**2015 Virginia Tech Academic Competition Occasion (VTACO)**

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**Packet 8: Tossups**

1. A plerion is a nebula that gains energy from the wind of these entities. The central object of the Crab Nebula is one of these, and Antony Hewish and Jocelyn Bell discovered the first of these entities, which they called LGM-1. Thomas Gold was the first to correctly classify these entities, which are a subset of entities that have a mass between the Chandrasekhar (“SHON-dra-SAKE-har”) and Tolman-Oppenheimer-Volkoff Limits. These entities come in “rotation-powered” and “accretion-powered” varieties, and those with very large magnetic fields are called magnetars. For 10 points, name these quickly rotating neutron stars that emit beams of radio waves at short and constant intervals.  
ANSWER: **Pulsar**s [prompt on “Neutron Stars”]

2. One body of water in this state receives water from Lake George via the La Chute River. This state's Glimmerglass State Park is located on the northeastern shore of its Otsego Lake, the source of a river that merges with the Unadilla River in Sidney in this state. This state contains Lake Tear of the Clouds, which is located on the southwest slope of this state's highest peak, Mount Marcy. This state contains the Adirondack and Catskill Mountains, and it also contains the origin of the Susquehanna River and the western portion of Lake Champlain. For 10 points name this state with capital at Albany.  
ANSWER: **New York**

3. This man’s final symphony was completed by Deryck Cooke. This man depicted a child’s vision of heaven in the song “Das himmlische Leben,” which he included in his Fourth Symphony. Another symphony by this man includes the text of a Klopstock poem that begins “Rise again, yes, rise again,” while another symphony by this man is based on the hymn “Veni Creator Spiritus.” This man used text from poems by Friedrich Rückert and Li Po in his *Kindertotenlieder* and his *The Song of the Earth*, respectively. For 10 points, name this Austrian composer of the “Resurrection” Symphony and The Symphony of a Thousand.

ANSWER: Gustav **Mahler**

4. In one work, this man examined the Australian Arunta tribe and concluded that religion reinforces a group's solidarity. In another work, this man suggested that groups generally transition from mechanical solidarity to organic solidarity. In addition to *Elementary Forms of Religious Life* and *The Division of Labor in Society*, this man was criticized for a work using a correlational study regarding the rates of the titular action among Protestants and Catholics. He classified that same action into egoistic, altruistic, fatalistic, and anomic varieties. For 10 points, name this French sociologist who wrote *Suicide*.  
ANSWER: Emile **Durkheim**

5. This artist showed the title character of one of his paintings with black wings descending from a table in his *Amor Vincit Omnia*. This artist used Mario Minniti as a model for his *Boy with a Basket of Fruit*, and this man showed the results of an action carried out by Herod Antipas in his *Salome with the Head of Saint John the Baptist*. This man depicted Luke and Cleopas dining with an incognito resurrected Christ in his *Supper at Emmaus*. This man’s most famous work depicts men sitting at a table surprised at a beam of light entering the room from an unknown source. For 10 points, name this Italian founder of tenebrism who painted *The Calling of Saint Matthew*.  
ANSWER: Michelangelo Merisi o Amerighi da **Caravaggio** [do not accept “Michelangelo”]

6. Many of the problems with this document would lead to the Locarno Treaties, and the May Fourth Movement stemmed from this document’s awarding of Shandong to Japan instead of China. During this document's negotiations, Ho Chi Minh petitioned for his country’s independence, and Jan Smuts represented South Africa. Article 231 of this treaty became known as the War Guilt Clause, and, due to the opposition of Henry Cabot Lodge, the U.S. never ratified this treaty. This document was negotiated among Orlando, Clemenceau, Lloyd George, and Wilson. For 10 points, name this treaty that ended World War I that drew from Wilson’s Fourteen Points.  
ANSWER: Treaty/Peace of **Versailles** [Do not accept “The Fourteen Points”]

7. This author wrote a work in which a Scythian shepherd imprisons Emperor Bajazeth in a cake and stabs his own son. The phrase “Come live with me and be my love” is reiterated in one of this author’s poems. In addition to writing *Tamburlaine the Great* and “The Passionate Shepherd to His Love,” one of this author’s title characters asks “Was this the face that launch’d a thousand ships?” in a speech addressed to Helen of Troy and sees the words “Homo fuge” appear on his arm. For 10 points, name this playwright of *Doctor Faustus* who also wrote about Barabbas in *The Jew of Malta*.  
ANSWER: Christopher **Marlowe**

8. In one of this author’s poems, Parson Thirdly wishes he “had stuck to pipes and beer." Another poem by this author detailed how "consummation comes, and jars two hemispheres" in a poem about the sinking of the *Titanic*. This author of "Channel Firing" and "The Convergence of the Twain" wrote “I leant upon a coppice gate” in his poem "The Darkling Thrush." This author wrote a work in which the title character falls in love with his cousin Sue Bridehead, and another of his title characters loves Angel Clare and gives birth to a child named Sorrow. For 10 points, name this author of *Jude the Obscure* and *Tess of the d'Urbervilles*.   
ANSWER: Thomas **Hardy**

9. This dynasty’s Zhengtong (“ZHAYNG-tong”) Emperor was captured at the Battle of Tumu Fortress, and this dynasty’s Wanli Emperor was advised by the Jesuit missionary Matteo Ricci. The first ruler of this dynasty established a secret police force known as the Jinyi Wei and won at the Battle of Lake Poyang. This dynasty’s Yongle (“YONG-lay”) emperor ordered the construction of Beijing’s Forbidden City, and this dynasty came to power following the Red Turban Rebellion, during which the Hongwu Emperor overthrew the Yuan Dynasty. For 10 points, name this penultimate Chinese dynasty renowned for its porcelain.  
ANSWER: **Ming** Dynasty

10. The case *Wolf v. Colorado* decided that this amendment did not apply to the states, although it would be overturned. One rule applying to this amendment was established in *Weeks v. U.S.*, but it was later limited by *Terry v. Ohio* and *U.S. v. Leon*. The provisions of this amendment were extended by *Katz v. U.S.*, and an exception from it was established by *New Jersey v. T.L.O.* Yet another case to rule on this amendment, which is enforced by the exclusionary rule, determined that illegally-obtained evidence was inadmissible. For 10 points, name this constitutional amendment ruled on in *Mapp v. Ohio*, which protects citizens from unwarranted search and seizure.  
ANSWER: **Four**th Amendment

11. This man was forced to flee Ephesus after being attacked by a silversmith, prompting a pro-Artemis riot. This man rebuked and blinded Elymas the magician, and this former student of Gamaliel survived a snake bite while on Malta. Along with Silas, this man escaped imprisonment after the prison's gates fell in an earthquake, and this man participated in the stoning of Saint Stephen. Ananias restored this man's sight after being blinded on the road to Damascus, after which this man converted to Christianity. For 10 points, name this apostle whose epistles largely comprise the New Testament.  
ANSWER: Saint **Paul** the Apostle [or **Saul** of Tarsus]

12. The effect of electrons on these particles is the subject of the MSW effect, and much research into these particles concerns whether or not they are Majorana fermions. The existence of the anti-matter counterparts to these particles was confirmed in the Cowan-Reines experiment, and those produced by fusion in the sun were collected in the Homestake experiment. These particles are observed at the Super-Kamiokande observatory, and they come in electron, muon, and tau varieties. For 10 points, name these particles with no charge that rarely interact with matter and have a name meaning “small neutral one.”   
ANSWER: **Neutrino**s

13. One story in this collection is analyzed using five codes in Ronald Barthes' essay *S/Z*. In addition to *Sarrasine*, another story in this collection sees Pauline profess her love for Raphaël de Valentin, who is cursed by the title object. That title object has Arabic writing on it claiming that its owner "shall possess all things." In addition to containing *The Wild Ass's Skin*, another story in this collection sees Vautrin attempt to draw Eugène de Rastignac into his schemes. Containing such works as *Eugénie Grandet* and *Le Père Goriot*, this is, for 10 points, what massive collection of novels by Honoré de Balzac?  
ANSWER: *The****Human Comedy*** [or *La****Comédie humaine***]

14. The family Cladorhizidae (“CLAD-o-RIZZ-uh-DIE”) in this phylum capture and digest small crustaceans, while carnivorous genuses in this phylum include Neocladia and Chondrocladia. These organisms have flagellated collar cells, also known as choanocytes, that help move water, and they are separated from another cell layer by the mesohyl. Those other cells are known as amoebocytes, and they produce skeletal elements called spicules. These animals have an ostia that takes in water, which they eject from the osculum. This phylum of filter feeders reproduces primarily by budding. For 10 points, name this phylum of sponges.  
ANSWER: **Porifera**ns [accept **Sponges** before mentioned]

15. This man’s army put down the Bulavin rebellion in Astrakhan, and this man conceded the port of Azov back to the Ottoman Empire in the Treaty of Pruth. After his sister Sophia led a rebellion against him, this man disbanded the streltsy, and he created a Table of Ranks to organize his nation’s class system. This man would sign the Treaty of Nystad after defeating Sweden in the Great Northern War. This man traveled into Europe as part of his Grand Embassy, and he instituted a beard tax on the boyars. For 10 points, name this Russian tsar whose attempts to westernize the nation included the relocation of its capital to St. Petersburg.  
ANSWER: **Peter I** [or **Peter the Great**; or **Pyotr Veliky**; or **Pyotr Alekseyevich**; prompt on “Peter” or “Pyotr”]

16. Enemies in this series include Yao Guai bears and the result of a random group of animals combined by the Forced Evolutionary Virus, called centaurs. A recent internet hoax surrounding this game series involved the website "thesurvivor2299.com." Consumables in this series include chems such as Mentats, which boosts SPECIAL stats, and Nuka-Cola, which restores health at the cost of radiation. For 10 points, name this video game series set after the Great War of 2077, one of which sees the "Lone Wanderer" traverse the Capital Wasteland searching for G.E.C.K., and whose most recent title features "The Courier" exploring "New Vegas."  
ANSWER: ***Fallout***

17. This work contains *Meditation* on its rightmost tympanum. Another piece in this work depicts a man who ate the corpses of his children after they died of starvation and is called *Ugolino and His Children*. Two figures that feature repeatedly in this work can be seen in its *Fleeting Love*, while characters depicted in its *The Three Shades* point to the phrase “Abandon all hope, ye who enter here.” A piece that was removed from this work depicts the lovers Paolo and Francesca in an embrace, while the best-known piece in this work is alternatively titled *The Poet*. For 10 points, name this work that includes *The Thinker*, a sculpture collection by Auguste Rodin.  
ANSWER: *The****Gates of Hell*** [or *La****Porte de L'Enfer***]

18. The “discrete” form of these functions applies to finite groups. The earliest formulation of them involved raising terms to the seventh or negative seventh degree, and that was discovered by John Napier. There is no Maclaurin series of this function of x as it does not exist at x equals zero, and these functions have two parts, a characteristic and a mantissa. Taking this function of a product of two terms is equal to the sum of this function on each of the terms, and the derivative of one form of this function is 1 over x. For 10 points, name this function that is the inverse of the exponential function and comes in a “natural” form.  
ANSWER: **Log**arithms

19. The main character of this work drops and breaks a Little Shirley Beans Record after he meets a prostitute named Sunny. That protagonist of this work is conned out of five dollars by an elevator boy and accuses his brother of prostituting himself because he writes Hollywood screenplays. The protagonist of this novel often asks where the ducks in Central Park go in the winter. That character in this novel is irritated by the hygienic habits of his classmates at Pencey Prep and squanders his savings before returning home for Christmas break. For 10 points, name this novel about Phoebe and Holden Caulfield, written by J.D. Salinger.  
ANSWER: *The****Catcher in the Rye***

20. This goddess made Zagreus immortal after rescuing his heart and enclosing it in a gypsum figure, and this goddess raised Erichthonius after nearly being raped by Hephaestus. One explanation for Tiresias’s blindness occurred when he encountered this goddess bathing. This goddess transformed Medusa’s hair into serpents, and the head of Medusa was placed on this goddess’s shield, the aegis ("EE-jus"). After losing a weaving contest, this goddess turned Arachne into a spider. This goddess was often depicted with an owl. For 10 points, name this goddess who sprung fully-grown and armored out of Zeus's head, the Greek goddess of wisdom.  
ANSWER: Pallas **Athena** [or **Athene**; do not accept “Minerva”]

TB. These numbers can be plotted using a Riemann sphere, but are more commonly visualized on an Argand diagram. Gaussian integers are examples of these numbers, and roots of unity are other examples of these numbers that can be found by using a generalization of De Moivre's formula. The fundamental theorem of algebra states that a polynomial with these numbers as its coefficients has at least one of these numbers as a root. Negating one component of these numbers gives their namesake conjugate. For 10 points, name these numbers with both real and imaginary parts, commonly written as a-plus-b-i.  
ANSWER: **Complex** Numbers

**Packet 8: Bonuses**

1. The Planck epoch pertains to this theory, and an early advocate of this theory was George Gamow. For 10 points each:  
[10] Name this cosmological theory supported by Hubble's Law as well as the abundance of light elements which states that all the matter in the universe was contained in a single point before it began expanding.  
ANSWER: **Big Bang** theory  
[10] The Big Bang theory is also supported by the existence of this radiation, discovered by Penzias and Wilson. It permeates the universe at around 2.7 Kelvin.  
ANSWER: **Cosmic Microwave Background** Radiation [or **CMB**R]  
[10] More evidence in support of the Big Bang theory is given by this paradox, which states that the darkness of the night sky conflicts with the idea of an infinite and eternal static universe.  
ANSWER: **Olbers**' Paradox

2. He fought alongside his father, Philip II of Macedon, against Greek forces at the Battle of Chaeronea. For 10 points each:  
[10] Name this man who defeated Darius III at the Battle of Gaugamela and whose conquests resulted in the cultural blending of the Hellenistic civilization.  
ANSWER: **Alexander the Great** [or **Alexander III** of Macedon]  
[10] This battle occurring after the Battle of Gaugamela saw Alexander once again defeat Darius near the Pinarus River. It marked the beginning of the downfall of the Persian Empire.  
ANSWER: Battle of **Issus**  
[10] This siege, which occurred after Issus and before the Siege of Gaza, saw Alexander and his general Hephaestion defeat the forces of Azemilcus.   
ANSWER: Siege of **Tyre**

3. In the North Atlantic, these named weather events typically occur between June and December. For 10 points each:  
[10] Name these large, rotating storm systems that typically produce storm surges when they make landfall. The most expensive, Katrina, made landfall in New Orleans.  
ANSWER: **Tropical Cyclone** [or **Typhoon**; or **Hurricane**]  
[10] A tropical cyclone swirls clockwise in the Southern Hemisphere due to this force. This effect is apparent due to the size of the Earth's rotating reference frame.  
ANSWER: **Coriolis** Effect  
[10] These large oceanic vortices are caused by the Coriolis effect and large wind movements. The North Pacific one is the cause of the Great Pacific garbage patch.  
ANSWER: **Gyre**

4. This painting is believed to be set at the Maidenhead Railway Bridge. For 10 points each:  
[10] Name this painting that supposedly depicts a rabbit crossing in front of a clouded train coming from the right.  
ANSWER: ***Rain, Steam, and Speed***  
[10] *Rain, Steam, and Speed* was painted by this English Romantic artist. His other works include *Hannibal and His Army Crossing the Alps* and *The Fighting Temeraire*.  
ANSWER: Joseph Mallord William **Turner**  
[10] This other Turner painting depicts people being thrown off the titular craft during a storm. It was likely set in the Middle Passage.  
ANSWER: *The****Slave Ship***

5. The four major deities in this myth system are Kāne, Kanaloa, Kū, and Lono. For 10 points each:  
[10] Name this myth system in which Hiʻiaka, the daughter of Haumea, is the goddess of the *hula* dance.  
ANSWER: **Hawaiian** Mythology [accept clear-knowledge equivalents mentioning **Hawaii**; prompt "Polynesian Myth"]  
[10] This is the Hawaiian goddess of volcanoes. She was able to flee from the hog-man Kamapua'a with the assistance of her sister Kapo and her detachable vagina.  
ANSWER: **Pele**  
[10] This hero in Hawaiian myth climbed the mountain Hale-a-ka-lā to restrain the sun as well as tricking his brothers while fishing to create the Hawaiian islands.  
ANSWER: **Māui**

6. Answer the following about various connotations of the word "safety" in the NFL, for 10 points each.  
[10] Recently, the NFL's safety policy has focused primarily on these injuries. Following litigation from former players, the NFL has implemented independent neurologists and a four-stage protocol for returning from these injuries.  
ANSWER: **Concussion**s  
[10] This team's disastrous 0-16 record in the 2008 campaign notably saw quarterback Dan Orlovsky run out of the back of the end zone for a safety in a game against the Vikings.  
ANSWER: **Detroit** **Lions** [accept either]

[10] This strong safety, who played his college ball at Virginia Tech, now plays alongside Earl Thomas in the Seattle Seahawks secondary. He twice vaulted the Carolina Panthers’ offensive line in the 2014 Divisional Playoffs.

ANSWER: Kameron Darnel “Kam” **Chancellor**

7. The protagonist of this work is rivaled by Padre José. For 10 points each:  
[10] Name this work detailing The Lieutenant's pursuit of an unnamed "whiskey priest" attempting to spread Catholicism through the Mexican state of Tabasco despite it having been outlawed.  
ANSWER: *The****Power and the Glory***  
[10] This British author, who wrote about Maurice Bendrix in *The End of the Affair* and about Alden Pyle in *The Quiet American*, wrote *The Power and the Glory*.  
ANSWER: Graham **Greene**  
[10] Greene's short story "The Destructors" sees T. and his gang destroy a house built by Christopher Wren, who notably rebuilt St. Paul's Cathedral after this 1666 event. A more famous literary account of this event is given in the diary of Samuel Pepys ("PEEPS").  
ANSWER: 1666 **Great Fire of London** [accept equivalents that somehow mention London burning down]

8. Ideas central to this man's philosophy include the concept of eternal recurrence and the central drive of man being the "will to power." For 10 points each:  
[10] Name this German philosopher behind works like *The Gay Science* and *Ecce Homo* who put forth the idea of the *Übermensch* and asserted "God is dead" in his *Thus Spoke Zarathustra*.  
ANSWER: Friedrich **Nietzsche**  
[10] This work by Nietzsche outlines the Apollonian and Dionysian dichotomy as it pertains to the title genre. Its ideas were later borrowed by Camille Paglia in her *Sexual Personae*.  
ANSWER: ***The Birth of Tragedy****from the Spirit of Music* [or ***The Birth of Tragedy****, Or: Hellenism and Pessimism*]

[10] This thinker claimed that Nietzsche’s philosophy expressed the “humane in a world in which humanity has become a sham.” This Frankfurt school philosopher wrote the *Dialectic of Enlightenment* with Max Horkheimer.  
ANSWER: Theodor W. **Adorno** [or Theodor Ludwig **Wiesengrund**]

9. The Great Escarpment, located almost entirely within this country, culminates in the eastern section of Drakensberg. For 10 points each:   
[10] Name this African country with three capitals, one of which is Pretoria. Its second most-populous city is Johannesburg.  
ANSWER: Republic of **South Africa**  
[10] North of South Africa is this semi-arid savannah covered in red sand, noted for its ancient dry riverbeds called omuramba. Its only permanent river is the Okavango.  
ANSWER: **Kalahari** Desert  
[10] Located west of the Kalahari, this coastal desert is often considered to be the oldest desert in the world. It contains the Skeleton Coast, and its northern tip is formed by the Moçâmedes Desert.  
ANSWER: **Namib** Desert

10. In this novel, Jack Gladney is a professor of Hitler Studies at The-College-on-the-Hill. For 10 points each:  
[10] Name this novel in which an airborne toxic event forces Jack to confront his own mortality.  
ANSWER: ***White Noise***  
[10] This American author of *Libra* and *Underworld* wrote *White Noise*.  
ANSWER: Don **DeLillo**  
[10] *Underworld* depicts Bobby Thomson’s “Shot Heard ‘Round the World,” which occurs while playing this sport. Owen Meany kills Tabitha while playing this sport in a John Irving novel, and it is also the focus of Bernard Malamud’s *The Natural*.  
ANSWER: **Baseball**

11. The central character of this story temporarily wins over the affection of her fellow stagecoach travelers upon producing a basket of fruit. For 10 points each:  
[10] Name this short story whose title prostitute is ignored after being urged to sleep with a Prussian officer so the aforementioned travelers can escape detainment.  
ANSWER: "**Ball of Fat**"[or "**Boule de Suif**"; or "**Dumpling**"; or "**Butterball**"; or "**Ball of Lard**"]  
[10] In this short story by the author of "Ball of Fat," Mathilde Moisel loses the title piece of jewelry she had borrowed from Madame Forestier, only to find out it was a fake ten years later.  
ANSWER: "The **Necklace**" [or "The Diamond **Necklace**"; or "La **Parure**"]  
[10] This French short story author behind "Mademoiselle Fifi" wrote "Ball of Fat" and "The Necklace."  
ANSWER: Guy de **Maupassant**

12. This man referenced western songs in his novel *Norwegian Wood*. For 10 points each:  
[10] Name this Japanese author of *Trilogy of the Rat* who wrote about Toru Okada in *The Wind-Up Bird Chronicle*.  
ANSWER: Haruki **Murakami**  
[10] One of Murakami’s novels depicts a title character based on this author being *on the Shore*. This German author depicted Gregor Samsa’s transformation into a large insect in *The Metamorphosis*.  
ANSWER: Franz **Kafka**  
[10] Murakami translated this American author’s *Farewell, My Lovely* and *The Long Goodbye* into Japanese. However, he is perhaps best known for his novel *The Big Sleep*.  
ANSWER: Raymond **Chandler**

13. He designed his Poplar Forest retreat near present-day Lynchburg. For 10 points each:  
[10] Name this architect whose more notable designs include the campus of the University of Virginia as well as his personal residence, Monticello.  
ANSWER: Thomas **Jefferson**  
[10] Jefferson used this earlier Venetian architect's *The Four Books of Architecture* as his "bible" while designing Monticello. He is perhaps best known for his Villa Rotonda.   
ANSWER: Andrea **Palladio**  
[10] Another seminal book on architecture is *Towards a New Architecture*, a work of this French architect behind the Villa Savoye and the Notre Dame du Haut.  
ANSWER: Le **Corbusier**

14. Answer the following about presidential assassins, for 10 points each.  
[10] This man was hanged after he shouted “I am a stalwart of the stalwarts…Arthur is president now!” as he shot James Garfield.  
ANSWER: Charles **Guiteau**  
[10] This Polish-born man, who was influenced by the anarchical ideals of Emma Goldman and Alexander Berkman, got the electric chair after he assassinated William McKinley.  
ANSWER: Leon **Czolgosz**  
[10] This man was killed by nightclub operator Jack Ruby and was investigated by the Warren Commission following his assassination of John F. Kennedy in Dallas.  
ANSWER: Lee Harvey **Oswald**

15. This politician decisively defeated the NIACS candidate Hassan al-Nouri and the independent Maher Hajjar in his country's 2014 presidential election. For 10 points each:  
[10] Name this Ba'ath party leader and son of Hafez whose tenure has seen an uprising from the al-Nusra Front and its allies.  
ANSWER: **B**ashar al-**Assad**  
[10] Bashar al-Assad is the president of this nation, which has been embroiled in civil war since 2011. Its government is in Damascus.  
ANSWER: **Syria**n Arab Republic [or **Sūriyā**; or **Sūrīyah**]  
[10] Human rights violations committed during the Syrian Civil War under Bashar al-Assad were condemned by this current Secretary General of the United Nations.  
ANSWER: **Ban** Ki-moon

16. George II became the last English king to personally lead an army into battle in its Battle of Dettingen. For 10 points each:  
[10] Name this war prompted by an invasion by the Prussian King Frederick II after Charles VI died without a male heir, forcing Maria Theresa to take the throne of a certain nation.  
ANSWER: War of the **Austrian Succession**  
[10] This “practical” edict issued by Charles VI attempted to ensure Maria Theresa, would inherit the Austrian throne following his death. Frederick clearly didn’t get the memo.  
ANSWER: **Pragmatic Sanction** of 1713  
[10] This treaty signed in Aachen ended the War of the Austrian Succession in 1748. It didn’t concede much to either side, but it did allow Prussia to retain the region of Silesia.  
ANSWER: Treaty of **Aix-la-Chapelle**

17. Paul Desmond composed and played the solo for this instrument in "Take Five." For 10 points each:  
[10] Name this single-reed instrument coming in soprano, alto, tenor, and baritone varieties. Charlie Parker played it on songs like "Yardbird Suite" and "Ornithology."  
ANSWER: Jazz **Saxophone** [accept any of the specific types mentioned above]  
[10] This jazz musician began on soprano saxophone but later switched to tenor. He recorded albums like *My Favorite Things*, *Giant Steps*, and *A Love Supreme*.  
ANSWER: John **Coltrane**  
[10] Outside of jazz, a saxophone solo features prominently in the "Sabre Dance" of this Armenian composer's ballet *Gayane*.  
ANSWER: Aram **Khachaturian** ("catch-uh-TUR-ee-uhn")

18. This country's forces defeated the French at the Battle of Pueblo. For 10 points each:  
[10] Name this country which also fought against the French in the Pastry War. Its first president was Guadalupe Victoria, and it underwent reforms under Benito Juárez.  
ANSWER: **Mexico** [or **United Mexican States**; or **Estados Unidos Mexicanos**]  
[10] This Mexican dictator, who had earlier risen to prominence fighting Emperor Maximilian, came to power following a victory at the Battle of Tecoac, part of his "Plan de Tuxtepec."  
ANSWER: Porfirio **Díaz**  
[10] This president ignited the Mexican Revolution to overthrow Díaz with his Plan of San Luis Potosí. The Ten Tragic Days would follow his capture by Victoriano Huerta.  
ANSWER: Francisco **Madero**

19. This movement’s manifesto was written by Filippo Tommaso Marinetti. For 10 points each:  
[10] Name this early 20th century artistic movement whose members included the painter of *The Funeral of the Anarchist Galli*, Carlo Carrá, as well as the painter behind *Abstract Speed + Sound*, Giacomo Balla.  
ANSWER: **Futurism** [or **Futurismo**]  
[10] Another one of Balla’s works depicts the *Dynamism of [this type of animal] on a Leash*. Brown & Bigelow commissioned C. M. Coolidge to paint a series of these animals playing poker.  
ANSWER: **Dog**s [or ***Canis lupus familiaris***]  
[10] This futurist sculptor behind *Development of a Bottle in Space* attempted to depict “synthetic continuity” of motion rather than “analytical discontinuity” in his *Unique Forms of Continuity in Space*.  
ANSWER: Umberto **Boccioni**

20. This gland is found in the neck, and its namesake cartilage is the "Adam's apple". For 10 points each:  
[10] Name this gland that controls how quickly the body uses energy and how sensitive the body is to other hormones by secreting the T3 and T4 hormones.  
ANSWER: **Thyroid**  
[10] The thyroid concentrates this element in the body. A condition called goiter is the enlargement of the thyroid and is caused by a lack of this element in the diet.  
ANSWER: **Iodine**  
[10] This autoimmune, non-cancerous disease of the thyroid is often characterized by Hurthle cells and is caused by the destruction of its peroxidase by antibodies.  
ANSWER: **Hashimoto's** Disease or thyroiditis [or **chronic lymphocytic thyroiditis**]

TB. In this novel, Arkady Kirsanov marries Katya and abandons revolution to become a magistrate. For 10 points each:  
[10] Name this work about the nihilist Bazarov, who falls in love with the widow Madame Odintsova before dying of typhus.  
ANSWER: ***Fathers and Sons*** [or ***Fathers and Children***; or ***Ottsy i dety***]  
[10] This author, whose collection *A Sportsman’s Sketches* was partially responsible for the abolition of serfdom in Russia, wrote *Fathers and Sons*.  
ANSWER: Ivan **Turgenev**  
[10] In *Fathers and Sons*, Arkady Kirsanov graduates from a university in Saint Petersburg, the same city in which this real-life author of *We the Living* and *Anthem* attended school.  
ANSWER: Ayn **Rand** [Alisa Zinov'yevna **Rosenbaum**]