2014 Brookwood Invitational Scholars Bowl Round 2

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1. The narrator begins a novel by this author explaining how he can't fall asleep without his mother kissing him goodnight. A character created by this author is ostracized for supporting Alfred Dreyfus, and fathers Gilberte with a prostitute named Odette. In a chapter called "Combray", this author described two walking paths: one owned by the (*) Guermantes, and one owned by Charles Swann. In a famous passage, this author's semi-autobiographical narrator is flooded with memories after eating a madeleine dipped in tea. For 10 points, name this author of a seven-part Modernist French novel titled *In Search of Lost Time*.

ANSWER: Marcel **Proust**

- 2. A small boy or dwarf holds onto a railing on the far left of this painting. Its commission was prompted by a visit from Marie de Medici. The artist of this painting included the names of its 18 clients on a shield. A ship's cook failed to rip apart this painting because an excessive amount of varnish was put on the canvas. In this painting, a man holding a yellow and blue (*) flag stands behind a woman in a yellow dress holding a chicken. A local mayor depicted in this painting wears black with a red sash and chats with a man wearing all yellow, with a white sash. For 10 points, name this 1642 painting of the militia of Captain Franz Banning Cocq by Rembrandt. ANSWER: The <u>Night Watch</u> [or De <u>Nachtwacht</u> or The <u>Shooting Company of Frans Banning Cocq</u> before mention]
- 3. Walter Thiel developed film cooling for use in these devices. The natural logarithm of two masses appears in Tsiolkovsky's equation describing the motion of these variable-mass systems. Either ammonium perchlorate, or a mixture of two liquids like nitrogen tetroxide and hydrazine, is used in these devices. These objects' (*) engines must carry their own oxidizing agent. Werner von Braun helped design one of these objects called the Saturn V. They can be used in multiple stages to increase acceleration. For 10 points, name these devices which use solid or liquid propellant to thrust spacecraft into space.

ANSWER: rockets [or rocket engines]

4. Allies of this man made the Pledge of the Tree to avenge the death of his envoy. He repelled the siege of Banu Qurayza, a Jewish tribe, by building a trench. This man made *hudna* with the Quraysh tribe in the Treaty of Hudaybiyyah. He married a successful merchant named Khadija. The victor at the Battle of Badr, he fled certain death on a (*) journey now know as the *hijra*. After this man's death, a succession dispute arose between Abu Bakr and Ali. He fled from Mecca to Medina. For 10 points, name this person to whom Jibril revealed the Koran, and therefore the last major prophet of Islam.

ANSWER: **Muhammad** ibn Abdullah [or the **Prophet** Muhammad]

- 5. Marshall McLuhan makes a cameo in one of this director's films, defending himself to a man standing in line for *The Sorrow and the Pity*. In another of his films, Mickey Sachs decides to not commit suicide after watching *Duck Soup*. Dianne Wiest won an Oscar for Best Supporting Actress for her role in this director's film (*) *Bullets Over Broadway*. This director cast himself as Alvy Singer in one of his movies. Diane Keaton plays the title character in this man's possibly-autobiographical 1977 Best Picture-winning movie about a neurotic writer. For 10 points, name this New Yorker, the screenwriter and director of *Hannah and Her Sisters* and *Annie Hall*. ANSWER: Woody <u>Allen</u> [or Heywood <u>Allen</u>; or Allan Stewart <u>Konigsberg</u>; accept buzzes of <u>Annie Hall</u> until the word "man's" is read]
- 6. This thinker opened a book by asking why we value truths, rather than untruths, in a section titled "On The Prejudices of the Philosophers." This thinker popularized the idea that we will infinitely relive each moment of our lives in exactly the same way. He argued that Jews have a morality which prizes humility, whereas Romans prized power, to explain the difference between (*) master and slave. This philosopher of a "will to power" also theorized a "superman" called *Ubermensch* in a book about Zarathustra. For 10 points, name this nihilistic German philosopher who claimed that "God is dead."

ANSWER: Friedrich Nietzsche

- 7. This novel repeats the line, "not a thing to be done lightly." A man and his pregnant mistress are married by Father Vincent in this book. A character in this novel donates money for the construction of a new church after his son is murdered. This novel's protagonist, an *umfundisi*, is aided by the lawyer Mr. Carmichael in (*) Sophiatown, but is outraged to learn that his brother John has turned to politics, and almost as bad, Gertrude has turned to prostitution. Absalom kills Arthur Jarvis in this novel. It is set in Ndotsheni and in Johannesburg. For 10 points, name this novel about Stephen Kumalo, written by Alan Paton, and set in apartheid-era South Africa. ANSWER: *Cry, the Beloved Country*
- 8. The man who held this political office at the end of the "Lost Decade" shockingly died of a stroke in office in May 2000. George HW Bush vomited at a dinner given by a man with this political office. Except between 1993 and 1994, and 2009 and 2012, this office has continuously been held by a member of the Liberal Democratic Party. The man who currently holds this office proposed the (*) "Three Arrows" economic policy and resigned the office in 2007 because of stomach trouble. This person is elected from the Diet's members. After the Fukushima disaster, Yoshihiko Noda resigned this office. For 10 points, name this position held by Shinzo Abe. ANSWER: prime minister of Japan [or Japanese PM; or obvious equivalents; prompt on leader of Japan; don't accept or prompt on mentions of "presidents" or "emperors" though]
- 9. Like the Minnesota Twins, this team was known as the Washington Senators before its most recent relocation. While a member of this team, outfielder Jose Canseco had a ball bounce off of his head and over the fence for a home run. Iván Rodríguez won his only MVP award with this team. Tim Bogar became the interim manager of this team in September after the resignation of (*) Ron Washington. It lost in the 2010 and 2011 World Series. Adrian Beltre and Japanese pitcher Yu Darvish are players on its current roster. For 10 points, name this team once owned by George W. Bush, which plays its home games in Globe Life Park in Arlington. ANSWER: Texas Rangers [accept either underlined part]
- 10. The gene gun transformed DNA into members of this kingdom. The Ti plasmid is used to transduce DNA into these organisms. Polyploidy is especially common in organisms of this kingdom. The first virus to be crystallized infected members of this taxon. Barbara McClintock discovered DNA transposons in a model organism from this kingdom. This taxon includes (*) Arabidopsis thaliana. The law of independent assortment was formulated after studies of an organism in this kingdom demonstrated a 3:1 phenotypic ratio in a monohybrid cross. For 10 points, name this kingdom which was studied by Gregor Mendel, who worked with peas. ANSWER: plants [or Plantae]
- 11. In a novel by this author, a white peacock tempts two characters to steal a heavy green sack they think is full of gold. Nearly every character in that book has a name randomly chosen as a word from the Bible. A novel by this author ends when marigold seeds fail to blossom. That book is about a girl who commits suicide, after she is (*) raped by her father. After escaping Sweet Home, another character created by this author slits her daughter's throat on the Ohio River to prevent her from returning to slavery, but Denver and Sethe are tormented by the girl's ghost. For 10 points, name this author of *Song of Solomon* and *Beloved*.

 ANSWER: Toni Morrison
- 12. In 2004, a filmmaker from this country was shot for his collaboration with Somalian-born Ayaan Hirsi Ali on the documentary *Submission*. Rick Santorum fabricated this nation's "Don't euthanize me" bracelets, since, in 2000, it became the first country to legalize euthanasia. It was also the first to legalize same-sex marriage. This nation's right-wing, anti-immigration PVV party is led by (*) Geert Wilders. Flight MH17 departed from this country. After 33 years in power, this nation's Queen Beatrix abdicated in 2013. For 10 points, name this European country where coffeeshops legally sell marijuana, the home of the International Court of Justice. ANSWER: the Netherlands [or Holland; or Nederland]

- 13. Four sisters who plot against Rafael Trujillo go by the name of this animal in a novel by Julia Alvarez. The telltale sign of lupus is a rash that resembles not a wolf, but this creature. Eckels kills one of these animals in the Jurassic Age in Ray Bradbury's story "A Sound of Thunder." In a Taoist parable, Zhuangzi dreamed that he (*) turned into one of these animals. A small change in initial conditions in a chaotic system has huge perturbations, in this animal's namesake effect. Lieutenant Pinkerton abandons his wife Cio-Cio San, known by this animal's name, in a Puccini opera. For 10 points, name these animals which are quite similar to moths. ANSWER: butterflies [or specific types of butterflies]
- 14. Paddy Finucane and Sailor Malan were prominent members of this organization when it was partly led by Keith Park. An operation called Eagle Day attempted to destroy this group, but won a tactical victory two days later on August 15's "Hardest Day." This organization pretended that its members binged on carrots to explain away successes, rather than reveal the (*) Dowding System. Members of this military unit were called "The Few" in a speech beginning, "Never was so much owed..." It employed the Hurricane and the Spitfire, countering the Me 109. For 10 points, name this air force that defeated the Luftwaffe during the Battle of Britain. ANSWER: Royal Air Force [or RAF; or British air force or English air force or similar answers before "Britain" is read; prompt on British military or similar answers to distinguish that it's the air force]
- 15. Rutherford discovered that bombarding nitrogen with alpha particles resulted in emission of this particle. The decay of this particle into a pion and a positron is studied by the Super-Kamiokande detector. Pions and muons were discovered because of the interaction of these particles with Earth's atmosphere. The Large Hadron Collider (*) smashes these particles into each other. They make up about 90% of cosmic rays. These particles consist of two up quarks and one down quark. The strong force mediates the attraction between them and neutrons. For 10 points, name these particles found in an atomic nucleus which have positive charge. ANSWER: protons
- 16. This musical work has a "Scherzino" movement inspired by costumes for a ballet; that is the "Ballet of the Unhatched Chicks." In Leopold Stokowski's orchestration of this work, the "Limoges" movement is omitted. The sounds of a clock are emulated in this work's section describing (*) Baba Yaga's hut. This work originally written for solo piano was transcribed for orchestra by Maurice Ravel in 1922. The "Promenade" theme of this work is echoed in its final movement "The Great Gate of Kiev." The For 10 points, name this suite depicting the artwork of Viktor Hartmann, a friend of the composer Modest Mussorgsky.

ANSWER: <u>Pictures at an Exhibition</u> [or <u>Kartínki s výstavki</u> – Vospominániye o Víktore Gártmane; or <u>Tableaux</u> <u>d'une exposition</u>]

17. After he was served from a golden cup at the silver table of Cadmus, this man cursed his sons to kill each other. This man was struck by a scepter at a triple crossroads leading to Delphi, Thebes, and Corinth. Apollo prophesied that this man's burial site would bring luck, but he'd die at a grove sacred to the Furies. A shepherd (*) abandoned this father of Eteocles and Polynices on Mount Cithaeron, with his feet painfully bound together. He ripped out his eyes after learning that he killed Laius. For 10 points, name this king of Thebes who solved the Sphinx's riddle...and then married his mom.

ANSWER: **Oedipus**

18. Albert Lasker set up his Lord and Thomas advertising agency in this city. Daniel Boone's great-nephew Levi was the mayor of this city during the Lager Beer Riot. Albert Parsons led a May Day march in this city. Daniel Burnham designed the "White City" for a major event hosted in this city's Jackson Park. A protest in this city occurred fifteen minutes after a speech by (*) August Spies. Jane Addams opened Hull House in this city. It was the site of the 1893 Columbian Exposition as well as a labor protest in Haymarket Square. For 10 points, name this Midwestern city where a cow supposedly caused a Great Fire in 1871.

ANSWER: Chicago, Illinois

- 19. The protagonist of this work kills Onela after receiving, then giving away, a golden torque necklace. A conflict in this work is initiated when a slave steals a golden cup. Scholars of this work frequently focus on its "four funerals." J. R. R. Tolkien initiated literary criticism of this poem. During a *flyting* in this poem, the protagonist brags about swimming in (*) armor. This poem uses the word "whaleroad" to refer to the sea. Naegling and Hrunting are swords in this work. A descendant of Cain in this poem attacks Heorot, the hall of Hrothgar. A dragon kills this poem's protagonist after he slays Grendel. For 10 points, name this Anglo-Saxon epic. ANSWER: *Beowulf*
- 20. Solvents with this property have a dielectric constant greater than about 15. Amino acids whose side chains have this property are usually found on the outside of a protein. The magnitude of this property is measured in debyes [DE-BUYS]. Groups with this property are found on the outside of micelles, such as in the head group of a (*) phospholipid. This property is often represented by writing a delta-plus and delta-minus, and arises in non-symmetric molecules with adjacent atoms of different electronegativities. For 10 points, name this property possessed by hydrophilic molecules, in which small charges build up on opposite sides of a molecule. ANSWER: chemical <u>polarity</u> [or word forms; or <u>dipole moment</u>; or <u>hydrophilicity</u> or word forms before it is read; prompt on <u>aqueous</u> before "debyes" is read]
- TB: This man never gave a speech which would have ended, "there is some corner of another world that is forever mankind." This president asked for the support of the "great silent majority" of Americans in a televised speech. This man gave a completely nonsensical speech explaining that his wife was not a (*) quitter, and he had no intention of giving back a dog he was apparently given as a campaign gift. Eighteen-and-a-half minutes of missing dialogue incriminated this politician. He gave the Checkers speech in 1952, allowing him to stay on Eisenhower's vice presidential ticket. For 10 points, name this president who resigned in 1974 after Watergate. ANSWER: Richard Milhous Nixon

- 1. Both versions of this painting only have three colors: red, green, and blue. For 10 points each:
- [10] Name this painting by Henri Matisse in which five nudes interlock hands in a circle.

ANSWER: The **Dance** [or La **Danse**]

[10] Matisse's *The Dance* is sometimes included in this artistic movement, which prized non-Western settings and motifs. Paul Gauguin and Henri Rousseau are usually included in this movement.

ANSWER: **Primitivism** [or **primitive** art; prompt on **symbolism**]

[10] The first version of *The Dance* is shown in this New York City art museum, which also shows Rousseau's *Sleeping Gypsy*. This museum primarily displays artwork from the 20th century and beyond.

ANSWER: Museum of Modern Art [or MoMA]

- 2. Dolichol phosphate localizes to this organelle as an anchor for making oligosaccharides. For 10 points each:
- [10] Name this cellular organelle where protein folding takes place. It comes in smooth and rough forms.

ANSWER: endoplasmic reticulum [or ER; or types of endoplasmic reticulum]

[10] The smooth ER synthesizes lipids, such as these compounds, which contain four fused rings. Cholesterol and estrogens are examples of these lipids.

ANSWER: steroids

[10] Another critical function of the smooth ER, particularly in liver cells, is to oxidize this compound into acetaldehyde, using cytosolic NAD+. This two-carbon product is the endpoint of glucose metabolism in yeast.

ANSWER: ethanol [or ethyl alcohol; prompt on alcohol]

- 3. Answer the following about literary characters who really have just terrible birthdays, for 10 points each:
- [10] In this dramatist's play *The Birthday Party*, Stanley gets kidnapped from his celebration by a couple hitmen. This Nobel-winning author wrote about two other hitmen in *The Dumbwaiter*.

ANSWER: Harold Pinter

[10] This author envisioned Josef K. waking up to arrest orders, on his birthday, in *The Trial*. Gregor Samsa bugs his family, a lot, in this author's *The Metamorphosis*.

ANSWER: Franz **Kafka** [pun intended]

[10] On her 77th birthday, Briony Tallis reveals that Robbie and Cecilia didn't really ever get back together again. So concludes this 2001 Ian McEwan novel.

ANSWER: Atonement

- 4. These estates were called estancias in Argentina and the rest of southern South America. For 10 points each:
- [10] Name these large plantations owned by Spaniards in Latin America, where natives were often forced to labor in inhumane conditions.

ANSWER: haciendas

[10] The worst haciendas were those in the Caribbean which grew this crop, long a staple of the Cuban economy. This crop was turned into molasses as part of the triangle trade.

ANSWER: sugarcane [or cane sugar; prompt on cane]

[10] This British colony in the Caribbean became, along with Jamaica, the world's largest sugar producer, partly due to the import of Sephardic Jews in the 1650s.

ANSWER: Barbados

- 5. Alcyoneus, one of these creatures, could only be killed outside of his homeland. For 10 points each:
- [10] Name these massive creatures who fought a namesake war against the Greek gods when they tried to ascend Olympus. Heracles had to help stop them.

ANSWER: Giants [or Gigantes]

- [10] During the Gigantomachy, Gaia sought one of these magical objects that would protect the Giants from mortal attacks. Zeus forbade the sun, moon, and dawn from bringing light to prevent the Giants from acquiring this object. ANSWER: an **herb** [or a **plant**; or obvious equivalents]
- [10] This goddess killed the Giant Pallas, then used his skin as a shield, which is why she's often referred to with the epithet "Pallas".

ANSWER: Athena [do not accept "Minerva"]

- 6. Pericles took this job for the performance of *The Persians*. For 10 points each:
- [10] Name this character, the leader of the Greek chorus who often served as a voice of reason in Greek plays. He was also usually the person who financed the work.

ANSWER: **choragos** [or **choregos**; or **choregus**; or other close phonetic equivalents]

[10] The chorus usually performed these songs, which consisted of strodes, antistrodes, and epodes. This term was adapted by the English as a poem written in praise of someone or something.

ANSWER: odes

[10] The size of the Greek chorus was reduced dramatically under this first of the great Greek tragedians, who also introduced actual dialogue to the stage.

ANSWER: Aeschylus

- 7. One form of this system requires the creation of a party list. For 10 points each:
- [10] Name this electoral system *not* used by the United States, in which the electorate votes directly for the political parties. Multi-member voting districts are used to properly allocate legislative seats in this system.

ANSWER: <u>proportional representation</u> [or <u>PR</u>; accept more specific answers like <u>party-list PR</u> and <u>STV PR</u>]

[10] Another way to have elections is this system in which the single person with the majority of the votes wins the seat. This system's name is derived from the way the winner is determined in horse racing.

ANSWER: <u>first-past-the-post</u> [or <u>FPTP</u>; or <u>FPP</u>]

[10] First-past-the-post voting is currently used in the House of Commons of this legislative body. This legislature elected David Cameron as Prime Minister in 2010.

ANSWER: <u>Parliament</u> of the United Kingdom of Great Britain and Northern Ireland [or the British <u>Parliament</u>; or the Westminster <u>Parliament</u>]

- 8. People who obeyed this law were given a copper token and a medal claiming that the item in question was a "useless burden." For 10 points each:
- [10] Name this tax instituted by Peter the Great in 1698 in order to modernize Russian society.

ANSWER: **beard** tax [prompt on facial **hair** tax]

[10] Though clean-shaven nobles were obviously important too, Russia got a lot more international respect after it led a successful coalition against Sweden in this early 18th century war.

ANSWER: Great Northern War

[10] In 1725, Peter was succeeded as tsar by his second wife, who had this name. The second queen of this name was the enlightened despot who ruled for 34 years at the end of the 18th century.

ANSWER: Catherine I [or Catherine II; or Catherine the Great]

- 9. Forms of these musical sets include the pentatonic and chromatic. For 10 points each:
- [10] Name these orderings of musical notes by pitch order or frequency. These fundamental musical figures are often paired with arpeggios for the purpose of practicing.

ANSWER: musical scales

[10] This is the name given to the interval between consecutive scale degrees, of which there are "whole" and "half" varieties. Contrasted with the larger "skip," this musical distance characterizes conjunct melodic motion.

ANSWER: <u>steps</u> [or whole-<u>steps</u>; or half-<u>steps</u>; or <u>stepwise</u> motion; do not accept "skip" or "leap" or similar answers]

[10] Stepwise motion is used in passing tones, examples of this type of tone existing outside the harmonic structure. Suspensions and neighbor tones are other examples of these tones. They are often used to reach cadence points.

ANSWER: <u>nonchord</u> tones [or <u>NCT</u>s; or <u>nonharmonic</u> tones; or <u>embellishing</u> tones]

- 10. The number of these particles multiplies Faraday's constant in the denominator of the Nernst equation.. For 10 points each:
- [10] Name these negatively charged particles which are lost during oxidations and gained during reductions.

ANSWER: electrons

[10] Galvanic cells will operate in such a way that this quantity for the entire cell is positive. The Nernst equation gives this quantity for the cell at nonstandard state. It's usually written with a scripted E.

ANSWER: cell **potential** [or cell **voltage**; or **emf**; or **electromotive force**]

[10] Thermodynamic standard state requires each species be in its natural phase, with one molar concentration, at 25 degrees Celsius, and at pressure equal to one of these units. This unit equals 100,000 Pascals.

ANSWER: bars [or one bar; do not accept or prompt on "atmospheres"]

11. For 10 points each, answer the following about common phrases in Obama administration foreign policy:

[10] The administration promised a "pivot" to this continent, away from Europe and Latin America.

ANSWER: Asia

[10] The president declared that the use of chemical weapons by the Syrian government constituted one of these things which could not be crossed. Israeli PM Netanyahu drew one on a bomb at the UN in September 2012.

ANSWER: a "red line" [prompt on line]

[10] During her term as Secretary of State, Hillary Clinton claimed credit for the "reset", the easing of tensions in 2009 between the US and this foreign nation.

ANSWER: **Russia**n Federation

12. The main character of this story frequently wonders about the song verse "A soldier of the legion lay dying in Algiers." For 10 points each:

[10] Name this short story which begins, "None of them knew the color of the sky." The only named character in this story, Billie the oiler, drowns.

ANSWER: "The Open Boat"

[10] "The Open Boat" is an example of the naturalism that this American writer would hone in novels like *Maggie:* A Girl of the Streets. Henry Fleming is the protagonist of his most famous novel.

ANSWER: Stephen Crane

[10] Fleming really just wants to be bloodied up a little bit in this Civil War novel by Stephen Crane.

ANSWER: The Red Badge of Courage

13. Answer the following about three-dimensional geometry, for 10 points each:

[10] The distance between two points in 3D is given by an analog to this theorem, which, classically, gives the distance formula in 2D by calculating the hypotenuse of an imaginary right triangle.

ANSWER: Pythagorean theorem

[10] Lines in 3D can be parallel, intersecting, or this third possibility, where they don't go in the same direction, but nevertheless lie in different planes and therefore do not intersect.

ANSWER: skew lines

[10] A basis which spans all of Euclidean space has the property that, when the vectors are written in a matrix, its determinant has this property. A matrix where the determinant has this property is invertible.

ANSWER: the determinant does **not equal zero** [or equivalents like **nonzero**]

14. A ketubah must be signed in the leadup to one of these events. For 10 points each:

[10] Name this events which traditionally take place underneath a canopy called a *chupah* and end with the smashing of a piece of glass.

ANSWER: Jewish **wedding**s [or **marriage**s; or obvious equivalents]

[10] Jewish males observe this coming-of-age ritual at the age of 13, though girls do it at twelve-and-a-half. In this ceremony, the adolescent reads a *parasha* from the Torah.

ANSWER: <u>Bar Mitzvah</u> [or <u>Bat Mitzvah</u>; or <u>B'nai Mitzvah</u>; or <u>B'not Mitzvah</u>]

[10] A torn piece of clothing called a *keriah* is worn during this traditional period of mourning after the death of a loved one in Judaism. Family members "sit" in a single house for seven days during it.

ANSWER: shiva [or sitting shiva; prompt on shloshim]

15. This book descibes some Indian ants which could dig up gold dust, which the villagers could then collect. For 10 points each:

[10] Name this work in ancient Greek which gives the best-known account of the Persian Wars. This book, which is heavily criticized for its factual dubiety, is often published with its sections named for the Muses.

ANSWER: *The Histories* [or *The History*]

[10] This man from Helicarnassus wrote the *Histories* and is accordingly called the "Father of History".

ANSWER: **Herodotus**

[10] Book II of the *Histories* comment on the culture of this civilization. Queen Cleopatra and the rest of the Ptolemaic dynasty ruled in this region.

ANSWER: ancient Egypt

16. You're on vacation to Japan. Name some destinations on your itinerary, for 10 points each:

[10] Make sure to visit this active volcano, the highest peak in Japan, but avoid the forest at its base, which is the site of dozens of suicides each year.

ANSWER: Mount Fuji

[10] Stop by one of these places, called *onsen* in Japanese, such as the ones described by Yasunari Kawabata in his novel *Snow Country*. Japanese macaques share the comforts of these attractions with humans at the Jigokudani Park. ANSWER: hot **spring**s [or obvious equivalents]

[10] This Japanese city is home to the Kinkaku-ji Golden Pavillion and rock garden, Nijo Castle, and a wooden temple with a waterfall running through it called Kiyomizu.

ANSWER: Kyoto, Japan

17. Counterintuitively, this force is independent of both sliding velocity and surface area. For 10 points each:

[10] Name this force which resists motion between two objects sliding past each other, evolving some of the energy as heat.

ANSWER: friction force

[10] The magnitude of static friction is directly proportional to this force. For a mass on a ramp, it has magnitude equal to the weight times the cosine of the ramp's angle.

ANSWER: normal force

[10] Static friction at the point of contact causes round, rotating objects to enter this paradigm of motion after a fixed time. In this type of motion, the bottom of the rolling object contacting the ground has no net velocity.

ANSWER: rolling without slipping [or rolling without slippage; prompt on partial answer]

18. A character created by this author is told to "beware the Jubjub bird, and shun the frumious Bandersnatch" and slays the title creature with a "vorpal blade". For 10 points each:

[10] Name this British author who wrote nonsense poems like "The Hunting of the Snark" and "Jabberwocky".

ANSWER: Lewis **Carroll** [or Charles Lutwidge **Dodgson**]

[10] The two main characters of this poem from *Through the Looking-Glass* "wept like anything to see such large quantities of sand" while strolling on a beach and later realize that they are every oyster that had accompanied them.

ANSWER: "The Walrus and the Carpenter"

[10] Through the Looking-Glass ends with this type of poem about Alice Pleasance Liddell, which begins "A boat, beneath a sunny sky" and ends with the line "Life, what is it but a dream?"

ANSWER: acrostic

19. Answer the following about the sculpture of Marcel Duchamp, for 10 points each:

[10] Duchamp provided the name of these kinetic sculptures to Alexander Calder, who made dozens of them. These sculptures often use small objects hanging on a rod which sway in the wind.

ANSWER: mobiles

[10] Duchamp famously wrote the name R. Mutt on one of these objects, and then submitted it to an art exhibition under the name *Fountain*. It didn't make it in the show.

ANSWER: a **urinal** [or obvious equivalents, if there are any?]

[10] Duchamp used this material covered with lead wire and paint in his sculpture *The Bride Stripped Bare by the Bachelors, Even.* Philip Johnson designed his New Canaan, Connecticut home with this material.

ANSWER: glass [or the Glass House]

20. The reason for this demographic event was the mass return of soldiers from World War II. For 10 points each:

[10] Name this phenomenon, the sharp increase in the number of births in America in the late 1940s and early

ANSWER: post-World War II **baby boom** [prompt on partial answer]

[10] This law passing through Congress in 1945 was a factor in the baby boom and the overall increase in number of American families. This bill afforded veterans rights, such as low-cost education and money to start a business.

ANSWER: G.I. Bill of Rights [or the Serviceman's Readjustment Act of 1944]

[10] Published in advance of the baby boom, this doctor's book on child-rearing, *The Common Sense Book of Baby and Child Care*, was the second-most-sold book of the 20th century in America.

ANSWER: Benjamin **Spock** [or **Dr. Spock**]