudicca**

[10] Boudicca was defeated by Seutonius at a battle named for this historic street, which crosses the Thames.

ANSWER: **Watling** Street

[10] Much of what we know about Boudicca comes from the writings of this Roman historian, who is known for his *Annals* and *Histories*.

ANSWER: Publius Cornelius **Tacitus** <TG/SK>

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4. **Christ firmly holds the wrist of a young girl in one painting from this period, Nicolaes Maes’ *Christ Blessing the Children*. Another artist from this era depicted a possible witch with an owl on her shoulder in *Malle Babbe*,** **but is more famous for depicting a man with a large hat and upturned mustache in *The*** (\*) *Laughing Cavalier*. Along with Frans Hals, another artist of this era depicted a young woman wearing a blue headband and the titular piece of jewelry, For 10 points, name this era in which Johannes Veermer and Rembrandt worked in cities like Amsterdam.

ANSWER: **Dutch Golden** Age [prompt on partial] <GR>

4. This medium often uses gum arabic as a binder for pigment. For 10 points each:

[10] Name this artistic media, which may be packaged in tubes or as a “cake” of paint. Gouache [*gwash*] is a similar medium that is more opaque.

ANSWER: **watercolor**

[10] This artist painted numerous watercolors across the world, but is better known for his portraits, including the scandalous *Portrait of Madame X*.

ANSWER: John Singer **Sargent**

[10] This other artist created a series of watercolor landscapes and nudes while living in Canyon, Texas early in her career. She is better known today for her paintings of flowers.

ANSWER: Georgia **O’Keeffe** <TC>

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5. **In 1972, secret talks were held with this group at 96 Cheyne Walk, while eight members of their Tyrone Brigade were killed in an ambush during an attack on Loughgall [*lock-gall*]. After thirteen demonstrators were killed in Derry, this group responded by setting off over twenty bombs on what became known as (\*)** Bloody Friday, and later assassinatedLord Mountbatten. This organization is associated with Sinn Fein, which endorsed the Good Friday Agreement, ending this group’s armed campaign against British rule in Northern Ireland. For 10 points, name this terrorist organization whose “provisional” wing fought the British during the Troubles.

ANSWER: Provisional **Irish Republican Army** [accept P**IRA**] <TG>

5. This goddess forms the Tridevi along with Lakshmi and Saraswati. For 10 points each:

[10] Name this deity, who serves as the mothering aspect of the supreme goddess Mahadevi. She has authority over marriage and children.

ANSWER: **Parvati**

[10] Parvati was married to this three-eyed Hindu god, who serves as the destroyer in the Trimurti.

ANSWER: **Shiva**

[10] In her quest to marry Shiva, Parvati caused the death of this god of love. This god was burned to ash by Shiva after attempting to wake him with arrows.

ANSWER: **Kama**deva <SK>

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6. **This nation once had a dispute over the Hanish Islands with a nation to its west. This nation contains the coastal area of Tihamah, and the highest point in this country is Jabal an-Nabi Shu'ayb. One island controlled by this nation is home to the dragon blood tree and the (\*)** Socotra sparrow. This Middle Eastern nation is separated from Africa by the Bab-el-Mandeb, and separatists in this country are currently in control of its port city of Aden. For 10 points, name this country on the Arabian peninsula with an official capital at Sana'a.

ANSWER: **Yemen** <GR>

6. The protagonist of this novel passes through the Valley of the Shadow of Death after defeating the fiend Apollyon. For 10 points each:

[10] Name this allegorical novel by John Bunyan, which describes a journey undertaken by Christian.

ANSWER: *The* ***Pilgrim’s Progress*** *from This World to That Which Is to Come*

[10] *The Pilgrim’s Progress* is presented using this literary technique popular in medieval poetry. Near the beginning of another work using this literary technique, *Pearl*, the narrator falls asleep in a garden.

ANSWER: **dream vision** [or **dream allegory**; prompt on “dream,” “vision,” or “allegory”]

[10] This author used dream visions in many of his works, including *The House of Fame* and *The Book of the Duchess*. He also included a dream in one of his *Canterbury Tales*.

ANSWER: Geoffrey **Chaucer** <TR>

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7. **This man’s vice president is the only one to have been sworn in on foreign soil, and he was severely injured after his horse fell on his leg during the Battle of Contreras. Two weeks before this president’s inauguration, his oldest surviving son died in a train accident, and his administration faced immense backlash after the release of the Ostend Manifesto. This president signed the (\*)** Gadsden Purchase, and his ardent Jacksonianism helped him defeat Winfield Scott in the 1852 election. For 10 points, name this fourteenth president, who signed the Kansas-Nebraska Act.

ANSWER: Franklin **Pierce** <GR>

7. Sergei Prokofiev used this instrument to represent the grandfather in *Peter and the Wolf*. For 10 points each:

[10] Name this low pitched instrument whose “contra” version is used in Beethoven’s 5th symphony.

ANSWER: **bassoon**

[10] The bassoon is a double reed member of this musical family, which also includes the clarinet.

ANSWER: **woodwind**s

[10] Bassoons introduce the main theme of this Paul Dukas work. Mickey Mouse represents the titular figure of this work in *Fantasia*.

ANSWER: *The* ***Sorcerer’s Apprentice*** <GR>

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8. **The Abraham-Minkowski controversy concerns the calculation of an electromagnetic form of this quantity in a dielectric, and a “canonical” form of it is used in Hamiltonian mechanics. A particle’s position and its value for this quantity (\*)** cannot both be known at the same time according to the Heisenberg uncertainty principle. Multiplying time by the change in force gives the change in this quantity, impulse. For 10 points, name this quantity, which can be expressed as mass times velocity.

ANSWER: linear **momentum** [do not accept or prompt on “angular momentum”] <CW>

8. This state is one of two that are home to the Sangre de Cristo mountains. For 10 points each:

[10] Name this state, which contains the cities of Durango, Boulder, and Denver.

ANSWER: **Colorado**

[10] This landform in western Colorado is the largest flat-topped mountain in the world.

ANSWER: **Grand Mesa**

[10] This national park in Colorado contains a large number of Ancestral Puebloan cliff dwellings, including the Cliff Palace.

ANSWER: **Mesa Verde** National Park <GR>

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9. **Upon returning to his home country, this character discovers that he was excluded from the will of his father, whose original name was Kreutznauer. This character is captured by Moroccan pirates and sold into slavery, but escapes and purchases a plantation in Brazil. After taming a parrot, this man discovers a single (\*)** footprint which he believes was made by the devil himself. After being saved from cannibals, the slave Friday declares this man to be his leader. For 10 points, name this character who is stranded on the “island of despair” in a novel by Daniel Defoe.

ANSWER: **Robinson** **Crusoe** [accept either] <RO>

9. One definition of this quantity sets it equal to the cross product of the moment arm and force. For 10 points each:

[10] Name this rotational analogue of force.

ANSWER: **torque**

[10] This phenomenon has torque-induced and torque-free types. It refers to a change in the orientation of an object’s axis of rotation.

ANSWER: **precession**

[10] Torque-induced precession is easily demonstrated using these devices, which allow the axis of rotation to have any orientation. A common version of this device has three gimbals.

ANSWER: **gyroscope** <TR>

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10. **This man was once concertmaster for Duke William Ernst, who jailed him for four weeks after he resigned. One of the most challenging solo pieces for violin ever written is the *Chaconne* from this composer’s *Partita in D Minor.* This man used a tune written by Frederick the Great to compose *The (\*)*** *Musical Offerin*g, and also wrote six concertos for the Margrave of Brandenburg. For 10 points, name this German composer of *Toccata and Fugue in D Minor*.

ANSWER: **J**ohann **S**ebastian **Bach** [prompt on “Bach”] <TG>

10. James Iredell was the only justice who dissented in this case, basing his judgement off of common law. For 10 points each:

[10] Name this case, considered to be the first of significance to be heard by the U.S. Supreme Court. It ruled that citizens can sue states in federal court.

ANSWER: ***Chisholm v. Georgia***

[10] Chisholm attempted to sue Georgia over payment for goods supplied by Robert Farquhar during this conflict.

ANSWER: American **Revolution**ary War

[10] The ruling in *Chisholm v. Georgia* was later overturned with the passage of this amendment, which granted sovereign immunity to states.

ANSWER: **Eleventh** <GR>

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11. **Gregory of Tours wrote of the Tauredunum event, a tsunami that destroyed much of this city in 563. This city celebrates L’Escalade in honor of the repulsion of an invasion led by the Duke of Savoy. His rejection of the holy trinity caused Michael Servetus to be burned at the stake for heresy in this city, which was unofficially led by the author of (\*)** *Institutes of the Christian Religion*. This city is home to the international headquarters of the Red Cross and its namesake “Conventions” established guidelines for the treatment of prisoners and non-combatants in war. For 10 points, name this Swiss city which was once home to John Calvin.

ANSWER: **Geneva** <GR>

11. The atmosphere of these celestial objects is estimated to be at most a few micrometers thick. For 10 points each:

[10] Name these extremely dense objects created by the collapse of supergiant stars.

ANSWER: **neutron star**s

[10] The core of neutron stars is hypothesized to be made up of this type of matter, which may be surrounded by nuclear pasta.

ANSWER: **strange** quark matter [or **degenerate** matter]

[10] Neutron stars are created after a main-sequence star exceeds this quantity, the maximum mass of a stable white dwarf.

ANSWER: **Chandrasekhar limit** <TC>

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12. **During this man’s early life, he faked myopia to escape enrollment in the Naval Academy, although he would later serve as a lieutenant during World War II. This man described his connection to a “guardian angel,” which he described as a tall red-headed woman named the Empress. This man theorized a “science of the mind” which he dubbed (\*)** Dianetics, and, in his theology, he described the human soul as a “Thetan.” For 10 points, name this self-proclaimed prophet of Xenu and founder of Scientology.

ANSWER: L. Ron **Hubbard** <SK>

12. This novel’s main character is a young New York socialite named Esther Greenwood. For 10 points each:

[10] Name this novel, which details Esther’s struggles with mental illness and begins in “the summer they electrocuted the Rosenbergs.”

ANSWER: ***The Bell Jar***

[10] *The Bell Jar* was the only novel written by this American poet, who originally published it under the pseudonym Victoria Lucas.

ANSWER: Sylvia **Plath**

[10] Plath was survived by this man, her husband, who was named Poet Laureate of the United Kingdom in 1984. His final collection, *Birthday Letters*, was published in 1998 and chronicled his relationship with Plath.

ANSWER: Ted **Hughes** <JD>

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13. **In one novel set in this city, detective Dave Robicheaux investigates a series of crimes committed after a disastrous storm. This setting of *The Tin Roof Blowdown* is also the setting of a novel in which a hot dog vendor runs off with (\*)** Myrna Minkoff. Robert Lebrun is the love interest of the protagonist in another novel set in this city, which ends with Edna Pontellier drowning in the Gulf of Mexico. For 10 points, name this city, the setting for *A Confederacy of Dunces* and *The Awakening*.

ANSWER: **New Orleans** <RO>

13. This man was inspired by smashed guitars when designing the Museum of Pop Culture. For 10 points:

[10] Name this architect who also designed the Walt Disney Concert Hall.

ANSWER: Frank **Gehry**

[10] This other work by Gehry resembles two people performing the title action. This unconventionally-shaped building is located in Prague.

ANSWER: **Dancing House** [accept but do not reveal **Fred and Ginger**]

[10] The Dancing House was originally named after this dancer and his partner Ginger Rogers.

ANSWER: Fred **Astaire** <GR>

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14. **This man explained how patterns on creatures like the giant pufferfish could occur naturally in his essay “The Chemical Basis of Morphogenesis,” and he invented a secure speech system named Delilah. A paper by this man showed that the Entscheidungsproblem [*int-sy-dunce-problem*] has no general solution, and he used advancements by Polish mathematicians to build a device called the (\*)** “bombe.” This man’s namesake law posthumously pardoned British men who had been convicted of homosexual acts. For 10 points, name this British mathematician who helped to break the Enigma code.

ANSWER: Alan **Turing** <TG>

14. This empire lost the siege of Plevna to Russian forces. For 10 points each:

[10] Name this nation centered around Anatolia whose elite troops were known as Janissaries.

ANSWER: **Ottoman** Empire

[10] As a result of the last Russo-Turkish War, this country gained autonomy from Ottoman rule. Boris III was a tsar of this modern-day nation, whose capital city is Sofia.

ANSWER: **Bulgaria**

[10] Several other Balkan countries were granted independence by this treaty. Great Britain and Austria-Hungary modified the terms of this treaty via the Treaty of Berlin to curtail Russia’s influence in the region.

ANSWER: Treaty of **San Stefano** <CB>

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15. **This movie’s screenplay was written by Reginold Rose, who originally wrote it as a teleplay. One character in this film defends his position by claiming “I’ve lived among them all my life. You can’t believe a word they say.” Another of the namesake characters is accused of voting guilty with everyone else because (\*)** Yankees baseball tickets were “burning a hole” in his pocket. An argument in this drama that the murder weapon is a unique switchblade is refuted when juror number eight pulls out another knife that looks exactly the same. For 10 points, name this Sidney Lumet courtroom drama in which Henry Fonda’s character convinced his co-jurors to change their mind.

ANSWER: ***Twelve Angry Men*** <GR>

15. Answer the following about various pieces of religious clothing, for 10 points each.

[10] This piece of headwear is typically worn by Jewish men as a sign of reverence towards God.

ANSWER: **kippah** [or **yarmulke**]

[10] This piece of clothing is most prominent among Shia Muslims and Sikhs, who call it a dastar. It consists of a strip of cloth which has been looped around the head many times.

ANSWER: **turban**

[10] This robe is typically worn by members of the Catholic and Orthodox clergy and features a full-length, often black coat.

ANSWER: **cassock** [accept **soutane**] <SK>

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16. **This man argued that economic theories should be judged based on their simplicity and fruitfulness in one work, while in another he calls for the abolishment of the FDA and advocates for school vouchers. This economist argued that New Deal policies were “the wrong cure for the wrong disease” and blamed the Federal Reserve for the (\*)** Great Depression in one work. In another work, he proposed a negative income tax and argued for increasing the monetary supply by a fixed annual percentage. Those works are a collaboration with Anna Schwartz, *A Monetary History of the United States*, and *Capitalism and Freedom*. For 10 points, identify this economist, a leading member of the Chicago School.

ANSWER: Milton **Friedman** <JD/TR>

16. The much-anticipated sixth main game in this series is scheduled to release in December 2021. For 10 points each:

[10] Name this first-person shooter series whose original trilogy of games has Master Chief take on the Covenant.

ANSWER: ***Halo***

[10] *Halo Infinite* will be available on release through this subscription service offered by Microsoft, which is available on both Xbox consoles and Windows PCs. This service’s “Ultimate” version also includes Xbox Live Gold and EA Play.

ANSWER: Xbox **Game Pass** [accept Xbox **Game Pass** Ultimate, Xbox **Game Pass** for PC, or Xbox **Game Pass** for Console]

[10] This online multiplayer game with gameplay described as “Halo meets Portal” was released on major consoles in July 2021. The server capacity for this game was increased after many players found themselves in extremely long queues to play it.

ANSWER: **Splitgate** <CW>

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17. **One official within this group recently announced in an interview that he is “absolutely fine and healthy,” and this group has criticized the United States for violating a treaty. The Panjshir resistance opposes the rule of this group, and is headquartered in the only provisional capital not under their control, Bazarak. This group signed the 2020** (\*) Doha Agreement with the U.S., and regained control of a country after Ashraf Ghani fled to Tajikistan. For 10 points, name this Islamic Military group that reinstated the Islamic Emirate of Afghanistan after the Fall of Kabul.

ANSWER: **Taliban** <GR>

17. This man first arrived in the Americas to study the Kwakiutl tribe, which led him to coin the term “cultural relativism.” For 10 points each:

[10] Name this "Father of American Anthropology" who taught a variety of future anthropologists at Columbia University.

ANSWER: Franz **Boas**

[10] Boas challenged many widely held claims about race and intelligence in this book, which claims that the title people are far less different from “civilized” cultures than previously thought.

ANSWER: *The* ***Mind of Primitive Man***

[10] One of Boas’ students was this man, who, along with Benjamin Whorf, developed a theory about how language influences thought.

ANSWER: Edward **Sapir** <GR>

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18. **A large quantity of this element is extracted from brines in Arkansas’ Smackover Formation. The presence of this element is signalled by peaks of equal height at M+ and M+2 in mass spectrometry, and its most common isotopes have masses of (\*)** 79 and 81. This element is used in a common test for alkenes, as it loses its color when reacting with unsaturated compounds. For 10 points, name this reddish-brown halogen, the only non-metal which is liquid at room temperature.

ANSWER: **bromine** <SK/TR>

18. Solutions with high concentrations of this substance are classified as “fuming.” For 10 points each:

[10] Name this compound, which has a pKa of approximately negative one and can be made via the Ostwald process.

ANSWER: **nitric acid**

[10] The Ostwald process can use a catalyst of this element and rhodium. Catalytic converters often use this element, whose atomic number is 78.

ANSWER: **platinum**

[10] Mixing nitric acid and hydrochloric acid yields this substance, named for its ability to dissolve gold and platinum.

ANSWER: **aqua regia** <CW>

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19. **This conflict was preceded by the Ezeiza massacre, which ended an alliance between left- and right-wing supporters of a namesake leader on the day of his return from exile. Eighteen people, including 91-year-old Miguel Etchecolatz, are currently on trial for torture and baby theft that occurred during this conflict, the aftermath of which has seen the Grandmothers of the Plaza de Mayo recover 130 (\*)** stolen children. Operation Condor supported the perpetrators of this period of state terrorism, during which some dissidents were thrown from military aircraft. For 10 points, name this 1976 to 1983 period of state terrorism in Argentina.

ANSWER: **Dirty** War <TG>

19. This city reportedly reached a population in the hundreds of thousands at its peak. For 10 points each:

[10] Name this Mesoamerican city whose notable landmarks included the Templo Mayor in its Sacred Precinct.

ANSWER: **Tenochtitlan**

[10] The last Aztec ruler of Tenochtitlan was this man, whose cause of death while captive to the Spaniards is disputed.

ANSWER: **Montezuma II** [or **Moctezuma II**; or **Moctezuma Xocoyotzin**; or **Motecuhzomatzin**; or **Moteuczoma**; or **Motecuhzoma**; or **Motēuczōmah**; or **Muteczuma**]

[10] After Montezuma’s death, Cortes and his forces were forced to retreat from Tenochtitlan in this event, whose name means “The Sad Night.”

ANSWER: La **Noche Triste** <TG/SK>

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20. **In one play set in this city, a man eats the brains of a decapitated head, causing him to lose a chance at immortality. Another work set in this city ends with two brothers killing each other after one of them breaks their agreement to alternate years ruling it. Another play set in this city includes the suicide of Haemon after the title character defies King (\*)** Creon when deciding to give burial rites to Polynices. An Aeschylus work focusing on Eteocles is titled for seven Argive captains who fight “against” this city. For 10 points, name this Ancient Greek city which titles a Sophocles trilogy that includes *Oedipus Rex*.

ANSWER: **Thebes** <RO>

20. This author lived during the transition from the Yuan to the Ming dynasty. For 10 points each:

[10] Name this Chinese author usually credited with writing *Romance of the Three Kingdoms*.

ANSWER: **Luo** Guanzhong [accept **Luo** Ben]

[10] Luo Guanzhong is also credited with editing this other of the four great works, which details the exploits of a band of 108 bandits called the “stars of destiny.”

ANSWER: ***Water Margin*** [accept ***Outlaws of the Marsh***; accept ***All Men are Brothers***]

[10] This American author also translated *Water Margin*, which she published with the title *All Men are Brothers*. Her original works include *The Good Earth*.

ANSWER: Pearl S. **Buck** <SK>