## The 2018 Scottie



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# Extra Questions

#### **TOSSUPS**

1. Rheotropic materials experience an increase in this property over time when exposed to shearing forces, while in thixotropic materials it decreases over time. Ludwig Prandtl proposed the existence of the boundary layer and area where the effects due to this property are (\*) high. The Reynold's number is defined by the ratio of internal forces to forces of this kind. For superfluids, this property is zero. For 10 points, name this property of fluids, commonly known as the resistance to flow. (MR)

ANSWER: viscosity

2. This author began a lengthy, three part poem in 1798 whose third part, the *Recluse*, was never finished. The middle part of that composition, *The Excursion*, was published in 1814 and featured characters such as the Solitary, the Wanderer, and the Pastor. Another poem by this author (\*) begins with the line "Five years have passed..." and describes the finding of daffodils by his sister Dorothy. For 10 points, name this poet of *The Prelude* who collaborated with Samuel Coleridge on *Lyrical Ballads*. (DD/TG)

ANSWER: William Wordsworth

3. This thinker said that "to become truly great, one has to stand with people, not above them," and also stated that despotism is based on fear, monarchies on honor, and republics on virtue. This philosopher ridiculed the rule of Louis XIV in a satirical view of life in Paris titled the (\*) *Persian Letters*. This enlightenment theorist's writings greatly influenced the decision to separate the three branches of government in the U.S. Constitution. For 10 points, name this French author of *The Spirit of the Laws*. (TG)

ANSWER: Baron de **Montesquieu** [accept **Charles-Louis de Secondat**]

- 4. Giuseppe Tartini and Jean-Baptiste Lully were both major operatic composers during this era. This era was divided into three phases, and it received its name from the Portuguese word for (\*) "misshapen pearl". Some characteristic of music during this era were rhythmic unity and terraced dynamics, and the harpsichord was especially important during it. For 10 points, name this era known for composers such as Vivaldi, Handel, and Bach. (PB) ANSWER: Baroque
- 5. While performing at the 2015 Pan American Games, "technical difficulties" prompted this person to throw a microphone in the air and walk off stage. This musician was the proposed co-spokesperson in the discussion that led to John Schnatter's dismissal from Papa Johns, and in 2018 he released the album KIDS SEE GHOSTS (\*) with Kid Cudi, whom he had earlier worked with on "Heartless". This man's comments during a TMZ interview sparked the "If Slavery Was A Choice" hashtag. For 10 points, name this rapper and fashion designer nicknamed Yeezy. (RN/GP)

ANSWER: **Kanye West** [accept either]

6. John Maynard Keynes was one of the designers of this organization that was created as part of the Bretton Woods Agreement. This entity's structural adjustment programs have been criticized for worsening poverty and reproducing the structures of colonialism. This organization contains (\*) 189 member countries and is headquartered in Washington D.C. For 10 points, name this financial organization with goals of promoting economic growth and cooperation around the world. (PB)

ANSWER: International **M**onetary **F**und

7. John Wynter and Thomas Doughty captained two of the five ships on this expedition, but Doughty was ordered beheaded by this expedition's leader and Wynter headed home after being caught in a severe storm in the Strait of Magellan. (\*) Reduced only to a renamed flagship, the leader of this journey landed in California before crossing the Pacific and rounding the Cape of Good Hope. For 10 points, the *Golden Hind* was the only ship to return from what historic voyage led by Sir Francis Drake? (TG)

ANSWER: <u>circumnavigation</u> of the earth by Sir Francis <u>Drake</u> [prompt on circumnavigation before Drake; accept <u>circumnavigation</u> after Drake]

- 8. In a novella by this author, Miss Tina burns the title letters after the narrator leaves her marriage proposal unanswered. Along with *The Aspern Papers*, this author created Madame de Vionnet, a Paris socialite involved in a love affair with Chadwick (\*) Newsome. In another novel by this author Daniel Touchett leaves much of his estate to his niece, Isabel Archer. For 10 points, name this author of *The Ambassadors* and *The Portrait of a Lady*. (GP) ANSWER: Henry James
- 9. One of this figure's sons was named Aethalides [eth-a-lee-dees] and was the herald of the Argonauts. This god once turned Battos and Agraulos into stone for taking and demanding bribes. This deity's namesake columns (\*) depict his head atop a stone pillar with genitalia attached. This god created a musical instrument out of a tortoise shell and intestines to appease his brother Apollo. For 10 points, name this messenger of the gods who carries a caduceus. (MR) ANSWER: Hermes [accept Mercury]
- 10. In a novel written by an author from this nation, the fictional country of Cimmeria is described in one chapter. The action of that book revolves around You, the reader, trying to read a book which has pages out of order. In another novel from this country, (\*) William of Baskerville and Adso of Melk attempt to investigate a murder at a Benedictine monastery. For 10 points, name this country where *If on a Winter's Night a Traveller* and *The Name of the Rose* were written by Italo Calvino and Umberto Eco. (OK) ANSWER: **Italy**
- 11. A woman wearing a yellow dress in a painting by Cassatt appears to be trying to tug her dress loose from a piece of furniture while displaying one of these things. In a play by Oscar Wilde, one of these is found in Lord Darlington's house. Lunia Czechowska is the name of the woman holding one of these (\*) devices in a Modigliani work that was stolen in 2010. For 10 points, name these devices waved by individuals in order to cool the person holding it. (TG)

ANSWER: fan

12. In Ludovico Ariosto's *Orlando Furioso*, the knight Astolfo flies in Elijah's flaming chariot to this location to try and find a cure for Orlando's madness. A princess from this place grows up as the adopted daughter of a bamboo cutter and his wife in *The Tale of the Bamboo Cutter*. One of Wilkie Collins' best known works is about a diamond (\*) titled for this object and "Light from [this object] drowns out all of the stars" according to J.R.R. Tolkien. For 10 points, name this celestial object. (TG)

ANSWER: the **moon** 

13. The last time a major shift occurred in this feature of the Earth was about 780,000 years ago, during the Brunhes-Matuyama reversal. Saturn's is in line with its axis of rotation, and the one of these possessed by Jupiter is stronger than the Sun. Ganymede is the (\*) only moon in the Solar System to possess one of these. Geodynamo theory explains how the Earth creates and maintains, for 10 points, what type of field, often abbreviated as a B field? (MR)

ANSWER: magnetic field

14. This battle began with the capture of the heavily defended Fort Douaumont, and the defenders at this battle were supplied by a route known as the "Sacred Way." General Erich von Falkenhayn stated the goal of the attack was to "Bleed France white" while French General Robert Nivelle famously ordered "They Shall not pass." (\*) Philippe Petain was nicknamed the Lion of this battle which saw over 700,000 combined casualties. For 10 points, name this 1916 World War 1 battle, a failed German offensive near the Meuse River. (RN)

ANSWER: Battle of **Verdun** 

15. The salivary glands of Drosophila contain oversized or "polytene" forms of these formations, and their "Philadelphia" variety are often found in leukemia patients. In bacteria, these structures are circular and called (\*) plasmids, and these structures are depicted in photographs called karyotypes. Patients with Down Syndrome contain three of the twenty-first of these. For 10 points, name these structures that contain genetic material for which humans have 23 pairs. (MR)

ANSWER: chromosome

- 16. During one battle in this conflict, one of the Niños Heroes legendarily wrapped his country's flag around himself and leapt to his death to save it from capture. Fifty Irish Catholic soldiers were hanged in this war after having deserted to the opposing side due to feeling persecuted by Protestants in their home country. Zachary Taylor and Winfield Scott were US generals in this war, which took place during the Polk presidency. For 10 points, identify this conflict resulting in the US receiving California in the Treaty of Guadalupe Hidalgo. (TG) ANSWER: Mexican-American War [accept Mexican War]
- 17. This emperor supposedly constructed a large party vessel that sailed on Lake Nemi, but that vessel has never been found. This emperor received his nickname when, as a child, he wore a miniature soldier's uniform (\*) while traveling on military campaigns with Germanicus. For 10 points, name this Roman Emperor known as "little boots" who was assassinated before he could appoint his horse as a consul. (PB)

### ANSWER: Caligula

18. The Aar, the Waal, and the IJssel rivers are all tributaries of this river that has its source at Lake Toma. This river's namesake waterfall, located in Switzerland, is the largest in Europe. (\*) Cologne, Dusseldorf, and Rotterdam are all major cities on this river. For 10 points, name this long European river that flows through much of Germany and then the Netherlands before emptying into the North Sea. (PB)

ANSWER: Rhine River

19. In the mechanical type of this condition, all the forces on an object sum to zero. The zeroth law of thermodynamics is essentially the transitive property of this state. (\*) Le Chatelier's principle states that when a system in this condition is disturbed, it will return to this state. This state's constant is symbolized by the letter K. For 10 points, name this state, the "thermal" of which involves no heat exchange. (MR)

ANSWER: **equilibrium** 

20. This piece was inspired by Doane Robinson, who initially wished to locate it in the Needles. George H.W. Bush spoke at the official dedication to this work on its 50th anniversary in 1991. In opposition to this sculpture, a memorial depicting a famous Oglala Lakota warrior (\*) has been under construction since 1948. For 10 points, name this National Memorial sculpted by Gutzon Borglum that features 60-foot tall heads of four US Presidents. (TG)

ANSWER: Mount Rushmore National Monument

#### BONUSES

1. For 10 points each, answer these questions about Italian art during the Renaissance. (PB)

[10] This so called "Renaissance Man" created many well-known pieces including *Lady with an Ermine*, *Virgin of the Rocks*, and the *Mona Lisa*.

ANSWER: Leonardo da Vinci [accept either]

[10] This Florentine painter's first name meant "clumsy Tom", and he painted several frescoes at the Brancacci Chapel in Florence. He also painted *The Tribute Money* and *Expulsion from the Garden of Eden*.

ANSWER: <u>Masaccio</u> [or Tomasso di Ser Giovanni di <u>Simone</u> Cassai; prompt on "Tomasso"] [10] *Bacchus and Ariadne*, *The Rape of Europa*, and *Venus of Urbino* were all painted by this leading member of the Venetian School.

ANSWER: <u>Titian</u> [or <u>Tiziano</u> <u>Vecellio</u>; accept any underlined portion]

2. In Chinese mythology, one god is born from a cosmic egg and gradually pushes the two halves of the shell apart until they become the earth and sky. For 10 points each: (TG)

[10] Name this god that grew every day for 18,000 years in order to accomplish that feat.

ANSWER: Pan Gu

[10] In the Pan Gu creation myth, humans were believed to have evolved from these parasites that fell from Pan Gu's fur.

ANSWER: fleas

[10] In another myth, this sister of Emperor Fuxi with the body of a snake and head of a human creates humans out of yellow clay.

ANSWER: Nuwa

3. This event inspired the story "The Things They Left Behind" by Stephen King as well as Thomas Pynchon's novel *Bleeding Edge*. For 10 points each: (OK/TR)

[10] Name this tragic event. In *Extremely Loud and Incredibly Close*, Oskar's father was killed in this New York City event.

ANSWER: 9/11

[10] 9/11 survivor Keith Neudecker is the central character of *The Falling Man*, a work by this postmodern author. He wrote about a professor of Hitler Studies in *White Noise*.

ANSWER: Don DeLillo

[10] Another work inspired by 9/11 is *In the Shadow of No Towers*, a graphic novel by Art Spiegelman, who also created this graphic novel retelling the Holocaust with the Germans as cats.

ANSWER: Maus

4. This procedure involves taking mature eggs and fertilizing them with sperm in a lab setting, and it is the most effective form of reproductive assistance. For 10 points each: (MR)

[10] Name this process, which differs from in vivo fertilization.

ANSWER: **in vitro** fertilization

[10] This man was awarded the 2010 Nobel Prize in Physiology and Medicine for his development of in vitro fertilization.

ANSWER: Robert Edwards

[10] Edwards perfected in vitro fertilization while a fellow at this university known for having Stephen Hawking and Alan Turing as fellows.

ANSWER: University of **Cambridge** 

5. For 10 points each, answer the following about the 1963 March on Washington. (RN)

[10] King gave his famous "I Have A Dream" speech on the steps of this landmark.

**ANSWER: Lincoln Memorial** 

[10] This current Representative from Georgia was the youngest to speak during the March on Washington and had originally planned to be more critical of the Kennedy administration.

ANSWER: John Lewis

[10] This civil and gay rights activist organized the 1963 March on Washington.

ANSWER: Bayard **Rustin** 

6. For 10 points each, answer the following about an economist known for a namesake tax.

[10] That tax suggested by this man proposes to tax monetary exchanges to decrease speculation in currency.

ANSWER: James **Tobin** [accept **Tobin Tax**]

[10] Tobin also proposed this statistical model between an independent variable and a non-negative dependent variable. The variable may have been so-named because Tobin was the inspiration for a character with this name in Herman Wouk's *The Caine Mutiny*. (TG)

ANSWER: the **Tobit** Model

[10] The ratio between the market and replacement value of a physical asset is known as Kaldor's V or Tobin's this letter.

ANSWER: **Q** ratio

- 8. This franchise debuted on the Nintendo 64 with a roster of only 12 playable characters. For 10 points each: (TR)
- [10] Name this Nintendo fighting game franchise. Its GameCube release, *Melee*, remains one of the most popular fighting games today.

ANSWER: Super <u>Smash</u> Bros. [or Super <u>Smash</u> Brothers]

[10] The upcoming *Super Smash Bros. Ultimate* will be launched on this console, Nintendo's newest. Its primary feature is the ability to be used as a mobile or home console.

ANSWER: Nintendo Switch

[10] Super Smash Bros. Ultimate features several third-party characters, including this Square creation. He is the protagonist of Final Fantasy VII, where he defeats Sephiroth.

ANSWER: Cloud Strife

9. Answer the following about Russian ballet in the 20th century. For 10 points each: (DD) [10] This ballet created by Igor Stravinsky has sections titled "The Adoration of the Earth" and "The Sacrifice". It caused riots at its world premiere in Paris in 1913.

ANSWER: The Rite of Spring

[10] This ballet dancer choreographed the Rite of Spring. He also choreographed Swan Lake, and he is known for retiring at age 29 due to schizophrenia.

ANSWER: Vaslav Nijinsky

[10] This other Russian choreographer defected to the United States in 1961. He is famous for his collaboration with Margot Fonteyn.

ANSWER: Rudolf Nurevev

10. For 10 points each, answer these questions about well-known works of philosophy. (PB) [10] In this work, Jean-Jacques Rousseau argues that legitimate government rule comes from an agreement between the citizens and their rulers.

ANSWER: The Social Contract

[10] This is the name of Aristotle's best known work on ethics. It was probably named for his son.

ANSWER: Nicomachean Ethics

[10] This Dutch-Jewish philosopher was one of the leading figures in rationalism in the 17th century. He wrote *Ethics* and *Tractatus Theologico-Politicus*.

ANSWER: Baruch Spinoza

- 11. In some legends surrounding this figure, he is one of the last remaining Roman soldiers in Britain; in others, he is a Celtic king. For 10 points each: (OK)
- [10] Name this figure, whose death names the only prominent work of Thomas Malory.

ANSWER: King **Arthur** 

[10] In many versions of the King Arthur story, Arthur kills and is mortally wounded by this man, who is often depicted as Arthur's son by his half-sister.

ANSWER: Mordred

[10] The King Arthur story was given a more modern reinterpretation by this author in *The Once and Future King*, which opens with *The Sword in the Stone*.

ANSWER: T.H. White

- 12. Quantum numbers are rad. For 10 points each: (MR)
- [10] The principal quantum number describes the size of these functions where electrons can be found.

ANSWER: orbital

[10] An angular quantum number of 2 corresponds to this orbital, which has the most complex shape.

ANSWER: **f** 

[10] This quantum number, symbolized "s," parametrizes the angular momentum of a particle.

ANSWER: **spin** quantum number

- 13. For 10 points each, name these current Middle Eastern leaders. (RN)
- [10] This Turkish Prime Minister and leader of the Justice and Development party survived a 2016 coup.

ANSWER: Recep Tayyip Erdoğan

[10] This current Prime Minister of Israel defeated Shimon Peres in 1996 to gain the position. He is nicknamed Bibi and had an older brother killed in the Entebbe Raid.

ANSWER: Benjamin Netanyahu

[10] This current King of Jordan took power in 1999 following the death of his father, King Hussein.

ANSWER: King Abdullah II

- 14. This composer used a wind machine to portray windmills in *Don Quixote*. For 10 points each: (RN)
- [10] Name this composer of An Alpine Symphony and the opera Der Rosenkavalier.

ANSWER: Richard Strauss

[10] The "Sunrise" movement of one of Strauss' tone poems was popularized following its use in this Stanley Kubrick film.

ANSWER: 2001 A Space Odyssev

[10] That tone poem is this one, whose final section is titled "Song of the Night Wanderer." It was inspired by a Friedrich Nietzsche work of the same name.

ANSWER: <u>Also sprach Zarathustra</u> [or <u>Thus Spake Zarathustra</u>; or <u>Thus Spoke Zarathustra</u>; or Richard Strauss's <u>Opus 30</u>]

15. This author wrote "My name is not Marie Aurore de-Saxe....but Amantine-Lucile-Aurore Dupin." For 10 points each: (OK)

[10] Name this author of *Consuelo* and *Indiana* who wrote under a pen name.

ANSWER: George **Sand** 

[10] Sand was notorious for dressing in men's clothes, smoking in public, and multiple affairs, including one with this Polish French composer of mazurkas and preludes.

ANSWER: Frederic Chopin

[10] Chopin completed twenty-three preludes in each of the major and minor keys while he and Sand were vacationing on this largest of the Balearic island with capital of Palma.

ANSWER: Majorca

16. In general relativity, these regions exhibit such strong gravity that not even particles or electromagnetic radiation can escape. For 10 points each: (MR)

[10] Name these astronomical bodies. A supermassive one of these things is thought to be at the center of the Milky Way galaxy.

**ANSWER: Black Hole** 

[10] Black holes and gravitational collapse were first postulated in the 18th century by this French mathematician who has a namesake transform.

ANSWER: Pierre-Simon <u>Laplace</u>

[10] The no-hair postulate characterizes black holes based on three properties: angular momentum, charge, and this property.

ANSWER: mass

- 17. This work is the source for much of what we know about Norse mythology. For 10 points each: (OK)
- [10] Name this work, which opens with a description of the origins of the Norse gods and continues with a section entitled the *Gylfaginning*.

ANSWER: **Prose Edda** 

[10] Name this Icelandic author, who is the author of the *Prose Edda* and the *Heimskringla*.

ANSWER: Snorri Sturluson

[10] This other Icelandic author wrote *The Fish Can Sing* and *Independent People*. He is the only Nobel laureate from Iceland.

ANSWER: Halldor Kiljan **Laxness** 

- 18. Pencil and paper ready. For 10 points each, answer these questions about circles. (GP)
- [10] What is the area of a sector of a circle with radius of 4 and a central angle of pi over 2 radians?

ANSWER: 4 pi

[10] What is the measure, in degrees, of an inscribed angle in a circle that intercepts an arc measuring 134 degrees?

ANSWER: <u>67</u> degrees

[10] Quadrilateral DEFG is inscribed in a circle. If angle E is 102 degrees, what is the measure of angle G?

ANSWER: **78** degrees

- 19. Shortly after this faceoff between Britain and France in 1898, the two countries agreed on what their areas of influence in Egypt and the Sudan would be. For 10 points each: (TG)
- [10] This war scare at a namesake town on the White Nile River was the last serious dispute between Britain and France.

**ANSWER: Fashoda Incident** 

[10] The Anglo-Egyptian Treaty of 1936 gave Britain permission to place troops in Egypt in order to protect this important artificial waterway.

**ANSWER: Suez Canal** 

[10] The Suez Canal was nationalized by this 2nd President of Egypt in July 1956, precipitating its namesake Crisis.

ANSWER: Gamal Abdel Nasser