**OLEFIN: Outstanding Like Excellent Fantastic Invitational**

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

ROUND 1

Tossups

**1. It's not the secession of Texas, but Sam Houston was included in *Profiles in Courage* for protesting this act, while Joshua Giddings and Salmon P. Chase wrote an "Appeal of the Independent Democrats" in response to it. The subject of Lincoln's Peoria Speech, its (\*)** repeal was the core of the Republican Party's original platform. This act led to the Pottawatomie Massacre and the "Sack of Lawrence". To gain southern votes, the concept of "Popular Sovereignty" was added to this act by Stephen Douglas. Charles Sumner was beaten with a cane by Preston Brooks after giving a speech decrying the effects of, for 10 points, what act that repealed the Missouri Compromise and led to "Bleeding Kansas"?
ANSWER: **Kansas-Nebraska** Act

2. **One character in this work tells a tale about why the turtle's shell is not smooth; that character follows as her daughter is carried by Cheilo. Another character in this novel plans to write a novel entitled *The Pacification of the Primitive Tribes of the Lower (\*)****Niger*. In this novel, the protagonist is sent to his mother's village for seven years after accidentally shooting a boy, during which time, Nwoye converts to Christianity. Earlier in this novel, Obierka advises the protagonist not to participate in the killing of Ikemefuna. For 10 points, identify this work about Okonkwo, a novel by Chinua Achebe.
ANSWER: ***Things Fall Apart***

3. **A negative value for this quantity is possible with population inversion, and it is inversely proportional to thermodynamic beta. For a classical system, an energy of one-half k times this quantity is allocated to each degree of freedom by the equipartition theorem, and this quantity is the conjugate variable of entropy. It is proportional to (\*)** pressure at constant volume and to volume at constant pressure by the ideal gas law, and heat capacity refers to the amount of thermal energy needed to raise this quantity one unit for a given substance. For 10 points, name this physical quantity measured in kelvin and Celsius.
ANSWER: absolute **temperature** [or kelvin **temperature**]

4. **This state's Mossy Creek is a famous trout fishing stream. This state is home to the U.S.’ oldest sporting competition, which is held at Natural Chimneys Park. The highest point in this state is Mount Rogers and this state borders a series of class 5 and 6 rapids at (\*)** Great Falls park. This state's Hanover County was the site of the Battle of Cold Harbor and the Battle of Petersburg occurred just south of its capital. This state's northwestern quarter is part of the Piedmont Region and the Blue Ridge Mountains line this state's Shenandoah Valley. For 10 points, name this state located south of Washington D.C. with capital at Richmond.
ANSWER: **Virginia**

5. **One notable performer of this instrument wrote a pedagogic work on *The Art of* playing this instrument; that performer was Heinrich Neuhaus, teacher of Emil Gilels. Another performer of this instrument, van Cliburn, won an international competition during the Cold War. One of its performers known for (\*)** humming while playing it and similar eccentricities was Glenn Gould, and composers who primarily composed for this instrument included Alexander Scriabin and Frederic Chopin. For 10 points, identify this instrument played by Lang Lang and frequently manufactured by Steinway & Sons, a percussion instrument with 88 keys.
ANSWER: the **piano** [accept **pianoforte**]

6. **In one scene from this novel, the protagonist dreams of a drunken crowd led by Mikolka beating a horse to death. In another scene, this novel's protagonist demands that a lady with a yellow pass read him Lazarus. That woman from this novel is the daughter of an alcoholic who is run over by a carriage, named (\*)** Marmeladov. Later in this novel, Luzhin proposes to Dunya after she rejects the advances of Svidrigailov. This work's protagonist is followed to Siberia by Sonya after he confesses to Porfiry Petrovich for the murders of Lizaveta and her sister. For 10 points, name this Dostoyevsky novel about Rasnolnikov's murder of a pawnbroker.
ANSWER: ***Crime and Punishment***

7. **One work by this author discusses a game in which his grandson threw a wooden reel attached to a string over the bed repeatedly, called the "fort-da" game. In the same work, this author discussed the death instinct, (\*)** Thanatos, in addition to the Eros. This author wrote another work which begins with a story about a sick woman treated with an unclean syringe, "Irma's injection." That work by this author of *Beyond the Pleasure Principle* explains a certain form of "wish fulfillment." For 10 points, identify this author of *The Interpretation of Dreams,* an Austrian psychoanalyst who invented the ego and id.
ANSWER: Sigmund **Freud**

8. **One form of this element cleaves alkenes at their double bond. The active compound in photodynamic therapy is this element's singlet state, while MO theory is needed to explain the (\*)** paramagnetism of its more common triplet state. This element is given off upon heating of potassium chlorate, and its liquid state is a translucent blue. This element is the most abundant in the Earth's crust, and it was discovered independently by Carl Wilhelm Scheele and Joseph Priestley. Making up about a fifth of the Earth's atmosphere, for 10 points, name this element necessary for respiration and combustion with atomic number 8.
ANSWER: **oxygen**

9. **This event's site was chosen by General Naverre and was captured by paratroopers during Operation Castor. During this event, Colonel Piroth committed suicide after failing to counter the initial surprise attack on Beatrice, which was proceeded by the fall of Anne-Marie and Gabrielle. At this battle the defending troops were commanded by Colonel Christian de (\*)** Castries and it ended the day before the Geneva Accords were signed. After 55 days of fighting, this battle ended when troops under General Giap overran the French fortifications. For 10 points, name this decisive Viet Minh victory at the end of the First Indochina War.
ANSWER: Battle of **Dien Bien Phu**

10. **One of this artist's works incorporated his painting "The Princess From The Land of Porcelain," and he painted several views of the Old Battersea Bridge. This painter was notably called a "coxcomb" who "asked two hundred guineas" by John (\*)** Ruskin, and he illustrated a view of fireworks at the Cremorne Gardens in a painting depicting "the falling rocket." This artist often titled his paintings after symphonies and nocturnes, but he may be better-known for painting a stern, elderly woman in black seated facing left. For 10 points, identify this English painter of *Arrangement in Grey and Black,* a portrait of his mother.
ANSWER: James MacNeill **Whistler**

11. **This figure, while living in disguise at the court of the king of Scyros, had an affair with Deidameia that resulted in the birth of Neoptolemus. Some stories claim that, in the Underworld, this figure married Medea. After his death this man's armor was fought over by (\*)** Odysseus and Ajax the greater. This figure dragged one body behind his chariot seven times around the walls of Troy. That was Hector's body. This figure's mother attempted to make him immortal by either holding him over a sacred fire or dipping him in the River Styx. For 10 points, name this greatest Greek hero of the Trojan War who was finally killed when Paris shot a poisoned arrow into his ankle.
ANSWER: **Achilles**

12. **One of this author's novels ends with a character receiving a blessing in the form of the word "Timshel." In another novel by this author, a strike on a peach orchard leads to the death of Jim Casy, and later in that novel a man is breast-fed by Rose-of-Sharon. This author created two families, the (\*)** Trasks and the Hamiltons, in his novel *East of Eden,* and many of this author's writings take place in the Salinas Valley, with the notable exception of a novel about a family whose crops were destroyed in the Dust Bowl, forcing them to journey west. For 10 points, identify this creator of the Joad family who wrote about their trek from Oklahoma to California in *The Grapes of Wrath.*
ANSWER: John **Steinbeck**

13. **This movie begins and ends with the image of a "NO TRESPASSING" sign giving way to an iron-wrought 'K' emblem. *News on the March* reporter Jerry Thompson describes this film's protagonist as "a man who got everything he wanted, and then lost it." Jim Leland is fired from the (\*)** *New York Inquirer* after his poor review of Susan Alexander's opera. This movie's titular character later constructs Xanadu and is modeled after newspaper magnate William Hearst. That character dies uttering the name of his sled, "Rosebud." For 10 points, Orson Welles starred in and directed what movie, widely considered to be the greatest ever made?
ANSWER: ***Citizen Kane***

14. **This man was the first of Carl Hubell's five consecutive strikeout victims in one All-Star Game. Whitey Ford broke this man's record of 29 and 2/3rd consecutive scoreless innings pitched in the World Series. He first played professional baseball for the then-minor-league Baltimore Orioles. In one World Series against the Cubs, he hit his (\*)** "Called Shot". As part of "Murderer's Row," he broke his single season record of 59 home runs by hitting 60, and his namesake curse began when he was sold by the Boston Red Sox in 1919. For 10 points, name this former New York Yankees left-fielder who was known as the Great Bambino and hit 714 career home runs.
ANSWER: Babe **Ruth** [accept George Herman **Ruth**; prompt on **Sultan of Swat**; or **Great Bambino** early]

15. **This event's path was the subject of a conference at Cierna nad Tisou. The "Two Thousand Word" paper called for its goals, laid out in the "Action Program," to be carried out by individuals. This movement's end led to Jan Palach's suicide protest and it began with the removal of (\*)** Antonin Novotny. Following this movement was a period of "normalization" led by Gustav Husak and it tried to implement "socialism with a human face." This movement's end by military force was justified by the Brezhnev Doctrine. For 10 points, Alexander Dubcek led what failed 1968 attempt to reform socialism in Czechoslovakia?
ANSWER: **Prague Spring**

16. **Bright glows on this object, called LTPs, have been observed by Earth-based telescopes and are possibly due to outgassing. The Valles Alpis extends out from the Frigoris Basin towards this body's Imbrium basin, which is a MASCON. This body's surface has long channel-like rifts called rilles in it, while Tycho and Copernicus are some of the brightest (\*)** impact craters on this object's surface. Along with craters, the most prominent features on this object are the large basalt-filled valleys called Maria or seas. This object's Sea of Tranquility was the landing spot for Apollo 11. For 10 points, name this celestial object that orbits the Earth.
ANSWER: **Moon**

17. **In this novel, the ship *Demeter* lands on the shores of Whitby, England during a storm, all of the crew having been killed. On the ship were fifty boxes of dirt. Meanwhile, at an asylum a man is deemed a "zoophagous maniac." When (\*)** Lucy repeatedly gets sick after spending a night sleepwalking, Van Helsing's blood transfusions ultimately do not stop her from "dying." The novel is written in an epistolary style and includes the writings of Jonathan Harker and his wife Mina, who the titular character takes control of before being killed. For 10 points, identify this Gothic novel focusing on the titular vampire from Transylvania.
ANSWER: ***Dracula***

18. **It's not John, but a book named the *Apocalypse of* this man describes how people who slander will be tormented with red hot irons, among other punishments. He is said to have been freed by an angel after being imprisoned by King Herod and to have walked on water briefly before losing his faith. This man, symbolized by an (\*)** upside-down cross, was crucified in Rome under the rule of Nero. As Jesus predicted, this man betrayed him three times before the cock crowed. For 10 points, identify this holder of the keys to Heaven, sometimes considered the first pope, to whom Jesus said "upon this rock I will build my Church."
ANSWER: Saint **Peter** [accept Simon **Peter**; accept Simon **Cephas**]

19. **The enzyme that synthesizes this compound is inhibited by oligomycin, an antibiotic which gives its name to that enzyme's Fo subunit. That enzyme works via the proton motive force and is found in the inner membrane of a certain organelle. A cyclic derivative of this molecule is a classic second messenger created by (\*)** adenylate cyclase, and kinases regulate signal transduction by using this molecule as a phosphate donor. Its namesake synthase is found in the mitochondria, and roughly 36 of these molecules can be produced from glucose in cellular respiration. For 10 points, name this energy-carrying molecule consisting of a ribose, a purine, and three phosphate groups.
ANSWER: **ATP** [accept **adenosine triphosphate**]

20. **In order to discuss the Jewish presence in his country, this figure convened the Whitehall Conference. This figure also convened Barebone's Parliament, and forces under this father-in-law of Henry Ireton committed atrocities at the Sieges of Wexford and Drogheda. This victor at the Battle of (\*)** Naseby would later brutally re-conquer Ireland, and this leader who fought for the "Good Old Cause" commanded the cavalry of the New Model Army during one war. He led the Parliamentarians during the English Civil War and ruled over the Commonwealth after Charles I's execution. For 10 points, identify this Lord Protector of England.
ANSWER: Oliver **Cromwell**

EXTRA: **As president, this man opposed a Californian initiative banning homosexuals from teaching known as the Briggs initiative. His presidency also saw the resignation of OMB Director Bret Lance and Warren Miller's replacement as Chairman of the Federal Reserve by (\*)** Paul Volcker. This man signed the Canal Treaty with Torrijos and was originally a peanut farmer. As president, he identified a "crisis of confidence" in his "Malaise speech" and helped Menachem Begin and Anwar El Sadat produce the Camp David Accords. For 10 points, name this Georgian, whose presidency was marred by the Iran Hostage Crisis.
ANSWER: James Earl "Jimmy" **Carter** Jr.

Bonus

1. The action of this painting takes place before a background of three arches. For 10 points each:
[10] Identify this Neoclassicist painting in which three soldiers pledge to their father, who holds up three swords, as their mother and sisters cry.
ANSWER: *The****Oath of the Horatii***
[10] This painter of *The Oath of the Horatii* also depicted a figure surrounded by his pupils about to drink hemlock in *The Death of Socrates.*
ANSWER: Jacques-Louis **David**
[10] David painted this figure on a rearing horse in his painting of this figure *crossing the Alps.*
ANSWER: **Napoleon** Bonaparte

2. One of his books contains the warning that "persons attempting to find a plot in it will be shot." For 10 points each:
[10] Name this American realist author of a work in which Jim eventually discovers that Miss Watson has died and he is a free man, *The Adventures of Huckleberry Finn*.
ANSWER: Mark **Twain** [or Samuel **Clemens**]
[10] This character briefly appears in Huck Finn but is better-known for his escapades in an earlier Twain novel, in which he whitewashes a fence and is infatuated with Becky Thatcher.
ANSWER: **Tom** **Sawyer** [accept either]
[10] These two characters from *Huck Finn* are con men who fool Jim, but not Huck, into believing they are royalty and who carry out numerous swindles as they journey down the river with Huck. Name either.
ANSWER: the **duke** and the **dauphin** [or the **duke** and the **king**; accept both names if both are given]

3. William Hearst's "Yellow Journalism" and the De Lome letter helped push America into this war. For 10 points each:
[10] Name this war that began with the explosion of the *U.S.S. Maine* and was ended by the 1898 Treaty of Paris.
ANSWER: **Spanish-American** War
[10] Occurring in a namesake Philippine bay, this first major engagement of the Spanish-American War began when Commodore Dewey told the captain of the *U.S.S. Olympia* that "you may fire when ready."
ANSWER: Battle of **Manila Bay**
[10] Prior to the Spanish-American war, Valeriano Weyler became notorious for his use of these camps. The U.S.' ability to place Japanese in these types of camps was the subject of *Korematsu v. United States*.
ANSWER: **concentration** camps [accept **internment** camps]

4. This quantity was first measured in a gas by Johann Josef Loschmidt, and it equals approximately 6.02 times 10 to the 23rd power. For 10 points each:
[10] Name this important number in stoichiometry, the number of atoms or molecules in a mole of a substance.
ANSWER: **Avogadro**'s number [or **Avogadro** constant]
[10] One definition of Avogadro's number is the number of atoms in 12 grams of the 12-isotope of this element.
ANSWER: **carbon**
[10] Avogadro's number times the elementary charge equals a constant named for this English experimental scientist, who discovered a namesake law of electrolysis.
ANSWER: Michael **Faraday**

5. Two summers ago some big name players changed teams. For 10 points each:
[10] This team was largely considered the "winner" of 2010’s hectic free agency period. Their current team president, Pat Riley, led them to their only NBA championship in 2006
ANSWER: Miami **Heat**
[10] In addition to keeping Dwayne Wade and signing Chris Bosh, the Heat were able to sign this man. 2010’s most coveted free agent, this man, nicknamed "The King," caused controversy with his nationally broadcast decision to leave Cleveland for Miami.
ANSWER: LeBron **James**
[10] This man's signing of an extension with the Thunder went largely unnoticed due to LeBroncalypse. During the 2009-2010 season, he led the league in scoring and set a record for the most consecutive games with 25 points.
ANSWER: Kevin **Durant**

6. He angered Achilles by taking Briseis for himself, and he later captured another young lady, Cassandra, at the sack of Troy. For 10 points each:
[10] Name this leader of the Greeks in the Trojan War, the brother of Menelaus who was supposedly murdered in his bathtub.
ANSWER: **Agamemnon**
[10] This treacherous wife cheated on Agamemnon with Aegisthus and plotted to murder the Greek leader when he returned home. Along with Helen, she hatched out of one of Leda's eggs.
ANSWER: **Clytemnestra**
[10] Agamemnon's house, the house of Atreus, was cursed because Atreus forced his brother Thyestes to perform this action which Tantalus also tricked Demeter into performing.
ANSWER: **cannibal**ism [accept **eating** people or **eating** one's **child**ren]

7. Name these Roman equivalents of Fenway Park, for 10 points each:
[10] The emperor Vespasian built this building on the remains of the Domus Aurea. It held naval battles and beast fights, but is probably more famous for its gladiators.
ANSWER: **Colosseum** [accept **Flavian Amphitheatre**]
[10] Situated between the Aventine and Palatine Hills, this was the first and largest chariot racing stadium. Winners would often become public celebrities.
ANSWER: **Circus Maximus** [accept **The Greatest Circus**]
[10] Roman soldiers and other citizens could train on this low-lying plain. In medieval times, it greatly swelled in population density due to its proximity to the Tiber River.
ANSWER: **Campus Martius** [accept **Field of Mars** and other loose translations]

8. Answer the following about a certain Jane Austen novel, for 10 points each:
[10] In this Austen novel Charlotte Lucas marries her friend Elizabeth Bennet's cousin, the clergyman William Collins. Elizabeth herself marries the handsome Mr. Darcy.
ANSWER: ***Pride and Prejudice***
[10] The first line of *Pride and Prejudice* famously states "that a single man in possession of a good fortune, must be in want of" one of these.
ANSWER: a **wife** [do not accept equivalents]
[10] This villainous character from *Pride and Prejudice* tells Elizabeth that Darcy has mistreated him, causing Elizabeth to dislike Darcy further. This character later elopes with Lydia Bennet.
ANSWER: George **Wickham**

9. The Second Defenestration of Prague sparked its Bohemian phase. For 10 points each:
[10] Name this war that was ended by the Peace of Westphalia and saw Albert von Wallenstien and the Count of Tilly lead Ferdinand II's pro-Catholic forces.
ANSWER: **Thirty Years** War
[10] Following the successes of Wallenstein, King Ferdinand II issued this edict. It sought to reinforce the Ecclesiastical Reservation clause of the Peace of Augsburg and return land stripped from Catholics after the Peace of Passua.
ANSWER: Edict of **Restitution**
[10] This Swedish king defeated Albert of Wallenstein at Breitenfeld and Lutzen, where this man died, during the Thirty Years War.
ANSWER: **Gustavus Adolphus** [accept **Gustavus Adolf**; prompt on “Adolphus”]

10. The development of this theory was precipitated by an inconsistency between Maxwell's equations and Newton's laws regarding the definition of an inertial reference frame. For 10 points each:
[10] Name this theory proposed by Albert Einstein in 1905 based on the postulate that light travels at the same speed in all inertial frames of reference. Einstein later extended it to gravity with a "general" version.
ANSWER: **special** theory of **relativity** [prompt on "relativity"]
[10] One of the counterintuitive consequences of relativity is this apparent "slowing down" of clocks moving at high velocities relative to the observer.
ANSWER: **time dilation**
[10] Time dilation gives rise to this thought experiment involving aging and high-speed rocket travel. The apparent asymmetry in the problem is solved by noting that one of the individuals involved accelerates, while the other does not.
ANSWER: **twin paradox**

11. One sculpture located in this city resembles a reflective, stainless steel bean and was created by Anish Kapoor. For 10 points each:
[10] Identify this city, where *Cloud Gate* resides in the AT&T Plaza. Adler and Sullivan was a design firm centered in this city.
ANSWER: **Chicago**
[10] Chicago is also home to the Lake Shore Drive apartments, the creation of this German-American architect who claimed that "less was more."
ANSWER: **Mies** van der Rohe [prompt on "van der Rohe"]
[10] This skyscraper located in Chicago and home to the Skydeck is currently the tallest building in the States.
ANSWER: **Sears Tower** [accept **Willis Tower**, its name as of July 2009]

12. This book claims that "A spectre is haunting Europe". For 10 points each:
[10] Name this book, which claims that "The history of all hitherto existing society is the history of class struggles".
ANSWER: *The****Communist Manifesto*** [accept ***Manifesto of the Communist Party***; accept ***Manifest der Kommunistischen Partei***]
[10] This man, along with Freidrich Engels, co-authored *The Communist Manifesto*. He would further criticize capitalism in his *Das Kapital*.
ANSWER: Karl **Marx**
[10] Marx believed that this entity, a society's culture and institutions, is determined by a society's base or economic relationships.
ANSWER: **superstructure**

13. Under the Sakoku, or "locked country" policy, no foreigners could enter Japan from 1635 until 1853. For 10 points each:
[10] During that period, Japan was ruled by this shogunate, whose founder Ieyasu defeated the daimyo and unified the country after the 1600 Battle of Sekigahara.
ANSWER: **Tokugawa** Shogunate
[10] This city was considered to be Japan's only window to the west during Sakoku. During the Sengoku period, Alessandro Valignano tried to pass administrative control of this city over to the Society of Jesus.
ANSWER: **Nagasaki**
[10] After dozens of attempts by Western powers, this American naval officer succeeded in opening Japan in 1853 by sailing four warships into Tokyo harbor and refusing to leave before obtaining the Kanagawa Treaty.
ANSWER: Commodore Matthew **Perry**

14. One character in this work hides under a table while his wife seduces another man. For 10 points each:
[10] Identify this play, in which the titular character pretends to be religious in order to get money and property from Organ's family.
ANSWER: ***Tartuffe****, or the Imposter* [accept ***Tartuffe****, ou l'Imposteur*]
[10] This 17th century playwright who penned *Tartuffe* died while playing a role in his play *The Imaginary Invalid*.
ANSWER: **Molière** [accept Jean-Baptiste **Poquelin**]
[10] This Molière play features Elise and Cleante, daughters of the titular character, Harpagon.
ANSWER: *The****Miser*** [accept ***L'Avare***]

15. This economist proposed the concept of a liquidity trap, which various commentators believe is exemplified by Japan's "lost decade". For 10 points each:
[10] Name this 20th century British economist who founded a namesake school of economics which advocates government deficit spending in recessions.
ANSWER: John Maynard **Keynes**
[10] Keynes set out his theories in this 1936 treatise which explains the business cycle in terms of aggregate demand and refers to the stock market as "the outcome of the mass psychology of a large number of ignorant individuals" and likens it to a game of musical chairs.
ANSWER: *The****General Theory****of Employment, Interest, and Money*
[10] This 1919 Keynes work presciently warned that the reparations Germany was ordered to pay for World War I would soon devastate the country's economy.
ANSWER: *The****Economic Consequences of the Peace***

16. Nudibranches and the model organism Aplysia belong to this phylum. For 10 points each:
[10] Identify this invertebrate phylum, often characterized by the presence of a mantle, whose members include bivalves.
ANSWER: **mollusc**s [accept **Mollusca**]
[10] Most molluscs are either gastropods or members of this class, examples of which include squids and cuttlefish.
ANSWER: **cephalopod**s [accept **Cephalopoda**]
[10] Composed of the odontophore and the cuticula, this toothed, tongue-like feature is used by molluscs for feeding.
ANSWER: **radula**

17. This work is subtitled "Quasi una fantasia" and its first movement is marked adagio and uses an ostinato triplet rhythm in the right hand. For 10 points each:
[10] Identify this piano sonata in C sharp by a certain composer nicknamed for a critic's analogy to reflections on Lake Lucerne.
ANSWER: Piano Sonata No. **14** in C♯ minor [accept **Moonlight** Sonata]
[10] This other piano sonata by the composer of the Moonlight and Hammerklavier Sonatas was written as that composer came to terms with his deafness. This piece receives its nickname from its tempestuous melody.
ANSWER: Piano Sonata No. **23** in F minor [accept **Appassionata** Sonata]
[10] This composer of the Moonlight and Appassionata Sonatas eventually became completely deaf, although he was still able to compose his extremely famous ninth symphony, which sets Schiller's "Ode to Joy" to music.
ANSWER: Ludwig van **Beethoven** [accept The Beets]

18. The Hexi Corridor and the Tibetan plateau border this desert to the southwest. For 10 points each:
[10] Name this largest desert in Asia which contains the Yin and Quilian Mountains. It is a rain shadow formed by the Himalaya Mountains.
ANSWER: **Gobi** Desert
[10] Much of the Gobi desert lies in this nation, which contains the ports of Shanghai and Guangdong.
ANSWER: **China**
[10] This geographic formation, bordered on the North by the Tian Shan Mountains, is located in the western portion of China. The Taklamakan Desert forms much of this basin, in which many mummies can be found.
ANSWER: **Tarim** Basin

19. This man's namesake line includes the circumcenter, orthocenter, and centroid of triangles. For 10 points each:
[10] Name this Swiss mathematician, who names the formula *e* to the *i* times pi equals negative 1.
ANSWER: Leonhard **Euler**
[10] Euler's proof that this problem has no solution laid the foundations for graph theory. This problem concerns a person walking through the titular city, crossing each titular object only once.
ANSWER: the **Seven Bridges of Konigsberg** [or the **Konigsberg Bridge Problem**]
[10] This doubly eponymous set of equations can be reduced to the Euler equations when viscosity is zero. It applies Newton’s second law to fluid movement.
ANSWER: **Navier-Stokes** equations

20. This author wrote a tetralogy in which the judge Honda becomes obsessed with preventing the early deaths of the reincarnations of his friend Kiyoaki Matsugae. For 10 points each:
[10] Identify this Japanese author of *Confessions of a Mask* and *The Decay of the Angel* who, with his Tatenokai, gave a speech attempting to incite a coup restoring the emperor before committing ritual seppuku.
ANSWER: Yukio **Mishima**
[10] This novel by Mishima centers upon the burning of the titular structure by the mentally ill Mizoguchi.
ANSWER: *The****Temple of the Golden Pavilion***
[10] Mishima's aforementioned tetralogy is titled for one of these objects of fertility. Ernest Hemingway wrote a novella about an old man and one of these bodies of water.
ANSWER: the **sea**

EXTRA: Identify the following about a certain son of Philip II of Macedon, for 10 points each.
[10] This Macedonian ruler and conqueror was tutored by Aristotle. In addition to sacking Tyre, he was notably victorious at the battles of Issus and Chaeronea.
ANSWER: **Alexander the Great**
[10] Alexander was also victorious at this 331 BC battle, the aftermath of which saw Darius III killed by his general Bessus. A decisive victory for the Macedonians, it led to the fall of the Achaemenid Empire.
ANSWER: Battle of **Gaugamela**
[10] Alexander the Great rode this horse into battle against Darius III. This horse died at the Battle of the Hydaspes.
ANSWER: **Bucephalus**