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### Tossups

1. One set of parameters that quantify these effects include the width parameters B1 through B5 and the length parameter L; those factors were developed by Verloop. Charton's nu modifies another equation used to determine these effects. A term for this kind of interaction symbolized with a lowercase delta was added to the Hammett equation by Taft. The cross section of reactive collisions over the total number of collisions gives a "factor" named this, which is multiplied by the (\*) collision frequency to find the pre-exponential factor. The Hoffmann product is preferred over the Zaitsev product in eliminations using bases that use this effect, like tert-butoxide. This effect is the reason why SN2 reactions are very slow in tertiary systems. For 10 points, name this effect in which bulky functional groups interfere with each other.

ANSWER: steric effects [or steric hindrance or steric resistance or steric factors; basically you need the word "steric"]

2. This author wrote about Blinker, who falls in love with Florence and later learns he owns the housing development in which she lives, in the story "Brickdust Row." In another of his stories, Sue convinces the artist Behrman to paint the title object before he dies, thus convincing the pneumonia-addled Johnsy to survive when it fails to fall. He also wrote about Jimmy Valentine, who is forced to reveal his hidden past as a (\*) safecracker to save his fiancée's niece, in "A Retrieved Reformation." In another story by this author of "The Last Leaf," Sam is re-named "Snake-eye, the Spy," and told by a boy that he is to be broiled at the stake at sunrise; in that story, found in *The Four Million*, Sam and his friend Bill end up returning Johnny to his father, Ebenezer Dorset. For 10 points, name this author of "The Ransom of Red Chief" and a story in which Jim and Della get each other ironically useless presents, "The Gift of the Magi."

ANSWER: O. Henry [or William Sydney Porter]

3. Paul Kainen suggested that this theorem could be related to quantum computing by applying it to a gedanken device consisting of two rooted cubic plane trees. A recent extension of this statement required the addition of the s-reflect extension to the Coq (cock) kernel. This theorem would follow from Wagner's theorem and the truth of the Hadwiger conjecture for K equals 5. A generalization of this statement says that the quantity in question is equal to the (\*) floor of quantity 7 plus quantity square root one plus 48 times genus end quantity all over 2; that statement is named for Heawood. It was proven by finding a set of 1476 reducible configurations by Appel and Haken, who then checked them all using a computer. For 10 points, name this theorem which states that any given map can be filled in with only a limited number of hues.

ANSWER: four color theorem

4. This artist depicted a man in overalls next to a woman in orange and a man in a tuxedo in one painting, while another work shows a lion statue and a painting of George Washington in a street in Detroit. One of this artist's works includes a naked man and woman lying on a sponge next to a red and yellow dress. In another work, that same dress was shown suspended from a toilet and a trophy over skyscrapers. This painter of *Autobus* depicted a woman in black underneath a woman in white plunging through clouds in (\*) *Suicide of Dorothy Hale*. and painted a bathtub with dreamlike objects floating next to the subject's feet in *What the Water Gave Me*. Another self-portrait showed this artist's spine as the title *Broken Column*. In another painting, this artist created two versions of herself, one in white and one in color, connected by a blood vessel. For 10 points, name this Mexican artist who painted many self-portraits showing herself with monkeys and highlighting her unibrow.

ANSWER: Frida Kahlo

5. This man made peace between the Susquehannocks (suhs-kwuh-HAN-ocks), Delaware, and Iroquois and provided shelter for refugee Mahicans during one conflict. William Blathwayt helped secure several of his political positions, and he feuded with James Blair over supporting a local college. After convincing the Mohawks to attack King Philip, he earned the nickname "Corlaer" for making the first treaty of the Covenant Chain with the Iroquois. His attempt to make (\*) Connecticut surrender its royal charter led to Connecticut officials allegedly hiding the charter in an oak tree. He appealed to Francis Nicholson for assistance after actions like limiting town meetings to once per year led to his overthrow in 1689, though he later would be appointed Governor of Virginia. For 10 points, identify this colonial governor of New York who also led the Dominion of New England.

ANSWER: Edmund Andros

6. This man prevented the destruction of one bridge by persuading Alexander I to rename it instead. One treaty negotiated by this man fixed the borders of French Guiana and returned the Cape Colony to the Dutch. One leader referred to this man as “shit in a silk stocking” following his resignation from his most famous position. As ambassador to the United Kingdom, this man proposed reorganizing the County of (\*) Flanders into a “Free State of Antwerp” as part of a plan to partition Belgium. A disability led this man to pursue theology instead of a military career, and he later became Agent-General of the Clergy. This man employed Hottinguer, Bellamy, and Hauteval in an attempt to obtain money from three American diplomats. For 10 points, name this foreign minister who represented France at the Congress of Vienna and demanded bribes in the XYZ Affair.

ANSWER: Charles Maurice de Talleyrand-Perigord

7. One person involved in this controversy wrote a New York Times op-ed criticizing “fixed” and “selfish” motivations while denying the use of game theory to help resolve this controversy. This controversy has led to felony charges against a statistician who was brought in to recalculate data released by ELSTAT, which involved a certain figure being brought up from 6% to 13% to 15.8%. Some argue that this crisis is the result of a policy spearheaded by Jacques Delors (duh-LORE) and adopted in 2000, and criminal charges have been threatened against a man who worked with (\*) James Galbraith to develop a contingency plan for parallel liquidity described as “treasonous” and which involved an alternative currency; that man is Yanis Varoufakis. For 10 points, name this crisis involving the economy of a certain European country.

ANSWER: Greek debt crisis [or Greek financial crisis; accept obvious equivalents involving Greece and debt or finance; accept things like “Grexit” or “Greece leaving the Euro”]

8. A type of flute from this country has an extra hole that can be covered by a reed membrane to create a buzzing timbre. A composer from this country called for brake drums and hubcaps in the percussion section of a symphony subtitled for the *Eroica* Symphony. The YouTube Symphony Orchestra premiered that *Internet* Symphony No. 1. A different piece sets poetry in this country in movements such as “The Lonely One in Autumn” and “The Drunken One in Spring.” This country is home to a (\*) two-stringed instrument held on the left thigh. A poem from this country was set in the half hour-long “Der Abschied” (“dare” AAB-sheet) movement of a piece written as a song cycle to avoid the “curse of the ninth”; that piece is Gustav Mahler’s *Das Lied von der Erde* (dahss LEET fohn “dare” URD-uh). For 10 points, name this country home to composer Tan Dun and instruments such as the *erhu* (AIR-hoo) and the *guqin* (goo-“CHIN”).

ANSWER: China [or Zhongguo]

9. A character in this play once promised to buy a girl a kingdom and call it the Kingdom of Orangia, and to carry her off like a troll with a princess. This play’s protagonist complains that it is too difficult to tell if one is being controlled by light devils or dark devils, and claims that everyone has a troll inside them and that his success is to blame for his sons’ deaths and his wife’s anxiety. In this play, the secretary Kaia is engaged to be married to her cousin (\*) Ragnar Brovik, who the protagonist hires due to fears about his talent. A character who first appeared in the author’s previous play *The Lady From the Sea*, Hilda Wangel, makes this play’s protagonist promise to build her a “proper castle in the air” before he falls to his death while climbing steeples. For 10 points, name this play about the architect Halvard Solness, by Henrik Ibsen.

ANSWER: *The Master Builder* [or *Bygmester Solness*]

10. One passage in this work compares those living in darkness to those living in light, saying that the latter have an obligation to expose the futile deeds of the former. The author of this work refers to himself as a “prisoner,” and urges his readers to live lives worthy of the calling they have received. The doctrine of predestination finds support mainly in the opening remarks of this work, which states “we were chosen in Him before the creation of the world.” This work concludes by admonishing the subjects to don various (\*) metaphorical pieces of armor, including the belt of truth and shield of faith. The line, “Do not let the sun go down on your anger” is taken from the fourth chapter of this work, which also urges early Christians to refrain from bitterness, slander, and malice. For 10 points, name this Pauline epistle written to its namesake church located in modern-day Turkey.

ANSWER: Paul’s Epistle to the Ephesians

11. A character in this play character claims to know how to cook “Ormitha Macarounda” despite not even knowing how to prepare bean sprouts. Other discussions in this play involve a toilet that takes too long to flush and is speculated to have a faulty ballcock, a story about an old man who crawls beneath a truck and is run over, and the significance of a picture of cricketers called “The First Eleven.” After a character in this play receives an envelope containing a dozen (\*) matches, an argument over “common usage” breaks out when one character asks another to “light the kettle.” Though it’s not *Waiting for Godot*, this play features a mysterious man, Wilson, who is only discussed and

never appears. The appearance of a series of notes bearing orders for food precedes the implied revelation that one character's task will be to kill the other. For 10 points, name this play about hitmen Gus and Ben, by Harold Pinter.  
ANSWER: *The Dumb Waiter*

12. Amborella is near the base of the lineage of these organisms, whose evolution Darwin famously called an "abominable mystery". Fossil records from the mid-Cretaceous show a great radiation of these organisms. These organisms are distinguished by the presence of companion cells and sieve tube elements in one type of tissue. The female gametophyte in these organisms has seven cells with eight nuclei which are used during the process of (\*) double fertilization. Two broad subgroups of these organisms are differentiated between by whether their leaves are parallel or branching veined and whether the stem vascular bundles are scattered or in a ring shape. For 10 points, name these seed-producing plants divided into monocots and dicots that produce fruits and flowers, unlike gymnosperms.  
ANSWER: angiosperms [or magnoliophyta; accept "*Arabidopsis thaliana*" until "subgroups"; anti-prompt after; prompt on "plants" or "flowering plants," anti-prompt on "monocots" or "dicots"]

13. Susan Moller Okin criticized this book for acknowledging that the "monogamous family" is a basic unit of society, and thus not providing an adequate definition of the title concept for women. Expanding on this work, the author later wrote that the "Property-owning Democracy" and Liberal Socialism are the only two types of societies which can possibly be "ideal." It discusses civil disobedience in "Duty and Obligation" and contrasts individual- and group-directed jealousy in "The Problem of Envy." This book's idea that social and economic (\*) inequalities must be arranged such that they provide the greatest possible benefit to the most disadvantaged is called the "difference principle." It argues that individuals should choose principles based on the idea that individuals do not know their place in society. For 10 points, name this book that introduces the "veil of ignorance," by John Rawls.  
ANSWER: A *Theory of Justice*

14. Upon learning that his childhood friend is returning, one character in this work kicks at a cat and proclaims that "life was a perfect fuckup." That character comforts his wife when she says "I don't want to be anybody's zombie." In a scene from this novel, a character straightens out nails for no reason, then asks for straight nails and some yerba to make a bridge between two buildings. That character was arrested after having sex with a homeless woman named Emmanuele, and was once a member of a group called the (\*) "Serpent Club". He spirals into insanity, mistaking Traveler's wife Talita for his own vanished lover, La Maga, and watches Talita in the courtyard of a mental asylum playing the title game. For 10 points, name this book about Horacio Oliveira by Julio Cortazar, whose chapters can be read in a variety of orders.  
ANSWER: *Hopscotch* [or *Rayuela*]

15. The first verse of one aria from this opera is sung as a solo, while the second verse is sung in counterpoint with two other characters arguing about a dowry; this aria is "Di rigori armato il seno". Minor characters include three noble orphans and the silent pageboy Mohammed. One character thinks he is bewitched when he sees faces everywhere. The same character sings a waltz in the scene "Da lieg' ich", which also sees (\*) Annina swear revenge after not receiving a tip. One character is mistaken for his own illegitimate sister when he cross-dresses as the chambermaid Mariandel, although his part is actually played by a female singer. In this opera, Sophie von Faninal is engaged to the boorish Baron Ochs, but in the final duet "Ist ein Traum," ends up with the young lover of the middle-aged Marschallin instead. For 10 points, name this Strauss opera in which Octavian acts as the title flower-bearing knight.  
ANSWER: *Der Rosenkavalier*

16. One thinker with this surname was criticized by Dwayne Betts for an "unrelenting focus on criminality." That thinker with this surname studied the "6th street boys" to conclude that unrelenting surveillance and imprisonment turned inner city blacks into fugitives; that work is *On the Run: Fugitive Life in an American City*. This is the surname of a thinker who compared taking a drowning man out of a lake, teaching him to ride a bike and then putting him back in the lake to hospitalizing and then discharging a man from a (\*) psych ward. In addition to writing about "total institutions," that sociologist with this surname analyzed gender representation in advertising and described the way we perceive society using the example of a picture frame. For 10 points, name this surname shared by Alice and Erving, the latter of whom wrote *The Presentation of Self in Everyday Life*.  
ANSWER: Goffman [accept Alice Goffman or Erving Goffman]

17. A myth about one group of these people tells of how Helico obtained a dried fig, a grape, oil, and wine, which was so desirable it led his people to invade their southern neighbor. Some of these people frequently attempted to catch an object that was "cast upward" by snakes. According to one source, these people organized their calendar in such a way that night precedes day; this was because they believed they were descendants of (\*) Dis Pater. A unified

army of these people won the Battle of Gergovia (ger-GOH-vee-uh), but were defeated at another battle using two concentric rings of fortifications called a circumvallation and a contravallation. That defeat of these people occurred at Alesia, prompting their leader Vercingetorix (VUR-sin-JET-or-icks) to surrender to Julius Caesar. For 10 points, name these people who, before the late Roman Republic, occupied most of modern-day Switzerland and France.  
ANSWER: **Gauls** [prompt on “Druids” before “mercenaries”; accept **Helvetians** or **Helvetii** before “mercenaries,” prompt after]

18. **The cavalry of one side in this war suffered from a spinal disease that wiped out most of its horses and that side conserved ammunition in this war by carrying out executions with lances. A fortification in this war included a battery named for a London recruitment firm for artillerymen and a battery named for the mistress of one side's leader. The victors of this war melted down the church bells of the defeated side's capital to create the “Church Cannon” and used a fleet of six monitors to bypass the (\*) Humaita fortress. An invasion to support the Colorados at its start led to a counter-invasion of the Matto Grosso that crossed the Corrientes province, prompting Bartolome Mitre to join Pedro II in fighting Francisco Solano Lopez. For 10 points, identify this 1864-1870 war that wiped out most of the male population of Paraguay in fighting Uruguay, Argentina, and Brazil.**

ANSWER: War of the **Triple Alliance**

19. **Daniel Axelrod created a form of fluorescent microscopy using this effect which is used to image membrane surfaces. In one system, this phenomenon is induced in a core substance by the interface with a cladding. One variety of this effect relies on the transmission of energy via evanescent wave coupling. This phenomenon can induce a small lateral shift in linearly polarized (\*) light, or a perpendicular phase shift in circularly polarized light; those are the Goos-Hanchen and Imbert-Federov effects. The angle at which this phenomenon occurs is equal to the arcsine of  $n_{\text{sub } 2}$  over  $n_{\text{sub } 1}$ , and it occurs repeatedly in a fiber optic cable. For 10 points, name this phenomenon that occurs when incident light strikes a refractive surface at greater than the critical angle, and is bounced back into the first medium**

ANSWER: **total internal reflection** [or **TIR**]

20. **This god once told another deity that her kindness was fake, causing her to cry blood for 52 years. Karl Taube and Mary Miller describe this entity as “the embodiment of change through conflict,” and his alternate names included “We his Slaves” and “Precious Turkey.” By decapitating Tata and Nene, this deity was responsible for the creation of the first dogs. He disguised himself as an old man and tricked his brother into getting (\*) drunk, breaking his religious vows. This deity and his brother defeated Cipactli (see-PACT-lee), who ate his foot, leading him to make a new foot out of obsidian. This deity ruled over the age of the first sun, after which he was overthrown and turned into a jaguar. For 10 points, name this Aztec god whose name meant “Smoking Mirror” and who fought with his brother Quetzalcoatl.**

ANSWER: **Tezcatlipoca**

## **Bonuses**

1. Examples of these cold-core, low-pressure systems include the Great Blizzard of 1888. For 10 points each:

[10] Name this type of East Coast storm named for the direction its winds come from.

ANSWER: **Nor'easter**

[10] In South Asia, the progressive type of these storms are known as “Nor'westers”. These straight-line wind storms are associated with severe thunderstorms.

ANSWER: **Derechos**

[10] This meteorological scale from 0 to 12 relates wind speed to observed conditions like wave height on the open ocean, sea conditions, and land conditions.

ANSWER: **Beaufort** wind force scale

2. The novel *August 1914* and the historical volume *Two Hundred Years Together* are among the works by this author that have drawn criticism for their possible anti-Semitism. For 10 points each:

[10] Name this Russian author who Elie Wiesel called “too intelligent” to be an anti-Semite. Oleg Kostoglotov is exiled to a hospital in Central Asia in his novel *Cancer Ward*.

ANSWER: Aleksandr **Solzhenitsyn** [or Aleksandr Isayevich **Solzhenitsyn**]

[10] The protagonist of this Solzhenitsyn novella is a member of Gang 104, a squad of laborers in a Soviet prison camp. Its protagonist works to curry favor with Tiurin and shares in Caesar's packages of food.

ANSWER: **One Day in the Life of Ivan Denisovich** [or **Odin den' Ivana Denisovicha**]

[10] The aforementioned *August 1914* is the first “knot,” or volume, of this cycle about the transition from Imperial Russia to the Soviet Union.

ANSWER: *The Red Wheel*

3. This goddess's powers included ensuring that the pharaoh would "have joy with no hangover." For 10 points each, [10] Name this goddess and wife of Set whose name meant "Lady of the Temple Enclosure," and who also enjoyed titles like "Queen of the Embalmer's Shop," possibly because she was the mother of Anubis.

ANSWER: Nephthys

[10] This son of Horus was protected by Nephthys. He symbolized the North and protected the canopic jar that held the lungs.

ANSWER: Hapi

[10] Hapi shares his name with another god that is the personification of the flooding of this river. Said flooding of this river was referred to as his "arrival."

ANSWER: Nile

4. Answer the following about the non-interminable works of Nathaniel Hawthorne, for 10 points each:

[10] The title character of this Hawthorne story meets Goody Cloyce and a staff-carrying older man on his way to a meeting in the forest that turns out to be something like a witches' sabbath, where he and his wife Faith are to be inducted.

ANSWER: "Young Goodman Brown"

[10] "Young Goodman Brown" appeared in this collection, Hawthorne's second, which also contains "The Birth-Mark," "Rappacini's Daughter," and "Roger Malvin's Burial".

ANSWER: Mosses from an Old Manse

[10] In this story from *Mosses from an Old Manse*, Owen Warland spurns dull watchmaking in order to craft an intricate, possibly-living butterfly for his secret love, Annie Hovenden.

ANSWER: "The Artist of the Beautiful"

5. For 10 points each identify the following about the book *Writing and Difference*:

[10] It is a collection of essays and lectures by this author of *Spectres and Marx*, who critiqued Emmanuel Levinas's idea that face-to-face interaction is the highest good.

ANSWER: Jacques Derrida

[10] *Writing and Difference* also contains this essay, which opens with a quote by Kierkegaard and ends with a quote from Joyce. This essay rather unintelligibly critiques the use of Descartes' "evil demon" hypothesis in another author's *Madness and Civilization*.

ANSWER: "Cogito and the History of Madness"

[10] "Cogito and the History of Madness" was written in response to the work of this French author, who is known for *Madness and Civilization* and *The Order of Things*.

ANSWER: Michel Foucault

6. This cell process contributes to introducing genetic variation via crossovers at chiasmata (kahy-az-MAH-tah) For 10 points each:

[10] Name this pairing of two homologs during prophase I of meiosis.

ANSWER: synapsis [or syndesis]

[10] *This fifth stage* of prophase I is the first point at which the tetrads are visible as four parts. This stage follows leptotene, zygotene, pachytene, and diplotene.

ANSWER: diakinesis

[10] The incidence of nondisjunction in prophase one increases with maternal age and can lead to conditions like Patau syndrome, Edwards syndrome, and this other condition, which is caused by trisomy 21.

ANSWER: Down syndrome

7. In the scherzo of Ludwig van Beethoven's Symphony No. 5, these two instruments introduce the opening theme of both the movement itself and later, the trio section. For 10 points each:

[10] Name these two instruments which, near the start of the fourth movement of Beethoven's Symphony No. 9, play recitatives between statements of themes from the previous three movements.

ANSWER: cellos and double basses [prompt on "low strings"; do not accept "strings"]

[10] Cellos and basses play tremolos at the start of the thunderstorm depicted in the fourth movement of this programmatic Beethoven symphony about the countryside.

ANSWER: Pastoral Symphony [or Symphony No. 6]

[10] The Adagio cantabile second movement of this C minor Beethoven piano sonata was the inspiration for the "Nimrod" movement of Edward Elgar's *Enigma Variations*.

ANSWER: Pathétique Sonata [or Piano Sonata No. 8]

8. The collapse of the Hennepin Island tunnel in 1869 nearly led to the loss of the St. Anthony Falls that powered the mills of this city. For 10 points each:

[10] Identify this city that elected Hubert Humphrey mayor in 1945 and in 1965 refused to adopt Daylight Savings Time for two weeks after its “twin” city neighbor, St. Paul, did.

ANSWER: Minneapolis

[10] Minneapolis' municipal government was taken over in the late 1800s by this doctor, who made his brother Chief of Police and encouraged gambling and prostitution in exchange for bribes.

ANSWER: Alonzo Ames

[10] Ames' pilfering of Minneapolis was described by Lincoln Steffens in an article that was later incorporated into this 1904 muckraking book about public corruption in metropolitan areas.

ANSWER: *The Shame of the Cities*

9. This novel opens with a chapter narrated by the recently-murdered miniaturist Elegant Effendi. For 10 points each:

[10] Name this metafictional mystery novel set during the reign of Sultan Murat III. Its other unusual narrators include a coin, Satan, and the title color.

ANSWER: *My Name is Red* [or *Benim Adim Kirmizi*]

[10] *My Name is Red* is a novel by this Turkish Nobel Laureate who used the Turkish headscarf controversy as the basis for some events in his 2002 novel *Snow*.

ANSWER: Orhan Pamuk [or Ferit Orhan Pamuk]

[10] This other Pamuk novel also has a historical setting, taking place primarily in 17th-century Istanbul. Its narrator, a traveling Italian scholar, is kidnapped and becomes the slave of the Ottoman scholar Hoja.

ANSWER: *The White Castle* [or *Beyaz Kale*]

10. In this country, the affair of the sausages occurred over the eating of meat on fast days. For 10 points each:

[10] Name this country in which Ulrich Zwingli initiated a reformation from the Catholic church from his office in the Grossmunster. The reformation in this country resulted in the Kappel wars.

ANSWER: Switzerland

[10] This three-day-long meeting in 1529 between Martin Luther and Ulrich Zwingli failed to resolve their dispute of the real presence of Christ in the eucharist.

ANSWER: Marburg Colloquy

[10] Ulrich Zwingli executed this man by drowning for preaching adult re-baptism. He also cofounded the Swiss Brethren Anabaptist congregation before being the first martyr of the radical reformation.

ANSWER: Felix Manz

11. A woman tells a new bride “Take my share of a fickle heart / Mine of a paltry love,” to which the bride responds “I’ll love him till he loves me best,” in this author’s poem “Maude Clare”. For 10 points each:

[10] Name this poet who gave instructions for when she would be “gone far away into the silent land” in her poem “Remember.” She also wrote the words to the Christmas carol “In the Bleak Midwinter”.

ANSWER: Christina Rossetti

[10] Christina Rossetti also wrote this sexually charged poem about Lizzie and Laura, which includes the line “For there is no friend like a sister.” Its title figures give the repeated cry “Come buy, come buy”.

ANSWER: “Goblin Market”

[10] Rossetti’s brother, Dante Gabriel Rossetti, wrote this poem about a woman who leans out “from the gold bar of Heaven,” with three lilies in her hand and seven stars in her hair.

ANSWER: “The Blessed Damozel”

12. Name the following cognitive biases from examples, for 10 points each:

[10] Subjects were shown pro-Castro or anti-Castro essays. Despite being told that the stance of the essays had been decided randomly, subjects were more likely to believe that pro-Castro authors personally felt more positively about Castro.

ANSWER: fundamental attribution error [or correspondence bias or attribution effect; prompt on “actor-observer bias”]

[10] Subjects were asked whether Mahatma Gandhi died before or after age 9, or before or after age 140. Subjects in the first group tended to give significantly lower answers than those in the second group.

ANSWER: anchoring [or focalism]

[10] Subjects were given a brief test, then given a list describing their personality supposedly based on the results. Despite being given the same list, all students felt that the list accurately described their unique personalities.

ANSWER: Barnum effect [or Forer effect]

13. One of these people depicted the Labors of Hercules in a print that was only 6 square inches. For 10 points each:  
[10] Name this group of German printmakers which included Hens Beham, George Pencz, and Heinrich Aldegrever. One of their members, Albrecht Altdorfer, is better known for his paintings, such as *Battle of Alexander at Issus*.

ANSWER: The Little Masters [or Kleinmeisters]

[10] The Little Masters mimicked the style of this German Renaissance artist of *Saint Jerome in his Study* and *Knight, Death, and the Devil*.

ANSWER: Albrecht Durer

[10] It's not a scythe, but Durer depicted Death holding one of these objects up to the Knight in *Knight, Death, and the Devil*. One hangs from a wall next to a magic square in *Melencolia I*.

ANSWER: An hourglass

14. The Portuguese originally colonized this island through Francisco de Almeida in the early sixteenth century. For 10 points each:

[10] Give this island's name as it was known until 1972, now known as Sri Lanka.

ANSWER: Ceylon

[10] During the struggle for Sri Lankan independence, Tamil politicians often clashed with this majority ethnic group, often demanding "50-50" representation with them.

ANSWER: Sinhalese

[10] The deadliest rail accident in history occurred in Sri Lanka due to this event, which also destroyed much of Aceh. Maria Belon, subject of the film *The Impossible*, survived this event.

ANSWER: 2004 Indian Ocean tsunami [or 2004 Indian Ocean earthquake; accept Indian Ocean Earthquake or Indian Ocean Tsunami or Indonesian tsunami or Boxing Day tsunami or Christmas tsunami or South Asian tsunami]

15. This man was nicknamed "Swaggy P.B." by TMZ after an appearance on Jimmy Kimmel Live in which he, dressed in denim overalls, discussed his favorite pre-game snack. For 10 points each:

[10] Name this guard, who in 2015 became the first player since Michael Jordan to have four consecutive triple-doubles. He posted a career-high 28.1 points per game in the 2014-2015 season.

ANSWER: Russell Westbrook

[10] Westbrook plays for this basketball team which lost the 2012 NBA finals to the Heat. It replaced head coach Scott Brooks with Billy Donovan in 2015, and its other players include Serge Ibaka and Kevin Durant.

ANSWER: Oklahoma City Thunder [accept either underlined part]

[10] This Thunder forward once knocked down an airport exit sign with his head; however, Kansas teammate Kirk Hinrich failed to knock down a tying three-pointer in the closing seconds of the 2003 NCAA Championship Game.

ANSWER: Nick Collison

16. Answer some questions about a ruler with many lovers, for 10 points each:

[10] This empress of Russia included Grigory Orlov and Grigory Potemkin as many of her favorites. Under her reign, the Smolny institute, the first institute for women, was founded.

ANSWER: Catherine the Great [or Catherine II or Ekaterina Alexandrovna]

[10] Another of Catherine's lovers, Count Poniatowski (POWN-ee-uh-TOW-skee), was the last Grand Duke of this commonwealth founded by the Union of Lublin.

ANSWER: Poland-Lithuania [do NOT prompt on partial answer]

[10] Another person employed by Catherine the Great was this naval commander, who commanded the *Vladmir* during the Russo-Turkish War. He moved to Russia after losing his ship at the Battle of Flamborough Head.

ANSWER: John Paul Jones

17. One method of synthesizing these compounds from aldehydes is the Corey-Fuchs reaction. For 10 points each:

[10] Name these hydrocarbons which contain a triple bond. If the triple bond is at the end, they are called terminal, and if it's in the middle, they are internal.

ANSWER: alkyne

[10] One method of creating cis alkenes from alkynes is to use this catalyst, which contains palladium, quinoline, and calcium carbonate and is poisoned with lead.

ANSWER: Lindlar's catalyst

[10] Arynes (AIR-eyenz) commonly undergo this type of substitution, in which the entering group is one carbon away from the leaving group.

ANSWER: cine substitution

18. Answer some questions about religious reckoning of time, for 10 points each:

[10] In Islam, all dates are written after this event, in which Muhammad migrated from Mecca to Medina with his followers.

ANSWER: **Hijra**

[10] An important bit of calendar reform in Christianity involved setting the date of this holiday, which was done in one instance by the Synod of Whitby. This day celebrates the resurrection of Jesus.

ANSWER: **Easter** [or **Pasch**]

[10] This month is the first one in the civil calendar in Judaism, while Nisan begins the ecclesiastical years. Yom Kippur occurs on the 10th of this day.

ANSWER: **Tishrei**

19. One scene in this film depicts Amy, a woman who despite her Quakerism shoots Jim Pierce in the back. For 10 points each:

[10] Name this 1952 film in which Marshall Will Kane defends the town of Hadleyville against a criminal who swore revenge on him in court.

ANSWER: **High Noon**

[10] *High Noon* is a western which unfolds in this style, meaning that the events portrayed occur without narrative jumps.

ANSWER: **real-time** [Technically, it's almost **real-time**]

[10] This actor frequently played villains in westerns, playing Jack Colby in *High Noon* and Angel Eyes in *The Good, The Bad, and The Ugly* alongside Clint Eastwood.

ANSWER: Lee **Van Cleef**

20. Hadrons consist of these particles, which come in three colors and 6 flavors. For 10 points each:

[10] Name these constituent particles which make up protons and neutrons. They exhibit color confinement, meaning they are not observed alone.

ANSWER: **quarks**

[10] Gell-Mann and Ne'eman proposed this schema for organizing baryons and mesons by charge and strangeness. It posited a decuplet for spin-3/2 baryons, which predicted the existence of the omega-minus baryon.

ANSWER: **eightfold way** [do NOT accept "eightfold path"]

[10] The quarks that actually determine the quantum numbers of a baryon are given this name, to contrast them with virtual or sea quarks.

ANSWER: **valence** quarks