Toss-Ups by Harvey Mudd & Scripps Colleges (Scrudd)

T1) The political theory of this name seeks to explain international relations not through states, but through individuals and their ideas. It is argued by Alexander Wendt in his <u>Social theory of International Politics</u>. The art movement of the same name was encouraged by the Soviet government before being condemned as unsuitable for mass propaganda purposes. It focused on the design of nonrepresentational objects from materials such as plastic or glass, and artists in the movement included Anton Lavinskii, Kasimir Malevich, and Vladimir Tatlin. FTP what name is shared by these movements?

Answer: Constructivism

T2) Actually an island group consisting of Gozo, Comino, and Fifla alongside the largest, main island, its colonizers have included the Phoenicians, Carthaginians, Romans, Byzantines, Arabs, Normans, Castilians, the Knights of St. John, the French, and the British. For ten points, name this nation, located at a strategic crossroads in the Mediterranean, whose entire population was awarded the George Cross for holding out through World War II, actively harassing Axis shipping.

Answer: Malta

T3) Their major leaf veins are parallel, as opposed to reticulated. Their stem vascular bundles are scattered, instead of arranged into a ring. Their roots are adventitious instead of developing from a radicle. Their flower parts, particularly petals, come in multiples of three instead of four or five, and their embryos have a single "seed leaf" as opposed to a pair of them. FTP, name this class of angiosperms.

Answer: monocotyledoneae (accept monocotyledons or monocots)

T4) This novel, written as a reaction to the comic depiction of Africans in Joseph Conrad's <u>Mister Johnson</u>, portrays the complex effects of colonialism on the village of Umuofia. Its second sequel, <u>The Arrow of God</u> explores the transformation of Nigerian government under the colonial system. Taking its name from a poem by Yeats, FTP identify this 1958 work by Chinua Achebe.

Answer: Things Fall Apart

T5) It has been estimated that this device, developed in the 1930s, could decrease the amount of work most American computer users do by a factor of 16. Despite this, it has attracted only a meager following of users, and shows no signs of breaking the stranglehold of its more popular competitor. The elements it shares in common with that competitor are the placement of the letters A and M, as well as the numeric keys. The rest have been rearranged to scientifically accelerate the typing speed of the user. For ten points, name this keyboard layout named for its creator.

Answer: Dvorak keyboard

T6) Home to the real-life Treasure Island, it extends to Suisun Bay through San Pablo Bay, and the southern portion is called South Bay. Considered a military stronghold years ago, the presidio at its famous entrance is now operated as a museum. FTP, name the body of water whose Central Bay contains one of the most famous islands in the world, and that spanned the distance between the home teams of the 1989 World Series.

Answer: San Francisco Bay

T7) He has thrown for eight touchdowns and 9 interceptions through 225 pass attempts in his six-year career. Though his Heismann winning brother is still playing backup, he gets to take the helm for the first time since 1999. FTP, name this former Colorado Buffalo who gets to see if he can lead his team to a division championship in place of the injured Donovan McNabb for the Philadelphia Eagles.

Answer: Koy Detmer (do not accept or prompt on Ty Detmer)

T8) This artist's lesser-known paintings include *The Ship of Fools* and *The Hay Cart*. His obsession with sin and taste for allegory, combined with an eye for detail, recalls late Gothic art. Though they often cite his fantastic imagery as an inspiration, this artist painted about five hundred years too early to be directly affiliated with the Surrealists. FTP, name this bizarre Northern Renaissance artist, best known for triptychs such as *The Temptation of Saint Anthony* and *The Garden of Earthly Delights*

Answer: Hieronymous Bosch or El Bosco

T9) This poem is 22,000 lines long, all in eight-syllable couplets. The protagonist is aided by "Fair Welcome", but must fight against Fear, Shame, and Wikked Tongue, or Gossip. Written between 1225 and 1270, it had two contributing authors, and was later translated into English by Geoffrey Chaucer. It is an allegory set in the Garden of Delight, whose protagonist experiences the trials and tribulations of courtly love. FTP, name this French romance by Guillame (gee-OHM) de Lorris and Jean de Meun (moon) about a young man who falls in love with the title flower.

Answer: Le/The Roman de la Rose or The Romance of the Rose

T10) Because the Aztecs believed dead warriors were reincarnated in a form similar to his and because the south was considered the left side of the world, this god's name, therefore meant the "resuscitated warrior of the south." His image was carried into battle on the shoulders of Warriors, and he was believed to speak to the people at night; thus it was at his command that Tenochtitlan was built. His nahual, or animal disguise was the eagle, but he was usually depicted as hummingbird. For ten points, name this Aztec god of sun and war.

Answer: Huitzilopochtli

T11) When polished and faceted as a gemstone, this mineral is known as marcasite. Although its color is usually a silver gray, a rubbing a sample of it on a streak plate will reveal the dark red color it becomes when powdered. This powdered form is often used as a pigment, and with formula FE2O3, it is an important source of iron ore. FTP, name this mineral, whose name reflects its true, blood-red color.

Answer: hematite

T12) Finland, Portugal, France, Sweden, Belgium, and Spain have been the last six holders of this office, while Greece, Italy, Ireland, and the Netherlands are next in line. Currently, it is held by Anders Fogh Rasmussen, the Prime Minister of Denmark. For ten points, name this office, which has existed since 1957 but which only acquired its current name in 1992.

Answer: <u>President</u> of the <u>European Union</u> (prompt on President of the European Economic Community; do not accept President of the European Commission)

T13) He and his brother became apostles of Christ, and he was later crucified by the Romans in southern Greece. His order of knighthood, the "Most Ancient Order of the Thistle", was established in 1687 by James VII and is restricted to only seventeen members, including the King or Queen. His feast day is celebrated on November 30th, and the flag bearing his cross contains a white diagonal cross on a blue field. FTP, name this patron saint of Scotland.

Anwer: St. Andrew

T14) The actress who portrays her on screen once called her "a cross between Yoda and William F. Buckley." She has been married several times and has many children, whom she says "turned out all right, except for one who wouldn't listen." Although she is a surpassingly skilled marksman, she is largely pacifistic in her views, with the notable exception of her attitude toward the cybernetic race that conquered her home planet, El Auria. FTP, name this enigmatic Ten-Forward lounge bartender played by Whoopi Goldberg on Star Trek: The Next Generation.

Answer: Guinan

T15) The bastard son of an English landowner, he attended Oxford and made his first trip Eastwards writing a paper on Crusader castles. He worked on various archaeological digs until World War I broke out, after which he joined the army. After his experience in war his exploits included attending the Paris Peace conference, changing his name to T. E. Shaw in honor of his friend George Bernard Shaw, and writing the memoirs The Mint and The Seven Pillars of Wisdom. He died in a motorcycle accident in 1935. For ten points, name this World War I hero more famous for his adoption of Middle Eastern garb, the subject of a classic David Lean movie.

Answer: Thomas Edward (T.E.) Lawrence or Lawrence of Arabia

T16) With one of the greatest opening lines in movie history, only someone as bad as Gretchen Mol could mess this one up. "Listen, here's the thing. If you can't spot the sucker in your first half hour at the table, then you are the sucker." Minutes later, Mike McDermott loses his three stacks of high society, then his girlfriend, then his legal career, and almost his life. FTP, Name this movie, marvelously starring John Malcovich as Teddy KGB and Matt Damon, and watched by anyone who wants a quick pick-me-up before a long Vegas trip.

Answer: Rounders

T17) Today it is a modest municipality whose primary products are textile and building materials. In the 13th century, though, this city along with Brugge and Ghent controlled all of Flanders. Such architectural gems as the Cloth Hall and the Cathedral of St. Martin bear witness to its former glory. For ten points, name this principal town within a key Allied salient in World War I, over which three bloody and indecisive battles were fought, and where chlorine gas was used as a weapon for the first time in 1915.

Answer: Ypres

T18) Born near Mantua in 70 BC, he is said to have been named after a laurel branch which appeared to his mother in a dream. His major work, an epic poem in twelve books, remained unfinished at the time of his death in 29 BC, and although he had requested that it be destroyed, it was edited and published anyway by the emperor Augustus, for whom it had originally been written. FTP, name this Roman poet, Dante's guide through the Inferno.

Answer: Virgil (Publius Virgilius Maro)

T19) The surname's the same. The first is the married woman who meets the singer "every day at the same cafe" in a song that netted Billy Paul a 1972 Grammy Award. The second is the object of numerous entreaties to "wake up" so that he can cure the singer in a 1997 Aqua hit. The third "strikes up a conversation with [a] black-haired flamenco dancer" in a 1993 song by Counting Crows. FTP, give the shared last name.

Answer: Jones (do not accept answers with "Mrs." "Dr." or "Mr." before "Jones")

T20) This result was first stated in the textbook, "Cours d'Analyze de l'École Polytechnique" in 1887, and bears the name of the author, who proves it in the text incorrectly. One application of this theorem includes the solution to the three utilities problem. After connecting some of the utilities to their houses, you find that two thus far unconnected vertices are separated by a loop of already laid pipe, and this theorem guarantees you can't connect those vertices. FTP name this theorem that states that any continuous simple closed curve in the plane separates the plane into a distinct inside and outside.

Answer: Jordan Curve Theorem

T21) This two-sport athlete graduated from Cal-Poly Pomona with a B. S. in physics. Along with his six-time world horseshoe championships, in 1997, he became the first player in his other sport to earn over two million dollars in career earnings. His 5 player of the year awards is second only to Earl Anthony. For ten points, name this professional bowler and horseshoe pitcher who is nicknamed "Dead-Eye".

Answer: Walter Ray Williams Jr.

T22) It was written by Abbé Sieyès (syess) and the Marquis de Lafayette, with a little help from Thomas Jefferson, and approved by Alexis Francois Pison de Galland. Influenced by the American Declaration of Independence, its seventeen articles were included as a preamble to the constitution of 1791. Drawing on the democratic ideals of the philosophes and other Enlightenment thinkers, its first article begins: "Men are born and remain free and equal in rights." FTP, name this document, approved by the National Assembly on August 26, 1789.

Answer: Declaration of the Rights of Man and of the Citizen or (Declaration des droits de l'homme et du citoyen)

Beethoven, Brahms, Mendelssohn, and Sibelius each wrote only one. Mozart wrote five; Paganini wrote six. Bruch wrote three, though only one is performed with any frequency. FTP, what is this musical form, generally in three movements, which one might expect to see performed today by Gil Shaham or Itzhak Perlman?

Answer: Violin Concerto

T22) Recently releasing a Passion Berry flavored and scented personal lubricant, this company actually has a selector on their website to find the size and style right for each user. Well, at least the free samples are nice. FTP, Whose prodects include designs that transmit body heat, are textured, are mutually satisfying, but not ribbed for her pleasure?

Answer: Trojan Brand Condoms

T19) In any gravitationally bound two-body system, there exist points at which the gravitational forces from the two bodies and the centrifugal pseudoforce of rotation cancel, meaning that an object placed at one of these points will stay fixed relative to the two bodies. What is the general name given to these five points, usually labeled L1-L5?

Answer: LaGrangian points (accept LaGrange points)

REPEATS T13) Arab traders discovered it in the 10th century. The Dutch, who first claimed it in 1598, were the first to try to establish a colony, but mostly used it as a supply stop on the route to Java; they also gave the island its present name. The French established the first successful settlements, and it became a major privateering center before the British captured it during the Napoleonic Wars, controlling it until its independence in 1968. FTP, name this island country, known to readers of Dirk Gentley's Holistic Detective Agency as having an extremely rare stamp, the one-time home of the dodo.

Answer: Mauritius

T18) Its original title was a line from a Dickens novel, and its original epigraph was "The horror! The horror!" from Conrad's *Heart of Darkness*. Characters in it include Queen Elizabeth, Mr. Eugenides, Phlebas the Phoenician, Madame Sosostris, and Tiresias. Its five sections have titles such as "What the Thunder Said" and "The Burial of the Dead". FTP, name this poem, the magnum opus of T.S. Eliot.

Answer: The Waste Land

Boni by Harvey Mudd & Scripps Colleges (Scrudd)

B1) Name these musically-titled poems FTPE.

A. This Julia Ward Howe poem was made into a Union song during the Civil War.

Answer: Battle Hymn of the Republic

B. The subject in this poem is a murderer whose execution makes the narrator reflect that "each man kills the thing he loves/ by each let this be heard/ some do it with a bitter look/ Some with a flattering word/

The coward does it with a kiss/ The brave man with a sword!"

Answer: The Ballad of Reading Gaol (Note: Pronounced "Redding Jail")

C. This epic poem by Ezra Pound was published in its complete state for the first time in 1972.

Answer: The Cantos (do not accept Pisan Cantos)

B2) 30-20-10: Name the actor.

30: He was born in Port Talbot, South Wales, but became a U.S. citizen in 2000. His acting debut was in 1968's The Lion in Winter.

20: He acted in, directed and wrote the musical score for the 1996 film August. He also acted in Howard's End.

10: When Jennifer Lopez began using the moniker "J. Lo", Entertainment Weekly advocated abbreviating his name to "A. Ho." But that's "Sir A. Ho" to you.

Answer: Sir Anthony Hopkins

- B3) Answer these questions about the race for the South Pole, 5-10-15.
- 5: This was the year Roald Amundsen arrived at the Pole.

Answer: 1911

10: Amundsen beat this Englishman to the Pole.

Answer: Captain Robert Falcon Scott

15: The lines "To strive, to seek, to find and not to yield" were written on Scott's memorial cross; these lines are the final ones from what Tennyson poem about an adventurer?

Answer: Ulysses

B4) FTPE, name these artists from the English monarchs who patronized them.

A. He painted many views of King Henry VIII, who sent him out to paint the portraits of eligible princesses of Europe after the death of the third wife, Jane Seymour.

Answer: Hans Holbein the Younger (prompt on Holbein)

B. A pupil of Rubens, this Flemish artist painted the definitive portraits of King Charles I.

Answer: Anthony Van Dyck

C. When this artist's highly unflattering portrait of Queen Elizabeth II was unveiled in December 2001, one reporter commented "It makes her look like one of the royal corgis who has suffered a stroke."

Answer: Lucian Freud

B5) The Patriots quarterback was hurried by a Raider lineman and his pass sailed high and too far in front of his wide receiver, and seconds later, the receiver lost the ability to walk, permanently. Answer these questions about this tragic event of 1978 FTSNOP.

(10) Who was this unfortunate Patriots receiver?

Answer: Daryl Stingley

(5) What Raider safety rendered Stingley a parapelegic?

Answer: Jack Tatum

(15) What Patriot quarterback was hit by Pat Toomay forcing the errant throw?

Answer: Steve Grogan

(Note: This was during an EXHIBITION game! Madden was the only coach from

either team to visit Stingley in the hospital that night. Stingley's entire

coachings staff left him there and went home to Boston. Toomay, author of On

Any Given Sunday, still regrets that he couldn't get to Grogan sooner and sack

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him, saving Stingley.)

B6) Answer these questions about the Battle of the Coral Sea for ten points

each.

10: This American carrier survived Japanese bombers, but could not survive the

torpedo bombers, whose attacks started fires that reached the boiler room.

Answer: U.S.S. Lexington

10: This carrier, Admiral Frank Fletcher's flagship, narrowly survived the

Coral Sea. She limped home to Pearl Harbor and was hastily repaired to fight at

Midway, only to be sunk there.

Answer: U.S.S Yorktown

10: For a final ten points, name either of the Japanese carriers that

participated in the raid on Pearl Harbor but was so badly damaged at Coral Sea

as to be unable to fight at Midway.

Answer: Shokaku or Zuikaku

B7) Ever wonder when knowing "useless" Taylor Series expansions would come in handy? Well here's your chance. Given the first three terms of the Taylor Series for an expression and the general term, give the expression FTP each. You will have 10 seconds for each part.

A. (10) One plus x plus x squared over two. The general term is x to the nth power over n factorial.

Answer: e^x (e to the x) (accept exponential)

B. (10) x minus x cubed over six plus x to the fifth over 120 The general term is negative one to the nth power times x to the two n plus oneth power over two n plus 1 factorial.

Answer: sin x

C. (10) 1 + x squared over 2 + x to the fourth over 24. The general term is x to the two nth power divided by two n factorial.

Answer: hyperbolic cosine (do not accept or prompt on cosine)

B8) Identify these works of literature featuring characters with doubles, for ten points given a brief description, or five if you need the author.

A. (10) This novel features a painting which alters to show the increasingly loathsome condition of the title character's soul, while the appearance of the character himself remains unchanged.

(5) Oscar Wilde

Answer: The Picture of Dorian Gray

B. (10) This play contains two pairs of twins, who have the same names—much confusion arises in Ephesus when their paths cross.

(5) William Shakespeare

Answer: The Comedy of Errors

C. (10) This short story contains a true doppelganger, who is ultimately killed by the title character; it ends in the chilling line "In me didst thou exist-and, in my death, see by this image, which is thine own, how utterly thou hast murdered thyself."

(5) E.A. Poe

Answer: William Wilson

- B9) Given an American state, give the city in that state with the largest population, FTP each.
- 10) Wisconsin

Answer: Milwaukee

10) Tennessee

Answer: Memphis

10) Montana

Answer: Billings

B10) In the months leading up to the 2000 election, there was much ado about a particular Saturday Night Live sketch that satirized the Bush-Gore presidential debates and ostensibly influenced Gore's subsequent debate style. Answer the following related questions for the stated number of points.

A. F5PE, name the two comedians who played the parts of George W. Bush and Al Gore in the sketch.

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Answer: Will Ferrell (Bush) and Darrell Hammond (Gore)

B. In the course of the mock debate, each candidate was asked to summarize in a single word why the American people should vote for him. Give their responses F5PE.

Answer: Bush/Ferrell: strategery (struh-TEE-jer-ee) (do not accept "strategy")

Gore/Hammond: lockbox

C. In a related sketch, Gore/Hammond and Bush/Ferrell sing a parody of, FTP, what chart-topping 1965 duet?

Answer: I Got You Babe

B11) Identify the historical figure from quotes, 30-20-10.

30: "There is no right to strike against the public safety by anybody, anywhere, anytime."

20: "You lose." and "They Hired the money, didn't they"

10: Upon hearing about his death, Dorothy Parker quipped, "How could they tell"

Answer: Calvin Coolidge

B12) Answer the following questions about American coins for the stated number of points.

A. (5) What historical building is on the back of the nickel?

Answer: Monticello

B. (10) All of nothing, out of the penny, nickel, dime and quarter, which two of these coins do not have grooves? You may not look in your pocket.

Answer: penny and nickel

C. (15) How many stars are on the back of the new Sacajawea dollar coin?

Answer: 17

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HMC/Scrudd(e) B13) It seems that more and more entertainers have shed their last names in favor of a more pithy title. FTP each, given a stage name, give the artist's last name. 10) Madonna Answer: Ciccone 10) Kenny G Answer: Gorelick 10) Shakira Answer: Mebarak (also accept: Shakira Isabel Mebarak Ripoll) B14) Given an aria, give the opera in which it occurs, FTPE; if you need the composer, you will receive five points. A. (10) "Madamina, il catalogo e questo" (Mah-dah-ME-nuh, ill cat-uh-LOW-go ay QUEST-o), also known as the Catalog Aria. (5) W.A. Mozart Answer: Don Giovanni B. (10) "La Donna e Mobile" (Lah DOH-na ay mow-BEE-lay) (5) Giuseppe Verdi Anwer: Rigoletto C. (10) "Largo al Factotum" (5) Gioachino Rossini Answer: Il Barbiere di Siviglia or The Barber of Seville

B15) Identify the following related to non-Newtonian classical mechanics, for 15 points each

B. (15) This principle states that all particles follow paths for which the integral of the Lagrangian over time is smallest.

Answer: Principle of stationary action (accept least action or Hamilton's Principle)

C. (15) This theorem states that a group of particles with the same forces acting on them but with different initial conditions will occupy a constant volume in phase space.

Answer: The Liouville Theorem

B16) Answer the following questions about the 2002 German federal elections for ten points each.

10: This CSU head and Bavarian premier was the chancellor candidate of the Union bloc.

Answer: Edmund Stoiber

10: To the surprise of many observers, this CDU party leader did not run for chancellor, allowing Stoiber to do so.

Answer: Angela Merkel

10: Although the CDU/CSU and the SPD did equally well, the SPD remained in government thanks to the strong showing of their coalition partners, the Greens. For a final ten points, name the CDU/CSU's potential coalition partners, whose poor showing condemned the Union bloc to the opposition.

Answer: FDP or Free Democratic Party or Freie Demokratische Partei

B17) Fill in the blanks in these lines from Emily Dickinson poems (5-10-15):

A. (5) [BLANK] is the many-feathered thing / That perches in the soul

ANSWER: Hope

B. (10) Because I could not stop for Death, / He kindly stopped for me; / The carriage held but just ourselves / And [BLANK].

ANSWER: Immortality

C. (15) Some keep the Sabbath going to church; / I keep it staying at home, / With a [BLANK] for a chorister, / And an orchard for a dome.

ANSWER: bobolink

B18) For five points each, and a bonus 5 for all correct, give the five largest countries in Africa by land area.

Answer: Sudan, Algeria, Democratic Republic of the Congo (accept Zaire), Libva, Niger

B19) You probably know that Español is Spanish, Français is French, and Deutsch is German, but how many of these less-familiar languages have you heard of? Give the English name of each of the following languages. You will get 5 points for one, 10 points for two, 20 points for three, and 30 for all four..

A. (5) Svenska

Answer: Swedish

B. (5) Magyar

Answer: Hungarian

E. (5) Hanguohua

Answer: Korean

F. (5) Suomi

Answer: Finnish

B20) Identify these neurological disorders, FTPE.

A. (10) This general disorder, most often caused by a stroke, is characterized by an impairment in understanding and/or formulating complex, meaningful elements of language

Answer: aphasia

B. (10) This disorder is a form of facial paralysis resulting from damage to the 7th (facial) cranial nerve. This nerve disorder afflicts approximately 40,000 Americans each year.

Answer: Bell's Palsy

C. (10) Affecting between 100,000 to 200,000 people in the United States, this inherited disease is characterized by uncontrollable "tics"

Alnswer: Tourette Syndrome

- B21) Given the first line of a novel, give the title FTPE. If you need the author, you'll get five.
- (10) "Once upon a time and a very good time it was there was a moocow coming along down the road."
- (5) James Joyce

Answer: A Portrait of the Artist as a Young Man

- (10) "It was love at first sight."
- (5) Joseph Heller

Answer: Catch-22

- (10) "Maman died today."
- (5) Albert Camus

Answer: The Stranger (accept L'étranger)

B22) Given a calendar system other than the Gregorian (in which it is currently November 23, 2002), give the current year according to that calendar. You'll get 15 points if exact, 10 points if within 10 years, and 5 points if within 50 years.

A. Hebrew Calendar

B. Answer: <u>5763</u> (for 10 points, from 5753-5773; for 5 points from 5713-5813)

C. Islamic Calendar

Answer: 1423 (for 10 points, from 1413-1433; for 5 points from 1373-1473)

B24) Give the Roman name of the god or goddess associated with each of the following, FTPE.

A. (10) Marriage

Answer: Juno (do not accept Hera)

B. (10) The hearth

Answer: Vesta (do not accept Hestia)

C. (10) Doorways or beginnings

Answer: Janus

REPEAT? B27) It's hard for me to write a packet without including an alcohol question. So, here we go. Name the related alcohol drinks from ingredients on a 5-10-15 basis.

5) Gin, Rum, Vodka, Tequila, Triple Sec, Sour Mix, splash of Coke

Answer: Long Island Iced Tea

10) Gin, Rum, Vodka, Tequila, Triple Sec, Sour Mix, splash of cranberry juice

Answer: Long Beach Iced Tea

15) Gin, Rum, Vodka, Tequila, Triple Sec, Sour Mix, Chambord, splash of Sprite

Answer: Purple Haze

REPEAT: B7) Identify the following terms related to Kabbalistic mysticism, FTPE.

- A. (10) This book, often attributed to the a 13th century Spanish scholar Moses de Leon, is one of the most important Kabbalistic texts. Its name is Hebrew for "Book of Splendor".
- B. Answer: Safer Ha-Zohar or Book of Zohar
- C. (10) The Zohar uses this term to describe the aspect of G-d which is completely unknowable to human beings. It literally means "infinite" or "without end".
- D. Answer: Ein-Sof
- E. (10) This term collectively refers to the ten unique aspects of G-d which emanate from the Ein-Sof and which human beings can have limited understanding of. It is also used to refer to a path to G-d, and a bastardization of this term was used as the name for the villain in Squaresoft's Final Fantasy VII.

Answer: Sefirot (pronounced sfee-ROHT, do not accept or prompt on Sephiroth

NO B13) In tribute to Cyril Jacquot, recent Mudd graduate and chemistry major, it's once again time for periodic table chess. For each part, you will be given a chess piece and a chemical element. Imagine the periodic table is a chess board (excluding Lanthanides and Actinides). If the given piece is placed on the given elements's square, give any one element it could legally move to in one move, FSNPE.

- A. (5) sulfur, King
- B. Answer: nitrogen, oxygen, fluorine, chlorine, bromine, selenium, arsenic, or phosphorus
- C. (10) calcium, Bishop
- D. Answer: sodium, rubidium, yttrium, hafnium, or dubnium
- E. (15) zirconium, Knight

Answer: calcium, chromium, barium, tungsten, lawrencium, or dubnium