Maryland Fall 2015

Packet 11 – kunigami

Questions by Jordan Brownstein, Ani Perumalla, Emma Stevens, Sam Rombro, Sarang Yeola, Will Alston, Weijia Cheng, Naveed Chowdhury, Justin Hawkins

Tossups

1. **This figure travels along the Road of the Sun after being allowed to enter by two scorpion-men. This figure dreams about a fire-breathing thunderbird as well as thunderstorms and bulls while sleeping on a mountain. This son of Ninsun tied stones to his feet in order to walk on the bottom of the sea and obtain a certain** (\*) plant. However, that plant is later stolen by a serpent while this figure is bathing. Anu is asked to send Gugalanna, or the Bull of Heaven, to attack this figure after rejecting Ishtar’s advances. This friend of Enkidu killed Humbaba. For 10 points, name this figure who was two-thirds god, one-third man, a King of Uruk with a namesake Sumerian epic.

ANSWER: **Gilgamesh**

<ES Mythology>

2. **Hilbert’s Grand Hotel paradox concerns sets with this property, and can be resolved by adding prime factors for additional “layers” of this property. This value is the surface area of Gabriel’s horn and the perimeter of a Koch snowflake. Georg Cantor introduced the** (\*) “countable” variety of this concept, which is denoted aleph-null. A monkey with this amount of time will almost certainly type the complete works of Shakespeare. The harmonic series one over *n* approaches this value as *n* also approaches it. For 10 points, identify this value, denoting a number that is uncountably large.

ANSWER: **infinity** [prompt on “uncountable” or equivalents]

<SR Math>

3. **One of these people meets Oliphaunt while searching for the elf-queen and is named Thopas. In a story told by one of these people, Saturn prevents a character of this profession from marrying Theseus’s niece. In another novel, bicycle-riding members of this profession rescue** (\*) Hank Morgan. In one novel, one of these people “of the White Moon” is actually the student Samson Carrasco. In a poem, Bertilak de Hautdesert is transformed by Morgan le Fey into a “green” one of these people. For 10 points, identify these armor-clad warriors exemplified by Gawain and Lancelot.

ANSWER: **knight** [or **cavalier** or **chevalier** or **caballero**; accept The Redcross **Knight**, The Greene **Knight**, Sir Gawain and the Green **Knight**, or The **Knight** of the White Moon; do not accept “squire”]

<AP Literature>

4. **This leader claimed there was no justification for disturbances over “sus” laws such as the Toxteth riots. This leader resigned following protests against the Community Charge, a single-rate poll tax. This politician clashed with Arthur Scargill during a coal miner’s strike and came to power following a period of strikes called the Winter of Discontent. A hotel in Brighton was bombed during an attempt by the** (\*) IRA to kill this person. This prime minister, the predecessor of John Major, attacked Argentina in the Falklands War. For 10 points, name this Conservative prime minister of the 1980s known as the “Iron Lady.”

ANSWER: Margaret **Thatcher**

<JB History>

5. **Diamond–Blackfan anemia is caused by a mutation in one of this structure’s proteins. Chloramphenicol targets these structures by binding to an A2451 residue in one part of them. These structures may be analyzed by determining their sedimentation rate in units of svedbergs. A process that takes place in these structures is initiated at the Kozak box or the Shine–Dalgarno sequence in** (\*) prokaryotes. Peptidyl transferase resides in this structure’s large subunit. This structure, which can be either free or bound to the endoplasmic reticulum, contains A, P, and E sites. For 10 points, name this organelle, the site of translation.

ANSWER: **ribosome**

<SR Biology>

6. **In February 2013, the leftist Chokri Belaïd was assassinated in this country after he criticized the Ennahda movement. In June 2015, Seifeddine Rezgui killed 38 tourists at a beach resort in this country. A similar tourist attack earlier took place at the National Bardo Museum in this country’s capital. The word “dégage” was used as a slogan during riots in this country against Prime Minister** (\*) Mohamed Ghannouchi and President Zine Ben Ali. The self-immolation of fruit salesman Mohamed Bouazizi triggered the Jasmine Revolution in this country. For 10 points, name this North African country, the origin of the Arab Spring.

ANSWER: **Tunisia**

<AP Current Events>

7. **During a siege of this city, two zoo elephants were eaten by a crowd and Leon Gambetta fled in a balloon. The Bloody Week ended a government established in this city which notably had a decorative column here torn down and dismantled. This city was the site of that revolutionary** (\*) commune, which was able to put up barricades even though this city’s boulevards had been widened by the renovations of Baron Haussmann. This capital city was besieged after an emperor was captured at the Battle of Sedan by Prussian troops. For 10 points, name this city which served as the capital of two emperors named Napoleon.

ANSWER: **Paris**

<JB History>

8. **One part of this novel defines words like “music” and “woman” because they are misunderstood words between a couple. Instead of arguing over inheritance, a character in this novel agrees to let her brother have everything as long as she can have their father’s bowler hat. Franz convinces a woman who hates kitsch to go to Palermo with him in this novel, although** (\*) Sabina breaks off that relationship by going to America. The protagonist of this novel is a surgeon who gives his wife a dog named Karenin and dies with her in a car accident. For 10 points, name this novel about the relationship between Tomas and Tereza during the Prague Spring by Milan Kundera.

ANSWER: *The* ***Unbearable Lightness of Being*** [or ***Nesnesitelna lehkost byti***]

<ES Literature>

9. **An ancient ritual practiced on this holiday involved drawing lots from a box to select a goat, then binding a crimson thread to its head and sending it into the wilderness as an offering to Azazel. The beginning of service on this holiday typically includes the Kol Nidre prayer, and ends with the Ne’ila prayer. Observers of this holiday can** (\*) confess their sins through Teshuva and Vidui. Bathing and sex are forbidden on this day. A *kittel* is often worn on this holiday. For 10 points, identify this Jewish day of repentance that involves a 25-hour fast, whose name means “Day of Atonement.”

ANSWER: **Yom Kippur**

<AH Religion>

10. **This composer is considered the inventor of the symphonic poem, which he pioneered with compositions like *Prometheus* and *Orpheus*. Like Beethoven, this composer was invited by Anton Diabelli to create several variations on one of his waltzes, which he did, possibly at the suggestion of his teacher Carl Czerny.This composer inspired** (\*) mania in crowds with his carefully staged recitals and difficult piano music, such as his *Transcendental Etudes* and *Hungarian Rhapsodies*. For 10 points, name this renowned Hungarian-born piano virtuoso.

ANSWER: Franz **Liszt** [or **Liszt** Ferencz]

<WA Music>

11. **A character created by this author collapses and dies after fixating on “a little yellow patch of wall” in Vermeer’s *View of Delft*. The narrator of a novel by this author describes a magic lantern that depicts Gilbert the Bad in a section beginning “For a long time, I went to bed early.” C. K. Scott-Moncrieff translated works by this author such as *In the Shadow of Young Girls in Flower*. This author’s most** (\*) notable protagonist is best friends with Robert Saint-Loup and falls in love with Albertine. In his novel *Swann’s Way*, the narrator experiences a flood of memories after tasting a tea-soaked madeleine. For 10 points, name this French author of *In Search of Lost Time*.

ANSWER: Marcel **Proust**

<JB Literature>

12. **A person with this surname worked with Cord Meyer to spread positive media reports in Operation Mockingbird. The “policy of boldness” developed by a man with this surname resulted in the New Look plan. A non-president with this surname ordered Kermit Roosevelt to carry out Operation Ajax against Mohammed Mossadegh and resigned after the** (\*) Bay of Pigs fiasco. A Secretary of State with this surname advocated replacing containment with brinksmanship and threats of “massive retaliation.” For 10 points, give this surname of CIA director Allen and John Foster, the namesake of an airport west of Washington, D.C.

ANSWER: **Dulles** [or John Foster **Dulles**; or Allen Welsh **Dulles**]

<JB History>

13. **The haloalkane R134A is a common substance used in these devices. Their namesake substances evaporate adiabatically in the vapor-compression type of these devices. A primitive example of one of these used for liquefaction relies on the Linde cycle. The efficiency of these devices is described by the coefficient of performance. They may operate by reversing the** (\*) Carnot cycle, or by expanding pressurized gas, and their efficiency is the amount of cooling divided by the work input. For 10 points, name these devices used to keep food cold.

ANSWER: **refrigerator**s

<SR Chemistry>

14. **In the second act of this opera, a woman sings “Vieni, sul crin ti piovano” after watching a dance of Moorish slaves. A character in this opera sings about her conflict over her love for a soldier and her father in the aria “Ritorna vincitor.” Amonasro disguises himself as a peasant after his army is defeated in this opera. Amneris tricks the protagonist of this opera into revealing her love for** (\*) Radames by saying that he died in battle. The protagonist of this opera sings about never seeing her homeland again in “O patria mia” and this opera ends with the protagonist dying with Radamès after being sealed up in a vault. For 10 points, name this Giuseppe Verdi opera about an Ethiopian princess.

ANSWER: ***Aïda***

<ES Opera>

15. **A man in this play yells at the waiter Stanley before asking him about seed stores in the area. A character in this play is afraid that his former boss won’t rehire him because of a time where he stole a crate of basketballs. A distinction in this play is made between people who are “liked” but not “well-liked.” A character in this play burns a** (\*) pair of sneakers after failing a math test and discovering his father’s affair with a woman in Boston. In this play, the title character crashes his car so that his son Biff can use the life insurance money to start his own business. For 10 points, name this play that ends with Willy Loman’s suicide, by Arthur Miller.

ANSWER: ***Death of a Salesman***

<ES Literature>

16. **In this country, the magazine *Kangura* published a racist “Ten Commandments.” Prior to the arrival of a force under Romeo Dallaire in this country, a controversial “safe zone” was created by Operation Turquoise. In this country, the slogan “Cut down the tall trees” was broadcasted by a radio station that often used the slur “cockroaches” and was followed by the** (\*) Interahamwe militias. In this country, the shooting-down of Juvenal Habyarimana’s plane sparked a bloody period ended when Paul Kagame launched a rebel force from neighboring Uganda. For 10 points, name this country where Hutus massacred Tutsis in a 1994 genocide.

ANSWER: **Rwanda**

<JB History>

17. **Milgram’s dissertation claimed that this phenomenon was more prevalent in Norway than France. An experiment on this phenomenon was based on the autokinetic effect, in which a stationary light in a dark room appears to move, and was conducted by Muzafer Sherif. An experiment on this phenomenon was presented as a** (\*) vision test and involved confederates giving incorrect answers when shown lines of varying lengths. Solomon Asch studied this phenomenon, which results in groupthink and compliance to norms. For 10 points, name this phenomenon in which individuals change their behavior or beliefs to match a group standard.

ANSWER: **conformity** [or word forms; prompt on “peer pressure,” “compliance,” or related terms]

<JB Social Science>

18. **Six times this quantity times the dynamic viscosity times the radius times the velocity gives the force exerted on a spherical object in Stokes’ law. Eight times this value times the universal gravitational constant times the stress-energy tensor appears in the numerator of Einstein’s field equation. Dividing** (\*) Planck’s constant by two times this number gives the reduced Planck constant, which appears in the Heisenberg uncertainty equation. Raising *e* to the power *i* times this number equals negative one. For 10 points, identify this constant, the ratio of a circle’s circumference to its diameter.

ANSWER: **pi**

<SR Physics>

19. **Because this book has no significant female characters, its film adaptation gave its main character a daughter named Casey. The central figure of this book is an admirer of Jeremy Brown, a student at the University of Alabama. A recurring point in this book is that selecting college students is preferable to choosing high school students. One chapter of this book describes** (\*) Kevin Youkilis and Billy Beane’s efforts to acquire him, and the middle portion of this book depicts the 2002 Major League Baseball draft. For 10 points, name this book by Michael Lewis about the Oakland Athletics’ use of statistical analysis in baseball.

ANSWER: ***Moneyball****: The Art of Winning an Unfair Game*

<NC Trash>

20. **Daniel Kahnweiler encouraged this artist to exhibit one of his paintings inspired by a visit to ethnography exhibits at the Trocadéro Museum. It’s unclear whether a severed arm at the bottom of one of this artist’s paintings holds a broken sword or a baseball bat. A basket of fruit appears at the bottom next to a figure squatting with her back to the viewer in a painting this artist referred to for years as** (\*) “my brothel” since it depicts five prostitutes. This artist also showed a mother screaming in agony over her dead child in a black-and-white depiction of the bombing of a Basque town. For 10 points, name this Spanish artist of *Les Demoiselles D’Avignon* and *Guernica*.

ANSWER: Pablo **Picasso**

<WA Painting>

Bonuses

1. This character’s wife spreads a bunch of gold coins on her bed and rolls around in them. For 10 points each:

[10] Name this dentist who ends up in a desert handcuffed to the corpse of his best friend Marcus Schouler after beating his wife Trina to death in a whiskey-fuelled rage.

ANSWER: Dr. **McTeague**

[10] McTeague was created by this American author of *The Octopus* and *The Pit*.

ANSWER: Benjamin Franklin “Frank” **Norris**, Jr.

[10] *The Octopus* is subtitled a “story of” this US state, the final destination of the Joad family in *Grapes of Wrath*. Sal Paradise and Dean Moriarty meet Remi Boncoeur in this state.

ANSWER: **California**

<AP Literature>

2. This god married Daksha’s youngest 27 daughters, who represent the 27 constellations. For 10 points each:

[10] Name this Hindu moon god.

ANSWER: **Chandra** [or **Candra**]

[10] Parvati cursed Chandra after he laughed at the clumsiness of this elephant-headed son of hers. It is now considered bad luck for several years if one looks at the moon on this god’s birthday.

ANSWER: **Ganesh**a [accept **Ganapati** or **Vinayak**a or **Vignesh**war]

[10] After he looked at the moon on Ganesha’s birthday, Krishna was falsely accused of stealing a gem. He found it in a cave home to Jambavan, the bear king who helped find Sita, the wife of this seventh avatar of Vishnu.

ANSWER: **Rama** [accept **Ram** or **Raghava**]

<AP Mythology>

3. This man’s territory was divided up by generals called the Diadochi. For 10 points each:

[10] Name this “great” Macedonian conqueror who led his troops as far as India with his beloved horse Bucephalus.

ANSWER: **Alexander** the Great

[10] One of Alexander’s successors was this general, who founded a namesake empire which ruled the Levant, Anatolia, and Mesopotamia under kings like Antiochus Epiphanes.

ANSWER: **Seleucus** I Nicator [or **Seleucid** dynasty]

[10] This Macedonian king was the wife of Olympias and the father of Alexander. He won the Battle of Chaeronea and was assassinated by Pausanias.

ANSWER: **Philip II** [or **Philippos II**; prompt on “Philip” or “Philippos”]

<JB History>

4. The Maxwell equal area rule was introduced to correct a deficiency in this equation. For 10 points each:

[10] Name this equation of state. It includes constants *a* and *b* to account for intermolecular forces and the volume excluded by particles.

ANSWER: **van der Waals** equation

[10] The van der Waals equation is a modification of this other equation, which isn’t very good at high temperatures. It states that *PV* equals *nRT*.

ANSWER: **ideal gas** law

[10] For gases that are real, this quantity replaces pressure in calculations. For a real gas, this quantity is the pressure that an ideal gas would have at the same chemical potential as the real gas.

ANSWER: **fugacity**

<SR Chemistry>

5. The title animals of this poem “search / in the moonlight for a bite to eat.” For 10 points each:

[10] Name this poem that likens the slow decay of the narrator’s small hometown to the night foraging of an animal with an “ostrich tail.”

ANSWER: “**Skunk Hour**”

[10] “Skunk Hour” is the last poem in this author’s collection *Life Studies*, which marked an important step in the emergence of Confessional poetry. He also wrote “For the Union Dead.”

ANSWER: Robert **Lowell**

[10] Both Lowell’s poem “For the Union Dead” and Allen Tate’s poem “Ode to the Confederate Dead” discuss the aftermath of this war.

ANSWER: American **Civil War**

<AP Literature>

6. Answer the following about the events of the Bosnian War. For 10 points each:

[10] Two years before this event took place, the United Nations Security Council declared its location a “safe area.” Bosnian Serb forces killed over 7,000 Bosniaks during it, overseen by General Ratko Mladić.

ANSWER: **Srebrenica** massacre

[10] This politician was the president of the Republic of Serbia during the Bosnian War, and was later indicted for violations of international law that took place during the Kosovo War.

ANSWER: Slobodan **Milošević**

[10] The Bosnian War took place in this now-defunct Balkan country, formerly ruled by Josip Broz Tito.

ANSWER: **Yugoslavia**

<WC History>

7. Answer the following about discussions of miracles in philosophy. For 10 points each:

[10] This philosopher defined miracles as “violations of the laws of nature” in the tenth section of his *An Enquiry Concerning Human Understanding*.

ANSWER: David **Hume**

[10] Baruch Spinoza’s claim that miracles are a “sheer absurdity” helped get him kicked out of this religion. Another philosopher of this religion, Moses Maimonides, authored the *Mishneh Torah*.

ANSWER: **Judaism** [or **Jew**s]

[10] This Islamic thinker argued that God is the direct cause of all events to attack Avicenna’s skepticism about some miracles described in the Qur’an in the 17th section of his *The Incoherence of the Philosophers*.

ANSWER: Al-**Ghazali** [or Abu Hamid Muhammad ibn Muhammad al-**Ghazali**; or **Algazel**]

<JB Philosophy>

8. This group’s members included Thomas Woolner and William Holman Hunt. For 10 points each:

[10] Name this group of English Romantic artists who rejected the corrupting influence of a certain Italian painter as well as of Joshua Reynolds.

ANSWER: **Pre-Raphaelite** Brotherhood

[10] A member of the Pre-Raphaelite Brotherhood, John Everett Millais, gained notoriety for his depiction of this religious figure living in a very plain looking house, where he’s seen crying in his father Joseph’s workshop.

ANSWER: **Jesus** **Christ** [accept either underlined part]

[10] This other Pre-Raphaelite artist was married to model Elizabeth Siddal, though he used Fanny Cornforth as a model for his more sensuous paintings, such as Bocca Baciata. He also illustrated his sister’s poetry.

ANSWER: **D**ante Gabriel **Rossetti** [prompt on “Rossetti”]

<WA Painting>

9. In this novel, Disko Troop leads the crew of the schooner *We’re Here*. For 10 points each:

[10] Name this novel in which a Portuguese sailor named Manuel rescues and humbles a 15-year-old millionaire named Harvey Cheyne, Jr.

ANSWER: ***Captains Courageous***

[10] This Anglo-Indian poet of “Gunga Din” and “If—” wrote novels such as *Captains Courageous* and *Kim*.

ANSWER: Joseph Rudyard **Kipling**

[10] This title mongoose of a Kipling short story keeps a family’s baby safe from two snakes named Naga and Nagaina.

ANSWER: **Rikki-tikki-tavi**

<AP Literature>

10. For an electromagnetic wave, this quantity is the speed of light over the wavelength. For 10 points each:

[10] Name this quantity, measured in hertz, that is equal to the reciprocal of the period.

ANSWER: **frequency**

[10] This term names a type of velocity equal to the angular frequency divided by the wavenumber, which is contrasted with group velocity. This value is equal to the initial angle of the wave at the origin.

ANSWER: **phase**

[10] When the phase velocity of a charged particle is greater than the speed of light, this phenomenon occurs. It is responsible for the blue glow seen near nuclear reactors.

ANSWER: **Cherenkov** radiation

<SR Physics>

11. Participants in this rebellion were at first primarily of the Hakka ethnicity. For 10 points each:

[10] Name this massive and bloody 19th-century rebellion against the Qīng Dynasty led by Hóng Xiùquán, who declared himself ruler of a Heavenly Kingdom.

ANSWER: **Taìpíng** Rebellion

[10] Hóng Xiùquán believed he was the younger brother of this religion’s central figure. This religion was brought to China by Jesuits like Matteo Ricci.

ANSWER: **Christian**ity [or **Catholic**ism; or **Baptist**s, or **Protestantism**]

[10] This city was the seat of the Taìpíng Heavenly Kingdom’s government. Earlier, it was the namesake of an “unequal treaty” which ended the Canton system and the First Opium War.

ANSWER: **Nanking** [or **Nánjīng**]

<JB History>

12. In his last email before his capture, this man wrote about “the army of liars, backstabbers, fools, and bullies.” For 10 points each:

[10] Name this US Army soldier held captive by the Taliban for five years who was exchanged for five members of the Taliban in May 2014.

ANSWER: Robert Bowdrie “Bowe” **Bergdahl**

[10] Bergdahl was held captive in this country that the United States invaded after 9/11 in order to dismantle Al-Qaeda.

ANSWER: **Afghanistan**

[10] Another prisoner exchange involved this Israeli sports journalist who was held by Hamas for five years after his 2006 capture. In 2011, he was swapped for 1027 Palestinians and Arab-Israelis, the largest exchange in history.

ANSWER: Gilad **Shalit**

<AP Current Events>

13. Answer the following questions about hot new trends in education. For 10 points each:

[10] An educational approach named for this type of classroom is designed so that students learn material at home and practice it at school with guidance from their teacher.

ANSWER: **flipped** classroom

[10] This system of unified educational standards is a project of the Obama administration. Its techniques for teaching addition and multiplication have been subject to widespread mockery.

ANSWER: **Common Core**

[10] This system run by the College Board was implemented after the launch of Sputnik and allows students to earn college credit for high school courses by passing exams.

ANSWER: **A**dvanced **P**lacement

<NC Misc>

14. This action is one of the five pillars of Islam. For 10 points each:

[10] Provide the Arabic name for the pilgrimage to Mecca that all observant Muslims are expected to complete at least once in their life.

ANSWER: the **Hajj**

[10] In September 2015, over 700 people died at the Hajj in a stampede during the stoning of this figure, a ritual that involves throwing rocks at walls that represent this figure.

ANSWER: the **Devil** [or **Shayṭān** or **Iblīs**]

[10] One of the central events of the Hajj is a visit to the Masjid al-Haram, which contains this black stone. All Muslims pray in the direction of this stone, which Muslims believe was placed by Abraham.

ANSWER: **Ka‘aba**

<NC Religion>

15. Nannetta Daisy reportedly jumped from a train’s cowcatcher multiple times during one of these events. For 10 points each:

[10] Name this sort of event which the “Sooners” cheated at. Settlers raced to grab newly-opened territories in present day Oklahoma during these events.

ANSWER: **land run**s [or **land rush**es]

[10] A large land run occurred on the Cherokee Strip during this decade. The frontier was declared nonexistent in this decade’s census, and Turner presented his “Frontier Thesis” at the Columbian Exposition during this decade.

ANSWER: **1890**s

[10] Oklahoma had earlier been the destination of this forced relocation of the Cherokee that occurred following the 1830 Indian Removal Act.

ANSWER: **Trail of Tear**s

<JB History>

16. Generics, enums, and the enhanced for loop syntax were introduced in version 5 of this programming language. For 10 points each:

[10] Name this object-oriented programming language originally developed at Sun Microsystems.

ANSWER: **Java**

[10] In contrast with traditional compilation, Java uses this faster kind of compilation. It occurs on the fly after the program has already started running, giving it access to dynamic runtime information.

ANSWER: **just-in-time** compilation [accept **JIT** or **delayed** compilation]

[10] This built-in Java API allows users to create GUIs, and it is intended to be more flexible than AWT.

ANSWER: **Swing**

<OL Computer Science>

17. After the title structure of this play is built, Bono buys a refrigerator for his wife. For 10 points each:

[10] Name this play in which Troy, a driver of a garbage truck, reminisces about his days as a baseball player and has an affair with Alberta, who dies while giving birth to Raynell.

ANSWER: ***Fences***

[10] *Fences* is the sixth installment of this African-American playwright’s magnum opus *The Pittsburgh Cycle*.

ANSWER: August **Wilson**

[10] In this fourth play of *The Pittsburgh Cycle*, Boy Willie and Berniece argue over the fate of the title family heirloom, which survives from the time when their ancestors were slaves at a sharecropping plantation.

ANSWER: *The* ***Piano Lesson***

<AP Literature>

18. Despite being twenty-four years older, Joseph Haydn was a good friend of this composer and was devastated by his untimely death. For 10 points each:

[10] Name this classical composer of the Jupiter Symphony whose works are numbered by the Köchel catalog.

ANSWER: Wolfgang Amadeus **Mozart**

[10] Mozart’s K. 545 is his sixteenth composition in this genre, written in C major and nicknamed “facile” since it was written for beginners. Mozart wrote 18 works in this genre, one of which contains the *Rondo alla turca*.

ANSWER: **piano sonata**

[10] This Italian-born composer, who lived in London, wrote over 100 piano sonatas and engaged in a piano duel with Mozart in 1781.

ANSWER: Muzio **Clementi**

<WA Music>

19. This structure is connected to the epididymis. For 10 points each:

[10] Name this structure, part of the male reproductive system. Congenital absence of this structure occurs in people with cystic fibrosis, and a namesake contraceptive procedure severs this structure.

ANSWER: **vas deferens**

[10] A vasectomy works because it prevents these male gametes from entering the ejaculate. They fertilize the egg to form a zygote.

ANSWER: **sperm** [or **spermatozoa**]

[10] The head of the sperm cell is partially covered by this cap-like organelle. It contains acidic enzymes that help the sperm fuse with the egg.

ANSWER: **acrosome**

<SR Biology>

20. This wizard, who first appears in *The Hobbit*, tells Frodo that he must destroy the One Ring and accompanies him on his journey. For 10 points each:

[10] Name this companion of Bilbo and Frodo Baggins who dies in his “Grey” form but is reincarnated in his “White” form.

ANSWER: **Gandalf** [accept **Mithrandir**, **Tharkûn**, **Olórin**, or **Incánus**]

[10] Gandalf dies in a fight with a Balrog at this location in the Misty Mountains. The mines of this location were the site of a failed dwarf colony led by Balin.

ANSWER: **Moria** [accept **Khazad-dûm** or the **Dwarrowdelf**]

[10] Years before the events of *The Lord of the Rings*, the dwarf king Thrór went to Moria, where he was decapitated by this orc, the father of Bolg.

ANSWER: **Azog**

<NC Trash>