2000 Kidder Cup Tossups by Subash Maddipoti

1. He was the primary American negotiator of the Austrian State Treaty and the Trieste Agreement. He always carried a copy of Stalin's *Problems in Leninism* with him, and publicly called Gamal Nasser "nothing but a in-born Hitler." While he was orchestrating the formation of SEATO, his brother Allen was serving as CIA director. FTP, identify this formulator of the policy of "brinkmanship" and secretary of state to Eisenhower.

Answer: John Foster Dulles

2. The author wrote this novel to ridicule Anne Radcliffe's *Mysteries of Udolpho*. A side-plot in it involves the break-up of the protagonist's brother and her friend, Isabella Thorpe. After accompanying Mr. and Mrs. Allen to Bath, the protagonist falls in love with Henry Tilney. FTP, name this novel about Catherine Morland written by Jane Austen and taking its title from the Tilney residence.

Answer: Northanger Abbey

3. First discovered in avian red blood cells, these water-soluble compounds are found in their greatest concentrations in the thymus and pancreas. Particularly rich in lysine and arginine, four of them form an octamer that contributes to a beadlike structure known as a nucleosome. The five main types are the H1, H2A, H2B, H3, and H4. FTP, identify these chromosome proteins around which the DNA helix winds during packaging.

Answer: histones

4. As a teenager he wrote the libretto and music for an opera, *The Death of Pierrot*. Despite the failure of *The Island God*, he gained fame with such operas as *Maria Golovin* and *The Last Savage*. Other accomplishments include his founding of The Festival of Two Worlds at Spoleto, Italy and writing the libretto for Barber's *Vanessa*. FTP, name this operatic composer of *Amelia Goes to the Ball* and *Amahl and the Night Visitors*.

Answer: Gian Carlo Menotti

5. His filmography includes such comedies as *Beethoven's 3rd* and *Stripes*. This actor's most memorable scene occurs when he masturbates at the sight of Phoebe Cates walking naked toward him. His best known roles include the movie *Vice Versa* and the aforementioned role in *Fast Times at Ridgemont High*. FTP, name this actor, who played Aaron, the close-talker, on *Seinfeld* and Detective Rosewood in the *Beverly Hills Cop* series.

Answer: Judge Reinhold

6. One side had claimed victory because they sunk the battleship *Pommern*. It was fought in confusion because of the smoke from the 250 vessels involved. Early intelligence allowed David Beatty to surprise von Hipper's fleet. However, the arrival of Admiral Scheer forced Beatty to retreat to the main British fleet under John Jellicoe. FTP, name this 1916 naval battle fought off of a Danish peninsula.

Answer: Battle of Jutland or Battle of the Skagerrak

7. Samuel Johnson imitated two of them in his *Vanity of Human Wishes*, while John Dryden's versions of five of them were extremely popular. They are the source of such epigrams as "bread and circuses" and "who will guard the guards themselves." Appearing in five books written between AD 100 and AD 127, all 16 attack the corruption of Roman society at the time. FTP, identify these best-known works of Juvenal.

Answer: the Satires

8. In two circuit connections maximum power is transmitted when the output type of this value for one device equals the input type for the second device. Designated by the letter Z, it is equal to the voltage across a circuit divided by the current through that circuit. Its reciprocal is termed admittance, and this value, like resistance, is measured in ohms. FTP, name this measure of the total opposition that a circuit presents to electric current.

Answer: impedance

9. He was a prince of Opus in Locris and the son of King Menoetius. During an argument, he killed his best friend Clysonymus, and he was banished to Peleus, where he would gain another friend. He would later be slain by Hector, while leading the Myrmidons and wearing the armor of that second friend. FTP, name this character in the *Iliad*, whose death is avenged by his lover, Achilles.

Answer: Patroclus

10. Its passage in the House included a side agreement sponsored by Doug Bereuter and Sander Levin and was spurred on by a 12 million dollar lobbying effort by the Business Roundtable. This, despite claims by the AFL-CIO that it would cost three million American jobs, ill will over human rights violations, and a possible invasion of Taiwan. FTP, name this controversial trade agreement that would ease the entry of China into the WTO.

Answer: PNTR or Permanent Normal Trade Relations

11. This band was created by combining forces from The Variations and The Paramours. They reunited in 1974 and went to number three with "Rock and Roll Heaven," but their early success, with such songs as "Just Once in My Life" and "Ebb Tide" came with producer Phil Spector. Bobby Hatfield and Bill Medley, FTP, formed what duo that hit it big with "Unchained Melody" and "You've Lost That Lovin' Feeling?"

Answer: The Righteous Brothers

12. As a teenager he was mentored by Adrian of Utrecht, later Pope Adrian VI. His younger brother Ferdinand gained the throne of Hungary after Louis II was killed at Mohacs, and this man ensured supremacy of Italy with a victory at Pavia over Francis I. The son of Phillip I and Juana the Mad, it was he who called the Diet of Worms. FTP, name this 16<sup>th</sup> century monarch, who ruled as both king of Spain and Holy Roman Emperor.

Answer: Charles V or Charles I of Spain (prompt on just "Charles I")

13. Henry Butler and Marvin Levy adapted it to operatic form. Its second part ends with a son killing his mother's lover in Boston and then departing for the South Seas with his sister. Its three plays are titled "The Homecoming," "The Hunted," and "The Haunted;" and its characters include Adam Brant and Christine, Orin, and Lavinia Mannon. FTP, name this dramatic trilogy by Eugene O'Neill based on Aeschylus' Oresteia.

Answer: Mourning Becomes Electra

14. One of these types of solutions is used industrially to remove water from the Fisher esterification reaction. Their definition specifically applies to such compositions as a solution of sulfuric acid with a concentration of 98.33 percent acid. They can not physically be separated by fractional distillation, for that will achieve no change in their composition. FTP, name these solutions of liquids that have a constant boiling point.

Answer: azeotropes

15. The coiffure [KWA-fyur] of this painting's subject is colored purple, arranged in a top-knot, and juts against a frame of three jostling colors. On the left, the colors of mauve and orange echo her dress, while on the right, the color more closely matches the painting's title. FTP, identify this depiction of the artist's wife, Amelie Payrare, a Henri Matisse portrait named for the color and feature that comes down the center of the model's face.

Answer: Green Stripe (Madame Matisse)

16. Notable books on this event include Stephen B. Oates' Fires of Jubilee. Almost all of our information comes from Thomas Gray's interviews with its leader, who felt that a solar eclipse was the sign to begin it. The plan had been to raid the town of Jerusalem and move east to the Dismal Swamp. However, only 75 blacks banded together for this event in Southampton County, FTP, identify this 1831 slave revolt in Virginia.

Answer: Nat Turner's Revolt

17. He was so physically unattractive, that his fellow schoolmates named him "the mysterious dwarf." Ivan Turgenev was exiled from Moscow for an obituary praising this author of Mirgorod and Arabeski. After writing an anti-beauracratic play about the clever Khlestakov, he was forced into his own exile in Rome, where he penned the story of the swindler Pavel Chichikov. FTP, identify this author of The Inspector General and Dead Souls.

Answer: Nikolai Gogol

18. One of their divisions is sub-divided into three zones known as the fasciculata, reticularis, and glomerulosa, while the other part is referred to as chromaffin tissue. Their secretions include the mineralocorticoids, and diseases that commonly affect them include Cuspings syndrome and Addison's disease. Also known as the suprarenals, FTP, name these glands that produce such hormones as cortisol and adrenalin.

Answer: adrenal glands (acc. early suprarenal glands)

19. In chapter five of this work, the tales of *The Talisman* and "The Emperor's New Clothes" are used explain man's embarrassment of nakedness. In its preface, the author thanks Wilhelm Stekel for his influence and Otto Rank for helping provide useful examples. The seventh and final chapter elucidates such concepts as repression and wish fulfillment during the title occurrences. FTP, name this seminal 1899 work by Sigmund Freud.

Answer: The Interpretation of Dreams or Die Traumdeutung

20. In 490 he appeared to a noble named Gargano and two years later, he raised a barbarian siege of Sipointo. This led to the establishment of his pilgrimage site at Monte Sant'Angelo in Italy. Better known as the patron saint of police officers, September 29<sup>th</sup> was solely his feast day before it came to be used for all of his kind. He was the immediate lawgiver to Moses on Sinai and is commonly referred to as "God's general." For 10 points—name this leader of heaven's armies and highest-ranking archangel.

Answer: Michael

21. He threw his mother in prison after succeeding his father, Euergetes. Following the partitioning of Galatia between himself and Nicomedes III of Bithynia, he suffered several defeats to Fimbria, but rebounded with victory over the consul Cotta at Chalcedon. He was finally conquered at the hands of Pompey in 66 BC. FTP, name this king of Pontus, the sixth of his line, whose name means "gift of the god Mithra."

Answer: Mithradates VI Eupator

22. Its marine life consists primarily of two species of killifish and a catfish. The Isla de Sol is the largest island within it, and this body of water is separated into two parts by the Strait of Tiquina. The Aymara Indians live around it, while its southern shore contains many Incan ruins. Lying on the border between Peru and Bolivia, FTP, identify this second largest lake in South America, and the highest lake in the world.

Answer: Lake Titicaca

23. His novel *The Playmaker* tells of a group of young convicts, who stage a play in their remote penal colony. After "disowning" his first two novels, *The Fear* and *The Place at Whitton*, he gained fame with *The Chant of Jimmy Blacksmith*, which relates the story of an Aborigine who, in a rage, slaughters a white family. However, he is best known for his 1982 Booker Prize-winner. FTP, identify this Australian author of *Schindler's Ark*.

Answer: Thomas Keneally

24. The petite mutation in *Saccharomyces* results in a complete lack of it. Both Kearns-Sayre syndrome and Leber's neuropathy exhibit lesions in it, while Myoclonic epilepsy and ragged red fiber disease result in its inability to carry on translation in its parent organelle. It encodes for 13 proteins, 22 tRNA's, and 2 rRNA's - much less than its counterpart in the nucleus. FTP, identify this organelle-specific type of DNA.

Answer: mitochondrial DNA or mtDNA (do not accept or prompt on just "DNA")

25. He was the leading scorer on the 1998 gold medal-winning USA Basketball Goodwill Games team. He comes from good stock as his father captured three World Championships while playing club basketball in Spain. This man is the second on his college's career scoring list, trailing only Ron Harper. FTP, name this former Miami of Ohio star and current Minnesota Timberwolf, who is nicknamed "Wally's World."

Answer: Wally Szczerbiak

26. A famous phrase by Sir Matthew Hale concerning "affectation with a public interest" was quoted by Chief Justice Morrison Waite in his majority opinion in this case. The court upheld the power of states to regulate private commerce in this suit that dealt with pricing for grain storage facilities. The most famous of the Granger cases, FTP, name this 1877 decision that involved the state of Illinois.

Answer: Munn v. Illinois

27. It includes the story of Jeanie who could not survive the predicament that befalls one of the central characters. A strong lesbian theme is illustrated by such lines as "Hug me, kiss me, suck my juices," however the central motifs are those of resisting temptation and power of sisterly love, as in that between Laura and Lizzie. It tells of a group of monstrous merchants who peddle their addictive fruits at the titular location. FTP, name this poem by Christina Rosetti.

Answer: Goblin Market

28. The British sent paratroopers to this nation's Lungi Airport to ensure the safety of English citizens. Despite a July 1999 truce, President Ahmed Kabbah's SLA forces had been fighting the rebel RUF forces under Foday Sankoh. Sankoh was helped by his possession of 300 UN peacekeeper hostages and the support of neighboring leader Charles Taylor. FTP, name this West African nation enclosed by Guinea and Liberia.

Answer: Sierra Leone

2000 Kidder Cup

Boni by Subash Maddipoti

1. Identify these William Butler Yeats poems from descriptions FTP each.

A. After Yeats' father read him a passage from Thoreau's Walden, he was inspired to write this poem about the titular location, where he would build a small cabin "of clay and wattles."

Answer: The Lake Isle of Innisfree

B. This poem written from the perspective of the title character is based on an old Irish legend about a ruler who went insane and hid himself in a valley near Cork.

Answer: The Madness of King Goll or King Goll, An Irish Legend

C. With this poem's lines "The best lack all conviction, while the worst / Are full of passionate intensity," Yeats was referring to the Russian Revolution.

Answer: The Second Coming

- 2. Identify the constellation from its alpha star for the stated number of points.
- A. For 5 points, Rigel

Answer: Orion

B. For 5 points, Regulus

Answer: Leo

C. For 10 points, Altair

Answer: Aquila

D. For 10 points, Ras Algethi

Answer: Hercules

- 3. Answer the following about the history of the Sikhs for the stated number of points.
- A. For 5 points, Ram Das, the fourth guru, made this city the Sikh capital. It is better known as the site of a 1919 massacre.

Answer: Amritsar

B. For 10 points, this Mogul emperor, the son of Shah Jahan, ordered the destruction of all Sikh temples and seized and killed the ninth guru.

Answer: Aurangzeb

C. For 15 points, this man, the tenth and final guru, militarized the Sikhs and created the pure military sect known as the "Khalsa."

Answer: Govind Singh or Gobind Singh

- 4. Identify these Swedish tennis players FTP each.
- A. Currently ranked 10<sup>th</sup> in the world, this Swede's best result as a pro came when he reached the finals of the 1999 Australian Open before losing to Yevgeny Kafelnikov.

Answer: Thomas Enqvist

B. This now retired Swede won three Australian Open, two Wimbledon, and one US Open singles championships. He was known for his sportsmanship as much as his serve and volley game.

Answer: Stefan Edberg

C. Though he was often overshadowed by Edberg, this Swede won seven Grand Slam singles titles, including three of the four in 1988.

Answer: Mats Wilander

- 5. Identify these British painters of the 18th century FTP each.
- A. This man is best known for his depictions of horses in nature in such paintings as "Mares and Foals" and "A Horse Frightened by a Lion."

Answer: George Stubbs

B. This man, primarily a portraitist, is best known for his depiction of an actual incident in his canvas "Watson and the Shark."

Answer: John Singleton Copley

C. Among this Scot's 700 plus portraits are famous depictions of the architect Richard Adam and Lord Newton. His best known work is "The Reverend Robert Walker Skating."

Answer: Sir Henry Raeburn

6. Identify these authors of South African literature for the stated number of points.

A. For 5 points, this Nobel laureate is best known for such novels as July's People and The Burgher's Daughter.

Answer: Nadine Gordimer

B. For 10 points, this writer is best known for his plays, which include *Boesman and Lena* and *Master Harold* . . . and the Boys.

Answer: Athol Fugard

C. For 15 points, this author is best-known for such novels as A Question of Power, Maru, and When Rain Clouds Gather.

Answer: Bessie Head

7. Answer the following about a controversial field of genetics for the stated number of points.

A. For 5 points, it is simply defined as the study of human improvement by genetic means. In its negative sense it attempts to discriminate against those with supposedly "inferior" genetic traits.

Answer: eugenics

B. For 10 points, this cousin of Charles Darwin coined the term eugenics.

Answer: Francis Galton

C. For 15 points, in modern genetic studies this term has replaced eugenics. It refers to medical and/or genetic intervention designed to reduce the impact of defective genotypes on individuals.

Answer: euphenics

8. Answer the following about George Washington's role in the Revolutionary War FTP each.

A. On Christmas night of 1776 Washington crossed the Delaware and easily defeated a garrison of Hessian soldiers at this New Jersey city.

Answer: Trenton

B. After his successful and inspiring Trenton-Princeton campaign, Washington wintered at this New Jersey city for the early part of 1777.

Answer: Morristown (not Valley Forge, which was the next year)

C. The national capital at Philadelphia fell in the fall of 1777 after Washington was indecisively defeated at Brandywine Creek and Germantown by this British general.

Answer: General William Howe

9. Answer the following about a certain state governor FTP each.

A. Name the current governor of Illinois.

Answer: George Ryan

B. Governor Ryan's name has been linked with the illegal sale of these items in the state government post he served in before he became governor.

Answer: driver's licenses

C. Unlike most issues, Ryan is in accordance with this Democratic Representative from Illinois on a moratorium on the death penalty. This man, who has proposed a 7-year moratorium on executions nationwide, is better known as the son of a famous politician.

Answer: Jesse Jackson Jr.

10. Identify these works of Soren Kierkegaard from a description FTP each.

A. This book, whose first part contains the "seducer's diary." compares the aesthetical life to the ethical life. Its title refers to the choice that must be made between these two lives.

Answer: Either/Or

B. Part one of this book examines the Socratic type of the title subject, while part two looks at that subject in the context of Fichte and Von Schlegel among others.

Answer: The Concept of Irony

C. In this sequel to Either/Or Kierkegaard goes beyond the aesthetic and ethical lives to examine what he believes is the most important part of one's life, the religious sphere of existence.

Answer: Stages on Life's Way

11. Identify the American authors of these short stories on a 15-5 basis.

A. 15: "That Evening Sun"

5: "Barn Burning," "A Rose For Emily"

Answer: William Faulkner

B. 15: "Revelation," "The Enduring Chill"

5: "A Good Man is Hard to Find," "Everything That Rises Must Converge"

Answer: Mary Flannery O'Connor

12. Answer the following about enzyme chemistry FTP each.

A. Enzymes act as these types of substances to speed up the rate of most reactions within the body.

Answer: catalysts

B. This is the type of control of an enzyme in which the enzyme is inhibited or activated by a molecule that interacts at a site other than the active site.

Answer: allosteric control

C. This hypothesis, named for its two discoverers, offers an explanation of the velocity and gross-mechanism of enzyme-catalyzed reactions.

Answer: Michaelis-Menten hypothesis

13. Answer the following about a certain church council for the stated number of points.

A. For 10 points, this council, held from 1545 to 1563, initiated the so-called CounterReformation. It was primarily called as a result of Martin Luther's charges of corruption in the Roman Catholic Church.

Answer: Council of Trent

B. For 15 points, this man, the successor to Clement VII and the last of the Renaissance popes, called the Council of Trent.

Answer: Pope Paul III or Alessandro Farnese

C. For 5 points, this doctrine was incorporated into the documents of the Council of Trent. It is the change by which the bread and wine in the Eucharist transform into Christ's body and blood.

Answer: transubstantiation

14. Identify these movie actresses who have played child prostitutes FTP each.

A. This actress got her movie start playing the child prostitute Violet in 1978's Pretty Baby.

Answer: Christa Brooke Shields

B. This actress' first big movie break came playing the child prostitute Iris in Taxi Driver.

Answer: Jodie Foster or Alicia Christian Foster

C. This actress played a teen prostitute being chased by a serial killer in the movie *Streets*. Other roles include playing Mark Wahlberg's fiancé in *The Big Hit*.

Answer: Christina Applegate

15. Identify these operas from clues on a 15-5 basis.

A. 15: Including the famous "Song of the Gnat," this opera begins with the coronation of the title character, and ends with his death after he is overwhelmed by a story told by the monk Pimen.

5: Base on a Pushkin drama of the same name, this Mussorgsky opera tells of a real life Russian tsar, who ruled from 1598 to 1605.

Answer: Boris Godonov

B. 15: The best-selections from this opera are the six movements that the composer gathered into an orchestral suite: Les Ridicules; Scene infernale; Marche; Scherzo; Le Prince et la princesse; and La Fuite.

5: Based on a tale by Carlo Gozzi, the fruits alluded to in the title of this Prokofiev opera represent princesses found in a desert.

Answer: The Love for Three Oranges

16. Identify these Thomas Hardy novels from female characters FTP each.

A. Cousin Thomasin and Eustacia Vye

Answer: Return of the Native

B. Mrs. Charmond, Grace Melbury

Answer: The Woodlanders

C. Fanny Robbin, Bathsheba Everdene

Answer: Far From the Madding Crowd

17. Identify these men who performed famous scientific experiments for the stated number of points.

A. For 5 points, this man performed an oil-drop experiment to determine the charge of an electron.

Answer: Robert Millikan

B. For 10 points, using two charged cathodes this man was able to observe the splitting of hydrogen's spectral lines when the atoms were subjected to a strong electric field.

Answer: Johannes Stark

C. For 15 points, this man developed a new technique, at that time, of fragmenting DNA to sequence phage phi-X 174 in 1977. Thus, he became the first to determine the entire nucleotide sequence of any organism.

Answer: Frederick Sanger

18. Given a 19th century treaty, identify the war that it ended FTP each.

A. Treaty of Ancon

Answer: War of the Pacific

B. Treaty of Ghent

Answer: War of 1812

C. Treaty of Shimonoseki

Answer: First Sino-Japanese War

19. Answer the following about a certain Norse God FTP each.

A. This god, who is the leader of the Aesier, is killed by Fenris-Wolf at Ragnarok, though he is avenged by his son Vidar.

Answer: Odin

B. Among Odin's weapons was a bow that unleashed ten arrows and this spear that never missed its mark.

Answer: Gungnir or Grungir

C. Odin owned many animals including this goat, from whose udder flowed endless mead.

Answer: Heidrun

20. Identify the following clubs from the Spanish Primera division in soccer FTP each.

A. This club's leading scorers include Fernando Morientes and Raul, who shined in Champion's League play.

Answer: Real Madrid

B. The goal scoring of Roy Makaay has helped this club to the lead in the league points standings through May 20<sup>th</sup>.
Answer: <u>Deportivo</u> Coruna

C. The dynamic duo of Mendieta and Claudio Lopez spearheads the attack of this club.

Answer: Valencia

21. Answer the following about a certain writer for the stated number of points.

A. For 15 points, the famous refrain of "But where are the snows of yesteryear?" comes from the "Ballade of the Ladies of Bygone Times" in this poetry collection of 185 eight-line stanzas.

Answer: Le Grand Testament

B. For 10 points, this 15th century French poet and criminal penned Petit Testament and Grand Testament. Also famous is his "Ballade des dames du temps jadis" or "The Ballad of Dead Ladies." (Same poement in "A.")

Answer: Francois Villon or Francois de Montcorbier or Francois de Loges

C. For 5 points, several of Villon's ballads inspired scenes in this Kurt Weill and Bertolt Brecht work that includes the song "Mack the Knife."

Answer: The Threepenny Opera or Die Dreigroschenoper

22. Identify the following related to French rivers FTP each.

A. This longest river in France swings in a great curve past Orleans and flows westward by its long estuary at Nantes.

Answer: Loire River

B. Along with the Adour and Garonne Rivers, the Loire flows into this inlet of the Atlantic Ocean.

Answer: Bay of Biscay or Golfe de Gascogne or Golfo de Vizcaya

C. This river also drains into the Bay of Biscay. After rising in the Massif Central, it flows north of Bordeaux, where it unites with the Garonne to form the Gironde Estuary.

Answer: Dordogne River

23. Identify these types of particle accelerators FTP each.

A. A key component of this accelerator is the attached spherical generator, which is charged by an interior conductor that sprays a positive charge onto a moving belt. The belt then carries the charge to the interior of the sphere, from where it is conducted to the outer surface.

Answer: Van de Graaff accelerator

B. This accelerator uses a magnetic field to maintain charged ions in paths within two D-shaped cavities known as "dees." By the way, it was invented by Ernest Lawrence.

Answer: cyclotron

C. This device is a modified cyclotron that can overcome the energy limitation of the cyclotron. At sufficiently high speeds, this device can decrease the frequency to allow for the increase in mass.

Answer: synchrocyclotron

24. Identify these Akira Kurosawa films for the stated number of points.

A. For 5 points, the rape of a woman and the murder of her husband are told from the four differing viewpoints of the four defendants in this classic.

Answer: Rashomon

B. For 10 points, this film, which inspired both Last Man Standing and A Fistful of Dollars, tells of a ronin who plays two warring factions against each other.

Answer: Yojinbo

C. For 15 points, this film, which tells of the friendship between the Russian army officer, Solomine, and the Asiatic guide, Munzuk, won the 1975 Oscar for Best Foreign Film.

Answer: Dersu Uzala

25. Given a famous elegy and the year of its publication, identify the author and its subject FTP each. You must give both pieces of information for the points.

A. "Adonais," 1821

Answer: author = Percy Bysshe Shelley

subject = John Keats

B. "Thyrsis," 1866

Answer: author = Matthew Arnold

subject = Arthur Hugh Clough [cluff]

C. "Ave Atque Vale," 1868

Answer: author = Algernon Charles Swinburne

subject = Charles Baudelaire

26. Identify these Doors songs from lyrics for the stated number of points.

A. For 5 points, "We chased our pleasures here / Dug our treasures there / But can you still recall / The time we cried"

Answer: Break on Through (to the other side)

B. For 10 points, "Faces look ugly when you're alone / Women seem wicked when you're unwanted / Streets are uneven when you're down"

Answer: People are Strange

C. For 15 points, "She has robes and she has monkeys / Lazy diamond studied flunkies / She has wisdom and knows what to do / She has me and she has you"

Answer: Love Street

27. Answer the following about crystals FTP each.

A. This law states that the angles between two corresponding faces on the crystals of any solid chemical or mineral species are constant and are characteristic of the species.

Answer: Steno's Law or First Law of Crystallography or Law of Constancy of Interfacial Angles

B. In this crystalline structural arrangement each atom has eight neighbors arranged at the corners of a cube. Cesium Chloride shows this arrangement in which the spheres occupy 68 percent of the volume.

Answer: body-centered cubic (prompt on "bcc")

C. This phenomenon is the appearance of positive electric charge on one side of certain nonconducting crystals and negative charge on the opposite side. It was discovered in 1880 by Pierre and Paul-Jacques Curie.

Answer: piezoelectricity or piezoelectric effect

28. Identify these German philosophers FTP each.

A. This man is best-known for his work The Protestant Ethic and the Spirit of Capitalism.

Answer: Max Weber

B. This philosopher was a former student of Alban Berg and became known for applying Marxist concepts to philosophy and music. He authored *Negative Dialectics*.

Answer: Theodor Adorno

C. This member of the Frankfurt School has written such texts as Autonomy and Solidarity, Debating the State of Philosophy, and Moral Consciousness and Communicative Action.

Answer: Jurgen Habermas