**OLEFIN: Outstanding Like Excellent Fantastic Invitational**

**Edited and written by members of the 2010-2011 TJHSST QB team**

ROUND 2

Tossups

**1. In one of this author's short stories, a man gets help from Sonny and his wife after his car drives into a ravine, after which he suddenly experiences a heart attack and dies. This author of "Death of a Travelling Salesman" also wrote a story whose protagonist travels to town to buy medicine for her grandson, who previously swallowed lye. In addition to creating (\*)** Phoenix Jackson in "A Worn Path," this author wrote of the Fairchilds gathering for Dabney and Troy Flavin's marriage in one novel, while in another of her works, the protagonist resents the mother of Shirley-T, her sister Stella-Rondo. For 10 points, identify this Mississippian author of *Delta Wedding* and "Why I Live at the P.O."
ANSWER: Eudora **Welty**

**2. This ruler erected the Aswan and Tanis stelae and defeated the Sherden pirates, while he celebrated more Sed Festivals than any other pharaoh. This leader moved the capital of his empire to a namesake city on the eastern Nile Delta, while his best-known consort was (\*)** Nefertari. This ruler concluded the first documented peace treaty after fighting the inconclusive Battle of Kadesh against the Hittite Empire. While he erected statues at Mit Rahina, Luxor, Memphis, and Thebes, his best-known monument was built at Abu Simbel. Referred to in Greek sources as Ozymandias, for 10 points, name this son of Seti I, the longest serving Egyptian Pharaoh.
ANSWER: **Ramesses II** [accept **Ramesses the Great**, prompt on Ramesses]

**3. One character in this musical is identified as #24601 and sings the "Work Song" while in prison. In this musical, the innkeepers Thenardiers cheat their customers, singing "Master of the House," and raise Eponine, who loves the same person as the illegitimate daughter of a fired factory worker. Marius loves (\*)** Cosette and the final song in this musical is "Do You Hear the People Sing?". The protagonist had found new life after being forgiven for stealing silver candlesticks and had earned a 19 year prison sentence for stealing bread. Fantine sings "I Dreamed a Dream" in, for 10 points, what musical where Javert pursues Jean Valjean, based on a book by Victor Hugo?
ANSWER: **Les Miserables** [accept **Les Mis** or **Les Miz**]

**4. Cells in one type of this tissue are bundled together by perimysium. That type has indentations in their plasma membranes known as T-tubules. Those cells also use the protein titin to connect the Z and M lines. Another type of this tissue has cells separated by (\*)** intercalated disks that allow them to act in synchrony, and is protected from tetanus by a long refractory period. Troponin and sarcomeres are not present in one form of this tissue, which is responsible for peristalsis in the digestive tract and known as the smooth type. Actin and myosin form the striations in the other two types of, for 10 points, what contracting tissue that makes up the heart, tongue, and biceps?
ANSWER: **muscle** tissue [accept **skeletal muscle** tissue before "intercalated" and**striated muscle** tissue before "not present"]

**5. One ruler of this empire briefly fled to Tahmasp I's court for shelter when his empire was overrun by Sher Shah. The throne of this empire was originally known as the Peacock Throne and once contained the Koh-i-noor diamond. Another leader of this empire once led by (\*)** Humayun imprisoned his sister and father in a citadel and won a power struggle against his brother. This empire defeated Hemu at the Second Battle of Panipat under Akbar the Great. This empire's last ruler, Aurangzeb, was the son of a ruler who built a mausoleum for his wife Mumtaz out of white marble. For 10 points, name this Indian empire whose rulers included the builder of the Taj Mahal, Shah Jahan.
ANSWER: **Mughal** Empire

**6. This man wrote the erotic *Roman Elegies* as well as a play where the Duke of Alba fights against the title figure in his *Egmont*. He also wrote a poem in which a child's cries of the title figure are dismissed as wind and fog, *Der Erlkönig*, while in another of his plays, a poodle follows a man home who has the son Euphorion with (\*)** Helen. After Albert weds Lotte, the title character of his first novel commits suicide, an event which inspired multiple copycat suicides in Germany. The most famous work of this author of *The Sorrows of Young Werther* sees a scientist make a deal with Mephistopheles the devil. For 10 points, name this German romanticist polymath and author of *Faust*.
ANSWER: Johann Wolfgang von **Goethe**

**7. In these substances, an energy level with a 50% chance of being occupied by an electron, known as the Fermi level, is found within the band gap. These substances work by the generation and recombination of charge carriers, including free electrons and electron (\*)** "holes." Adding group 3 and group 5 elements to a lattice of group 4 atoms can create the *p-* and *n-*types of these substances in a process known as doping. Found in electrical components like diodes and transistors, they often are composed of silicon. For 10 points, name these substances with conductivity intermediate between that of an insulator and a conductor.
ANSWER: **semiconductor**s

**8. This thinker used the terms "knowledge by acquaintance" and "knowledge by description.” In one work, this thinker claimed that the title religion was the "principal enemy of moral progress in the world." He rejected Meinong's theory of objects as well as the notions of "sense" and "reference" held by Frege in his essay "On Denoting." This man refuted that the burden of proof was on the skeptic in an analogy involving his namesake teapot. This author of *Why I Am Not (\*)****A Christian* co-authored a work which attempted to derive math from symbolic logic. For 10 points, identify this British philosopher who co-wrote *Principia Mathematica* with Alfred North Whitehead.
ANSWER: Bertrand **Russell**

**9. On April Fools day, in honor of this event, BMW announced that it was making a car. Though that was a prank, Linda Leith did design barf bags for the event. A see-through dress involved in the lead up to this event sold for 125 thousand dollars. Guests invited to this event included Kanye West and David and Victoria Beckham, but not (\*)** President Obama or Sarah Ferguson. The dress code for this event was "uniform, morning coat, or lounge suit." Following this event, there was a procession through London followed by a reception at Buckingham Palace. For 10 points, identify this event which took place on April 29th, 2011 at Westminster Abbey.
ANSWER: royal **wedding** of **Prince William** and **Catherine** Middleton [accept **Kate** in place of Catherine; accept other clear-knowledge equivalents; prompt on partial]

**10. This person convinced Scylla to help him kill King Nysus by cutting off Nysus's lock of crimson hair and this man's wife gave him a potion that caused him to expel spiders and scorpions, killing any mistresses. He, along with Aeacus and Rhadamanthus, became one of the (\*)** judges of the dead, and after this man failed to sacrifice a white bull to Poseidon, that wife was struck with a passion for a bull. She subsequently hid in a wooden cow so that she could mate with the bull, giving birth to a half-man, half-bull creature that bore part of this man's name. For 10 points, name this Greek king that imprisoned people in the Labyrinth to be eaten by the Minotaur.
ANSWER: King **Minos**

**11. As Lord Lieutenant of Ireland, this man put down the United Irishmen Rebellion and as Governor-General of India, he implemented Permanent Settlement. At the Battle of Long Island, this man, along with Sir Henry Clinton, led the advance guard that landed at Gravesend Bay. This man’s most famous act was actually performed by a proxy, General Charles O’Hara, who surrendered to Benjamin (\*)** Lincoln, the subordinate of George Washington. This general defeated Gen. Horatio Gates in the last major British victory in the south, the Battle of Camden. For 10 points, name this famous British general who is best known for his surrender at Yorktown.
ANSWER: Lord Charles **Cornwallis**

**12. In one work by this author, a character states that "it is very vulgar to talk like a dentist when one isn't a dentist" and later that character reveals that he hates tea-cake. In another play by this man, Margaret discovers her husband's secret bank book just after rebuffing (\*)** Lord Darlington for complimenting her too much, and later in that work, Tuppy questions Arthur about his relationship with Mrs. Erlynne. Sibyl Vane drinks prussic acid and Basil Hallward is murdered in another work by, for 10 points, what Irish author of *Lady Windermere's Fan* and *The Importance of Being Earnest*, who wrote about a man who wishes to remain beautiful forever in *The Picture of Dorian Grey*.
ANSWER: Oscar **Wilde**

**13. One character in this work cannot cross an ocean because he has destroyed the sacred stones. Another character in this work feels ill when placing his hand on the gates to a cedar forest, which have been placed there by the gods. That person, in this work, is mortally wounded by Humbaba, but survives to see it die. This work's titular character also survives the Bull of (\*)** Heaven, sent by Ishtar to avenge a slight by the protagonist. The protagonist of this work seeks the secret to immortality from Utnapishtim, a survivor of a great flood sent by the gods, so that he can revive Enkidu. For 10 points, name this Babylonian and Sumerian epic that details the journey of the titular king.
ANSWER: Epic of ***Gilgamesh***

**14. One neighborhood in this area, Prospect Heights, has seen real estate prices soar as a result of the controversial Atlantic Yard project proposed in this area. Its namesake "Battery Tunnel" crosses the East River, and the Franklin Avenue Shuttle runs through this borough, which is home to the MetroTech center and the (\*)** Park Slope neighborhood. The Verrazano-Narrows Bridge connects it to Staten Island, and this borough where Coney Island is located was home to the baseball team Jackie Robinson played for. For 10 points, identify this borough of New York City which borders Queens, once home to the Dodgers.
ANSWER: **Brooklyn** [accept "New York City" before "Battery"; prompt on "New York City" afterwards until mentioned]

**15. This man examined the outcome of when a person asks for a seat on a filled train or invades another person's personal space in his "On Maintaining Social Norms". One experiment by this man asks random people to mail letters addressed to the Friends of the Nazi Party. In another experiment, this man measured the average length of a person's social network. Those were the (\*)** Lost Letter and Small Worlds experiments. For 10 points, name this American psychologist whose namesake obedience experiment studied how the presence of an authority figure affected the willingness of “teachers” to deliver painful electric shocks to “learners” in another room.
ANSWER: Stanley **Milgram**

**16. One opera by this composer begins with a character forced to disguise himself as a chambermaid named "Mariandel," who is then propositioned by the crude Baron Ochs. That work by this composer centers on an aging princess who releases her much younger lover (\*)** Octavian. Another of this composer's pieces begins with the sustained notes C-G-C; that piece contains a "world riddle" theme. This composer who created the Marschallin in *Der Rosenkavalier* also wrote a work which appears at the opening of the film *2001: A Space Odyssey.* For 10 points, name this German Romantic composer of the tone poem *Also Sprach Zarathrustra*.
ANSWER: **R**ichard **Strauss** [prompt on "Strauss"; do not accept "Johann Strauss"]

**17. Occupational exposure to one form of this element can cause one's jawbone to glow in the dark, and this element inhibits acetylcholine breakdown. With four oxygen atoms, this element forms a common anion with a charge of negative three which is present in detergent and fertilizer and can cause (\*)**eutrophication; three of those ions are also present in living cells' most common energy carrier. Though this element's black form is the most stable, it is more commonly present in its white form, used in incendiary weapons, and its red form, used in match heads. For 10 points, name this element below nitrogen on the periodic table with symbol P.
ANSWER: **phosphorus**

**18. One man who refused despite popular support to overthrow this government was Georges Boulanger. This government secularized its nation's schools with the Jules Ferry Laws and it weathered the Panama scandals. Organized by Adolphe (\*)** Thiers, it put down the Second Paris Commune. The dismissal of one of this government's Prime Ministers, Jules Simon, led to the resignation of this government's third president, MacMahon. The stealing of secrets about its cannons led it to use Devil’s Island to imprison Alfred Dreyfus. This government was twice led by Georges Clemenceau. Replaced by Vichy France was, for 10 points, what government that ruled France between 1870 and 1940?
ANSWER: French **Third Republic** [accept La **Troisieme Republique**]

**19. One painting adds a flattened fish and several rows of blocks with voids between them to this painting. That painting is entitled the *Disintegration* of this painting. An orange object in the lower left of this painting is covered with animals which the artist used as a symbol of female genitalia, (\*)** ants. An unidentified animal body in the center of the painting is covered with one of the objects for which this painting is known, another of which hangs off of a tree branch in the upper left. For 10 points, name this work which depicts several melting clocks, a painting by Salvador Dalí.
ANSWER: *The****Persistence of Memory*** [or *La****Persistencia de Memoria***]

**20. This theorem was linked to another hypothesis by a descendant of Serre's conjecture known as Ribet's theorem or the epsilon conjecture. This theorem was proven using ring homomorphisms involving the Galois representations of certain curves. That hypothesis links closely modular forms to the elliptic curves dealt with in this statement and was known as the (\*)** Taniyama-Shimura conjecture. It applies to Diophantine equations whose exponent is above a certain integer and was proven in 1994. For 10 points, name this theorem which states that the equation a to the n plus b to the n equals c to the n has no integer solutions for n greater than 2 and was proven by Andrew Wiles.
ANSWER: **Fermat's last** theorem [accept **Taniyama**-Shimura-Weil Conjecture or **Modularity** theorem before mentioned; DO NOT ACCEPT **Fermat's Little** Theorem]

**EXTRA: One of this man's adviser's namesake "neckties" were the gallows. That adviser to this man was assassinated while watching a performance of *The Tale of the Tsar Saltan* and proposed a series of agrarian reforms. Advisers to this man included (\*)** Stolypin and Sergei Witte, who suggested that this man pass the October Manifesto and create the Duma. This man’s government was replaced by the Provisional Government led by Alexander Kerensky following the February Revolution, which was partially caused by Rasputin appearing in this man's court. For 10 points, name this last Russian czar.
ANSWER: **Nicolas II**

Bonus

1. This period was the first of the Paleozoic Era, and preceded the Ordovician Period. For 10 points each:
[10] Name this this geologic period which contained a namesake "explosion" that saw the emergence of most major extant phyla.
ANSWER: **Cambrian** Period
[10] First appearing during the Cambrian explosion, these arthropods found in oceans worldwide are best known for their segmented, armor-like exoskeletons. They were used by Niles Eldredge in the formulation of the theory of punctuated equilibrium.
ANSWER: **trilobite**s
[10] Some of the best fossil evidence for the Cambrian explosion comes from this lagerstätte found by Charles Walcott and located in the Canadian Rockies.
ANSWER: **Burgess Shale** formation [accept **Stephen** formation]

2. He and his brother Bleda were nephews of the warlord Rugila. For 10 points each:
[10] Name this 5th-century leader of the Huns.
ANSWER: **Attila** the Hun
[10] In 451 CE, Attila invaded this Roman province to intervene in a succession struggle in a local Frankish kingdom.
ANSWER: **Gaul**
[10] Attila's invasion of Gaul was stopped by a Roman-Visigothic alliance at this battle, considered a great victory for the Roman general Flavius Aëtius.
ANSWER: Battle of the **Catalaunian Plains** [or Battle of the **Catalaunian Fields**, or Battle of **Châlon**s]

3. She burns the sequel to her husband's rival's bestseller. For 10 points each:
[10] Name this idealistic and headstrong woman who is married to Tesman. She commits suicide after learning from Judge Brack that Ejlert Lovberg died in a brothel rather than killing himself.
ANSWER: **Hedda** **Gabler** [accept either]
[10] *Hedda Gabler* is a play by this Norwegian creator of Nora Helmer in *A Doll's House*. He also wrote of the lazy Peer Gynt in a play accompanied by music such as "In the Hall of the Mountain King."
ANSWER: Henrik **Ibsen**
[10] In this Ibsen play, Dr. Stockmann discovers that the town baths have been contaminated. He ultimately becomes a pariah after the public rejects his claims.
ANSWER: *An****Enemy of the People***

4. St. Bartholemew holds a flayed self-portrait of this man in one painting located in the Sistine Chapel. For 10 points each:
[10] Name this Renaissance artist of *The Last Judgement*. He also created many Pietas.
ANSWER: **Michelangelo**
[10] Michelangelo created the most famous version of this statue, which depicts the titular boy right before his fight with Goliath.
ANSWER: ***David***
[10] Michelangelo's design for the tomb of this warrior pope features a statue of a horned Moses as its centerpiece.
ANSWER: Pope **Julius II** [accept **Giuliano della Rovere**]

5. It includes the species ergaster, habilis, and sapiens. For 10 points each:
[10] Name this great ape genus to which Neanderthals belong and of which modern humans are the only surviving species.
ANSWER: ***Homo***
[10] One example of this *Homo* species, which descended from *H. habilis,* is the Java Man. Its name refers to its ability to walk upright on two legs.
ANSWER: *Homo****erectus*** [accept *H.****erectus***]
[10] This member of *Homo erectus* was discovered in China, where excavation yielded teeth, skulls, and tools for roughly 40 individuals.
ANSWER: **Peking Man**

6. Members of the Cornaro family look upon this scuplture. For 10 points each:
[10] Name this sculpture that depicts the title nun being stabbed by an angel with an arrow.
ANSWER: *The****Ecstasy of St. Teresa*** [accept ***Saint Teresa in Ecstasy***; accept***Transverberation of Saint Teresa***]
[10] This Baroque scupltor designed *The Ecstasy of St. Teresa* along with the Piazza San Petro and the "Fountain of the Four Rivers."
ANSWER: Gian Lorenzo **Bernini**
[10] Bernini also designed this statue that depicts the titular nymph's moment of transformation into a laurel tree, while being chased by a deity.
ANSWER: ***Apollo and Daphne***

7. Name some characters from Norse mythology, for 10 points each:
[10] Name this husband of Nanna, the Norse god of light and happiness who was killed by an arrow made of mistletoe.
ANSWER: **Balder** [accept **Baldr**; accept **Baldur**]
[10] This trickster god was Odin's blood brother and engineered Balder's death along with fathering Hel, and the Midgard Serpent.
ANSWER: **Loki**
[10] This mother of Baldr forced all the objects in the world not to harm her son, mistakenly thinking that mistletoe was too young to make such an agreement.
ANSWER: **Frigg**a

8. Near its end the word "Vincero!" is sung repeatedly, as its singer is certain of his victory. For 10 points each:
[10] Identify this aria in which a character proclaims that "no one shall sleep" as dawn approaches.
ANSWER: "**Nessun dorma**"
[10] That aria appears in a work mostly written by this opera composer who created Cio-Cio San in *Madame Butterfly.*
ANSWER: Giacomo **Puccini**
[10] This is the aforementioned opera that contains the aria "Nessun dorma." In this opera Calaf wishes to wed the titular icy Chinese princess.
ANSWER: ***Turandot***

9. Answer the following about chemical kinetics for 10 points each.
[10] This expression can be used to calculate the rapidity of a reaction. It contains a constant multiplied by the concentrations of various reactants raised to various powers.
ANSWER: **rate law** [accept **rate equation**]
[10] By integrating rate laws, it can be shown that reactions of this order have a half-life independent of reactant concentration.
ANSWER: **first** order [accept equivalents like **1**]
[10] The Arrhenius equation, which gives an expression for the constant in the rate law, explains how these substances that lower activation energy can increase the rate of a reaction without changing the final equilibrium position.
ANSWER: **catalyst**s

10. Name some things about the downfall of the Incan Empire, for 10 points each:
[10] This Spaniard, who, along with Vasco de Balboa, became the first European to see the Pacific Ocean, conquered the Incan Empire on his third voyage to Peru.
ANSWER: Francisco **Pizarro**
[10] The downfall of the Incan empire began when Pizarro launched this surprise attack on the royal Incan family. Pizarro's capture of the Inca here led to him demanding a room full of gold as ransom.
ANSWER: Battle of **Cajamarca**
[10] This last emperor of the Incans was captured by Pizarro at the Battle of Cajamarca shortly after this man's defeat of his half-brother Huascar.
ANSWER: **Atahualpa** II

11. One poem from this movement addressed to Lucasta claims that "I could not love thee, Dear, so much / Loved I not honor more." For 10 points each:
[10] Identify this group of gentleman courtier poets whose members included the author of "Why so pale and wan, fond lover?", John Suckling.
ANSWER: **Cavalier** poets [accept equivalents]
[10] This other Cavalier poet wrote to Lucy Sacheverell in "To Althea, From Prison" in addition to writing several poems to Lucasta.
ANSWER: Richard **Lovelace**
[10] The Cavalier poets were contemporaries of the metaphysical poets, who were famous for their use of this literary device. In "A Valediction: Forbidding Mourning" John Donne uses one of these literary devices to compare love to a drafting compass.
ANSWER: **metaphor**

12. Nintendo's busting out the big guns! For 10 points each:
[10] Following a tradition of colorful titles, Black Version and White Version are the newest entries in this GameFreak catch 'em all series. Players began with a Pikachu in this series' Yellow Version.
ANSWER: **Pokemon** [accept **Pocket Monsters**; do not accept specific game titles]
[10] Many new games and consoles are announced at this largest video game industry exposition. Two years ago, Nintendo unveiled its 3DS and the release of Legend of Zelda: Skyward Sword at this conference.
ANSWER: **E3** [accept **Electronic Entertainment Expo**]
[10] At the penultimate E3, Nintendo also announced the release of this addition to the Kirby series. In this game, players travel through Patch Land, a world composed entirely of the game's namesake material.
ANSWER: *Kirby's****Epic Yarn***

13. Albert Einstein was the first person to explain this phenomenon, and it was the subject of one of his famous 1905 papers. For 10 points each:
[10] Name this effect, in which light falling on a piece of metal excites electrons and causes them to escape.
ANSWER: **photoelectric** effect
[10] This man discovered the photoelectric effect. He also lends his name to the SI unit of frequency.
ANSWER: Heinrich **Hertz**
[10] This other effect is the process of inelastic scattering of a photon off an electron reduces the energy of a gamma ray or X-ray photon. The conservation of momentum in this effect was important in disproving BKS theory.
ANSWER: **Compton** effect [accept **Compton** scattering]

14. Intermediate filaments form its namesake lamina, which supports it. For 10 points each:
[10] Identify this double-membrane eukaryotic cell organelle in which chromatin is found.
ANSWER: cell **nucleus**
[10] These proteins are located in cell nuclei and come in core and linker types. Nucleosomes are formed when DNA is wrapped around these proteins.
ANSWER: **histone**s
[10] This functional group is added and removed from lysine residues of histone N-terminal tails to regulate gene transcription, which is catalyzed by HDAC/HAT.
ANSWER: **acetyl** [accept word forms, histone **acetyl**ation or de**acetyl**ation]

15. Name some things about 18th century British politics, for 10 points each:
[10] In addition to penning *Reflections on the Revolution in France* and being the founder of modern conservatism, this man, during the Hasting trials, attempted to change British policy towards India.
ANSWER: Edmund **Burke**
[10] Edmund Burke was a British politician during the reign of this "mad" Hanoverian monarch. Burke was one of the few Members of Parliament to support the American Revolution that occurred during this king's reign after this king rejected the Olive Branch Petition.
ANSWER: King **George III**
[10] This man, who handled the Falkland Crisis, was Prime Minister during the American Revolution. He also proposed the Intolerable Acts.
ANSWER: Fredrick **North**, Lord North [accept **Lord North**]

16. Jim buys a set of combs as a gift for Christmas in this short story, while Della buys a chain for a pocketwatch. For 10 points each:
[10] This is what short story where Jim discovers that Della has in fact cut and sold her hair for money to buy the chain and Della finds that Jim has sold his pocketwatch to buy the combs?
ANSWER: "The **Gift of the Magi**"
[10] This short story writer wrote "The Gift of the Magi." and is well-known for his twist endings, along with other stories like "A Retrieved Reformation."
ANSWER: O. **Henry** [accept William Sydney **Porter**]
[10] In this other O. Henry short story, two Alabama criminals kidnap the hyperactive son of the wealthy Ebenezer Dorset but end up returning him for $250 after he is too much to handle.
ANSWER: "The **Ransom of Red Chief**"

17. It is said to represent the events of the last supper during which Jesus Christ described bread and wine as being his body and blood. For 10 points each:
[10] Name this sacrament, which involves dipping bread in wine, whose name comes from the Greek word for thankfulness.
ANSWER: **Eucharist** [accept Holy **Communion**; accept **Lord's Supper**; accept **Sacrament of the Altar**]
[10] This Catholic doctrine holds that the bread and wine of Eucharist are actually changed into the body and blood of Christ. Both Martin Luther and Huldrych Zwingli rejected this doctrine.
ANSWER: **transubstantiation**
[10] Luther and Zwingli debated their views on communion at this meeting, which was called for by Philip I of Hesse.
ANSWER: **Marburg Colloquy**

18. It was investigated by the Tower Commission. For 10 points each:
[10] Name this 1986 political scandal over the United States' facilitation of arms sales to a certain Middle Eastern country in order to secure the release of hostages. Proceeds from those sales later funded the affair's namesake Nicaraguan rebels' war against the Sandinista government.
ANSWER: **Iran-Contra** affair
[10] The Iran-Contra affair occurred during this man's presidency. As president, he called the U.S.S.R. an "evil empire" and invaded Grenada during Operation Urgent Fury.
ANSWER: Ronald **Reagan**
[10] As a National Security Council staffer, this Colonel was responsible for the funding of the Nicaraguan Contras. He currently hosts *War Stories* on Fox News.
ANSWER: Colonel Oliver **North**

19. Identify these famous North American lakes, for 10 points each:
[10] This lake, the largest in North America, lies between the Canadian province of Ontario and the US states of Michigan and Wisconsin.
ANSWER: Lake **Superior**
[10] This American lake was formed from the collapse of Mount Mazama, and is known for its pure water and deep blue color.
ANSWER: **Crater** Lake
[10] This second largest lake in Canada serves as the source of the largest river in Canada, the Mackenzie.
ANSWER: **Great Slave** Lake

20. In one of his novels, two men miraculously survive when a hijacked plane explodes over the English Channel. For 10 points each:
[10] Name this author of *The Satanic Verses*, the publication of which caused Ayatollah Khomeini to issue a fatwa against him.
ANSWER: Sir Ahmed Salman **Rushdie**
[10] In this novel by Rushdie, Saleem Sinai is born at the titular first hour of August 15, 1947, India's independence. He, like other people born during that time period, gains magical powers.
ANSWER: ***Midnight's Children***
[10] Saleem is known for this large body feature which grants him telepathic powers. Nikolai Gogol also wrote a short story about this body part in which it takes a life of its own apart from its owner.
ANSWER: a **nose** [accept "The **Nose**"]

EXTRA: Some properties of solutions depend only on the number of particles of solute dissolved in the solvent. For 10 points each:
[10] Name these properties which include osmotic pressure, vapor pressure, and freezing point depression.
ANSWER: **colligative** properties
[10] Another colligative property is the elevation of this quantity, the temperature at which a substance's vapor pressure is equal to atmospheric pressure. For water, it is 100 degrees Celsius at sea level.
ANSWER: **boiling point**
[10] The equation describing the effect of solutes on boiling point includes this term representing the number of molecules or ions one molecule of solute dissociates into, symbolized i. For non-electrolytes it is equal to 1.
ANSWER: **van 't Hoff** factor [accept **ionization constant**]