

REQUIRES ATTACHMENT FOR BONUS

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1. In 1923 Arthur Compton demonstrated that these have momentum despite having zero rest mass. The exchange of them between electrically charged particles transmits one of the four fundamental forces, the electromagnetic force. It was called a radiation quantum in 1900 when Max Planck showed that its energy is proportional to the frequency, γ , of its light. FTP name the elementary particle with a spin quantum number of one that makes up electromagnetic radiation, including light.

Answer: **photon**

2. A lonely 12 year old Southern girl, Frankie Adams, wants to escape home. Her brother and his fiancée ask her to be involved with their matrimonial ceremony; she misunderstands, and thinks that she has been invited to live with them. FTP what is this 1946 Carson McCullers novel?

Answer: **The Member of the Wedding**

3. Marc Cohn once said he walked with his feet 10 feet off this street in Memphis, which in recent years has been revived as a center for the town's nightlife. Subject of a 1974 novel by James Baldwin, for 10 points what street was the heart of Memphis' black community and immortalized by a classic blues song?

Answer: **Beale Street**

4. In the surge of anti-European feelings after Augustin Iturbide's victory in the War of Independence his tomb in the Cathedral of Mexico was raided and his bones barely saved from desecration. Among his less successful adventures were an expedition to squash a rebellious subordinate in Honduras and an attempt to subjugate Lower California because Charles V would not give him the governorship of lands he had earlier conquered. Modeling himself on Alexander, he got an opportunity to emulate him in 1519. FTP name this conquistador who in 1521 overcame the Aztecs.

Answer: **Hernando Cortes.**

5. Adapted from the German name for Peppermint, they gave rise to the Ebay auction site. With heads of all sorts of characters and creatures, their value is inversely related to their frequency. The most sought-after are the Bridge, Mueslix, Pineapple, Vucko and Make-A-Face. At their museum in Burlingame California, you can see 500 of these five inch dispensers. For 10 points, name these plastic candy dispensers that made Elaine laugh when Jerry put one on her leg during a concert.

Answer: **Pez Dispenser**

6. This metal is the seventh most abundant and makes up about 1.5% by weight of the earth's crust. It is an essential constituent for plant growth and is a vital element in the human diet. Though it is never found free in nature, it is one of the most reactive and electropositive of metals. FTP name this second least dense known metal with atomic number 19 and symbol K.

Answer: **potassium**

7. In the far right background there is a clump of trees and a group of houses. Before them is a horseman directing the many workers scattered throughout the background. Large mounds of hay can also be seen and the sky is a depressing gray. In the back left-center a cart stands ready to take part of the harvest back to the granary. The painting, however, centers around three women, two of whom are stooped over and the third preparing to do so, none of them looking at the viewer. FTP name this Realist painting depicting peasant women collecting the scraps of a harvest, the most famous work of Jean Francois Millet.

Answer: **The Gleaners.**

8. William Cooper's *Scenes from Provincial Life* started the movement, followed by John Wain's *Hurry on Down* and Kingsley Amis' *Lucky Jim*. Its working class attitude was best exemplified by Colin Wilson, a philosopher and author of *The Outsider* who lacked much formal education. All these authors featured rebellious characters who were unsure of themselves but willing to mask this with belligerence. FTP name this 1950's British literary movement Alan Sillitoe's *The Loneliness of the Long Distance Runner* and John Osborne's *Look Back in Anger*.

Answer: **Angry Young Men.**

9. The "65" version could be used with a compiler called "WATFOR". The "77" version's standard was defined in a 1978 ANSI document. Nowadays, the most up-to-date programmers use the "90" or "95" versions to write programs in, FTP, what high-level programming language whose name is an abbreviation for "Formula Translator"?

Answer: **FORTRAN.**

10. At the beginning of the Civil War it was burned in order to keep it out of Confederate hands. It would later change sides eight times and its pre-war population of 3,000 was quickly reduced to 100. During the Antietam campaign, Stonewall Jackson trapped Dixon Miles' 12,500 troops here, gaining the largest Rebel POW bag in the entire war. Located at the confluence of the Shenandoah and Potomac rivers at the northern end of the Shenandoah valley, FTP name this Federal arsenal unsuccessfully raided October 16, 1859 by John Brown.

Answer: **Harper's Ferry.**

11. The high points are the repulse of a group of Marathon veterans by a chorus of old women and the chagrin of Cinesias when his wife Myrrhine teases him but does not have sex with him. Performed in 411 B.C. shortly after the Athenian disaster in Sicily, it ends with Peace made between the Spartans and the Athenians, brokered by a woman whose name means "Releaser of War." FTP name this Aristophanes comedy about a sex strike organized by the title character.

Answer: **Lysistrata.**

12. The most common of these is indole-3-acetic acid, which was discovered by Charles Darwin. They usually aid in the elongation of cells and apical growth. They also play an important role in root growth and maturation. FTP, name this type of plant hormone.

Answer: **auxins**

13. News Daily, Fashion Emergency, True Hollywood Story, Behind the Scenes, Fashion File, Mysteries and Scandals, Howard Stern, Celebrity Profile, Wild On, Talk Soup, and Search Party This network shows those shows, and pretty much only those shows, in addition to lots of paid programming and a surreal reality show on the life of Anna Nicole Smith. For 10 points, what is this short-named cable TV network?

Answer: **E!**

114. In 1981 this Brooklyn native was named Associate Attorney General under the Reagan administration. In 1989, he was narrowly defeated by Democrat David Dinkins in a bid for an elective office he later won. In 2000, after a brief failed attempt at a Presidential bid, facing both prostate cancer and a messy divorce, he bowed out of his Senate race against former First Lady Hillary Rodham Clinton. FTP, name this man who in 2001 led New York City through its greatest hardship in the last days of his tenure as its Mayor.

Answer: **Rudolph "Rudy" Giuliani**

15. Off and on in the 1500's they fought the Spanish, declaring their independence in 1581. From 1651 to 1655 they made war on Sweden, spent the middle three years of that war simultaneously fighting the English, and in the 1670's it was France's turn to try to conquer them. In 1664 they were attacked in a key colony by New Englanders. In 1672 they recaptured it, but traded it for Senegal and a country to be named later. FTP what is this nation, whose colony New Amsterdam became New York?

Answer: **The Netherlands** (accept Holland; accept Dutch since we say "they")

16. He "woke one morning and found himself famous". About him Lord Lovelace wrote "Astarte" and John Drinkwater "The Pilgrim of Eternity". His personal life was loose but his poetry important. FTP who wrote "The Prisoner of Chillon", "Childe Harold's Pilgrimage", and "Don Juan"?

Answer: **George Gordon (Lord) Byron**

17. It was compiled from lectures delivered at the Lowell Institute and Columbia University in 1906-07 and dedicated to John Stuart Mill. Subtitled "A new name for some old ways of thinking," it asserted that truth depended on humanity and its author argued that in learning humans "carve out everything [...] to serve our human purposes." On religion it argued that "if the hypothesis of God works satisfactorily in the widest sense of the word, it is true." FTP name this William James work that also names his school of philosophy.

Answer: **Pragmatism.**

18. Trained as a lawyer in England, he spent much of his early career in South Africa where he raised an ambulance corps to serve in the Boer War and founded the Natal Indian Congress. Among his failures was not keeping Mohammed Jinnah in the Indian National Congress and allowing Jawaharlal Nehru's plan of a modern industrializing India to defeat his predominantly rural vision. Among his many successes was the march to Dandi to protest the salt tax. FTP name this Indian, assassinated by a religious fanatic in 1948, a proponent of Satyagraha and non-violent activism.

Answer: Mahatma or Mohandas **Gandhi**.

19. A conversation he had with Milton is recorded in Milton's "Areopagitica". This scientist discovered the isochronism of the pendulum and the libration of the moon. FTP who in 1633 was forced to repudiate the Copernican theory, but still maintained correctly under his breath that the Earth does move?

Answer: **Galileo** Galilei (accept Galilei)

20. Jack Lupton is a Chattanooga who made millions bottling Coca-Cola. Frank Broyles is a former coach and athletic director of Arkansas. Roger Penske owns perhaps the best-known open-wheel auto racing team. Nelson Doubleday used to be principal owner of the New York Mets; William Clay Ford owns the Detroit Lions. Melvin Laird, Nicholas Brady, and George Shultz are all former Cabinet members. All these men belong to an organization led by William "Hootie" Johnson; strangely enough, Arnold Palmer is the only former pro golfer in its ranks. FTP name this organization, currently the target of women's groups for its all-male membership.

Answer: **Augusta National** Golf Club

21. Born into slavery near Diamond Grove, Missouri, he attended Simpson College at Indianola, Iowa in 1890. In 1896 he became head of Agricultural work at Booker T. Washington's Alabama Tuskegee Institute. FTP who is this important practical researcher, who developed 300 uses for the peanut?

Answer: George Washington **Carver**

22. Probably of Carian origin, Euripides claimed that she was a daughter of Leto while others suggested she was one of the offspring of Erebus and Nyx. Medea was one of her priestesses and Dido said she was "called on with weird cries by night at the crossways of the city." She appears in Macbeth, commanding the Wyrdsisters to "about the cauldron sing/ Like Elves and fairies in a ring" before breaking into song and dance. She also figures prominently in the Homeric Hymn to Demeter as she hears the abduction of Persephone and helps bring her back to her mother, becoming her attendant in the Underworld as reward. FTP identify this goddess associated with night, the moon, witches and crossroads.

Answer: **Hecate** or **Hekat**.

23. It currently funds 380 researchers and publishes Proceedings A and B, Transactions A and B, as well as an annual yearbook. Beginning with informal meetings at Gresham College, at its inception it contained both scientists and wealthy amateurs who might become their patrons, although since 1847 only scientific merit is looked at when electing fellows. Its first president was William Brouncker and others include T.H. Huxley, Joshua Compton, and Samuel Pepys. FTP name this independent national academy of the U.K. chartered in 1662, which has been presided over by Humphrey Davy and Isaac Newton.

Answer: **Royal Society** of London.

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1. "The Lion King" has been called Hamlet in fur, but as with any Disney treatment, most of *Hamlet's* darker aspects were whitewashed. Given the Lion King character, and what would have happened if the movie had followed *Hamlet's* plot more closely, give the Shakespearean equivalent F5PE:

A. Zazu, who'd get killed when Simba put his claws through a bush or something he was hiding behind

Answer: **Polonius**

B. Scar, who wouldn't be left alive for the hyenas to finish him off – Simba would scratch him with claws dipped in poison, then force him to drink out of a poisoned water dish.

Answer: **Claudius,**

C. Sarabi, who'd marry Scar and try to look happy about it. Yecch.

Answer: **Gertrude**

D. Nala, who'd go nuts and throw herself into the watering hole.

Answer: **Ophelia**

E. F5PE, Timon and Pumbaa, who'd sell Simba out and set him up to be killed, only he'd find out and get them whacked first.

Answer: **Rosenkrantz and Guildenstern** (order doesn't matter)

2. Alkaloids are any of a class of organic compounds composed of carbon, hydrogen, nitrogen, and usually oxygen that are often derived from plants. Identify these commonly used alkaloids, 10 pts. each.

a. This alkaloid drug derived from belladonna and other plants of the nightshade family is given before general anesthesia to keep the air passages clear and is an ingredient in various preparations for symptomatic relief of colds and asthma.

Answer: **Atropine**

b. Found in opium, this alkaloid is a narcotic whose effects, though less potent, resemble those of morphine. An effective cough suppressant, it is mainly used in cough medicines.

Answer: **Codeine**

c. A white crystalline alkaloid with a bitter taste, it is derived from the bark of several species of *Cinchona* trees native to Peru. It is most commonly used to treat malaria.

Answer: **Quinine**

3. Is this really a banner year for college quarterbacks, or just for sports information directors? Given a prominent quarterback, name his university F5PE:

a) Eli Manning

Answer: **Mississippi or Ole Miss** (do not accept Mississippi State)

b) Ken Dorsey

Answer: University of **Miami** (don't need to distinguish it from Miami of Ohio, but don't accept the latter)

c) Chris Simms

Answer: University of **Texas**

d) Jason Gesser

Answer: **Washington State** University (do not accept or prompt on just Washington)

e) Rex Grossman

Answer: University of **Florida** (do not accept Florida State)

f) Byron Leftwich

Answer: **Marshall** University

4. **HANDOUT**

Refer to the attachment. You don't have to know the title – just recognize the style. Identify the American painters who created these works FTPE.

1. Figure A.

Answer: Thomas **Cole**

2. Figure B.

Answer: Winslow **Homer**

3. Figure C.

Answer: Thomas Hart **Benton**

5. Those pesky politicians. FTPE, name these politicians from trouble they've caused..

(A) This man was a Republican Senator from Vermont, before becoming an Independent and allowing the Democrats to take control of the Senate. Chaos ensued.

Answer: James **Jeffords**

(B) This man was recently the second person to be expelled from the House of Representatives since the Civil War. He was sentenced to eight years in prison for bribery, tax evasion, and racketeering.

Answer: James A. **Trafficant**

(C) This man, despite getting shellacked in the primary in his reelection bid, is finishing out his term as a Democratic Representative from Modesto, CA, amid speculation of his role in the disappearance of intern, Chandra Levy.

Answer: Gary **Condit**

6. Answer these questions about conic sections for the stated number of points.

a. (5) This is a plane curve consisting of all points equidistant from a given fixed point (focus) and a given fixed line (directrix) It is the conic section cut by a plane parallel to one of the elements of the cone.

Answer: **parabola**

b. (10) What is the name of the chord through the focus perpendicular to the axis of a parabola?

Answer: **latus rectum**

c. (5) plane curve consisting of all points such that the difference between the distances from any point on the curve to two fixed points (foci) is the same for all points.

Answer: **hyperbola**

d. (10) These are lines, in the same plane, which the curve approaches as it approaches infinity. In an equilateral, or rectangular, hyperbola these are perpendicular.

Answer: **asymptotes**

7. Maxim Magazine has reduced the great classics to one-liners. Well, OK, sometimes two-liners. Given the line(s), name the literature classic being described FTPE:

A. Pip the orphan falls in love with rich girl Estella. About 400 pages later, they get together.

Answer: **Great Expectations**

B. Jake Barnes travels through Spain getting drunk and trying to get with Lady Brett, usually at the same time

Answer: **The Sun Also Rises**

C. Three brothers all pretty messed up. Everyone in the South is unhappy they're not sipping sasparilla.

Answer: **The Sound and the Fury**

8. Answer the following about ribosomes, FTSNOP.

1. (10 pts) A ribosome reads information encoded on this type of macromolecule to produce a polypeptide. Name it, FTP.

Answer: **mRNA or Messenger RNA** (prompt on RNA)

2. (5 pts each) For 5 points each, give the two letters that represent the sites occupied by tRNAs during elongation of the polypeptide chain. Note this is not including the E site from which the tRNA is released.

Answer: **A site & P site**

3. (10 pts) Ribosomes involved with producing polypeptides for exportation from the cell are usually in tight association with this wrinkly organelle. Name it, FTP.

Answer: **ER or Endoplasmic reticulum.**

9. Identify these related things from American history for 10 points each.

This 1961 agreement extended economic assistance to Latin American nations in exchange for land and tax reform, a more democratic government, and greater stability.

Answer: **Alliance for Progress**

John Kennedy's Latin America policy was called the Alliance for Progress, but what was the name given Franklin Roosevelt's Latin American policy, which sought to soothe the bad p.r. generated by "dollar diplomacy"?

Answer: **Good Neighbor Policy**

Successor to the Pan American Union, this international cooperative group founded in Colombia in 1948 has 35 members.

Answer: **OAS or Organization of American States**

10. FTPE identify the following Polar Explorers:

A. First to the North Pole, officially

Answer: Robert E. **Peary**

B. First to the South Pole

Answer: Roald **Amundsen**

C. Second to the South Pole, but (alas) not second to return

Answer: Robert F. **Scott**

11. Identify the Russian novels from clues FTPE.

1. This Boris Pasternak novel was censored by the Soviet administration because of its anti-Marxist stance as well as for its religiosity. It has been admired for its poetical language and, in fact, ends with 25 verses written by the title character.

Answer: **Doctor Zhivago.**

2. Raskolnikov, the anti-hero of this Dostoyevsky novel, wants to be like Napoleon. He robs and kills a pawnbroker and her sister to get food for his family, but feels remorse. Later, at the behest of his lover Sonya, he confesses to inspector Porfiry Petrovich and is sent to Siberia.

Answer: **Crime and Punishment.**

3. The theme of this Ivan Turgenev novel is the conflict between the younger, democratic generation represented by the nihilist Bazarov and the older, aristocratic generation represented by Pavel Petrovich Kirsanov.

Answer: **Fathers and Sons.**

12. Name the scientist given the year of his Nobel Prize in Physics and a description of his work FTPE.

1. 1939, "for the invention and development of the cyclotron and for results obtained with it, especially with regard to artificial radioactive elements."

Answer: Ernest Orlando **Lawrence**

2. 1904, "for his investigations of the densities of the most important gases and for his discovery of argon in connection with these studies."

Answer: Lord **Rayleigh**, John William Strutt

3. 1945, "for the discovery of the Exclusion Principle."

Answer: Max **Planck**

13. It didn't involve the Red Sox in late summer. Answer questions about the original Boston Massacre FTPE.

1. This black sailor was killed in the scuffle, becoming a revolutionary martyr.

Answer: Crispus **Attucks.**

2. He was the commander of the troops whom he ordered into line to protect the customs house from the angry mob.

Answer: Thomas **Preston.**

3. This man, along with Josiah Quincy, defended Preston and his troops, getting them off with little punishment, thereby avoiding their execution which would have been "a foul stain upon this country."

Answer: **John Adams.**

14. Sometimes he gets good parts in good movies, like *The Sixth Sense* and *Pulp Fiction*. But not always. Name these lesser Bruce Willis movies from clues FTPE

1. Willis is a private eye and Daman Wayans is an ex-quarter back whose girlfriend, a topless dancer played by Halle Berry, is killed. Lots of action, wisecracks, and swearing follow as they track down the killers.

Answer: **Last Boy Scout.**

2. Willis is a Pittsburgh cop who has to work at River Rescue after he testifies against his cousin who brutally beats a suspect to death. Also involved is the serial murdering of women that Willis' character knew. Sarah Jessica Parker and Dennis Farina co-star.

Answer: **Striking Distance.**

3. This is Willis' most under-appreciated movie. He plays a cat burglar who is kidnapped by a rich couple to help them re-build an alchemy machine that Da Vinci had made centuries before. Andie MacDowell, Danny Aiello, James Coburn and Sandra Bernhard co-star.

Answer: **Hudson Hawk.**

15. Identify the following about the death of a major Norse God.

1. This beautiful god of light, the son of Frigga and Odin, was killed by the Hodur, who had been egged on by Loki, with the only thing in the world that Frigga had not induced to swear not to harm him.

Answer: **Baldur.**

2. This was the material that killed Baldur.

Answer: **Misletoe.**

3. This son of Odin, who grew to manhood in a single day, avenged the death of Baldur by killing Hodur. He was also one of the few gods to survive Ragnarok.

Answer: **Vali.**

16. Identify the following about classic works of children's literature FTPE.

1. First published in 1974, this Shel Silverstein poetry collection has sold 4.5 million copies making it the most popular children's poetry collection. It contains "Sick," "Dancing Pants," and "The Dirtiest Man in the World."

Answer: **Where the Sidewalk Ends.**

2. This Kate Douglas Smith Wiggin novel drew great praise from both Jack London and Mark Twain. It tells of a girl with too many siblings who is forced to leave home and live with her strict aunt Miranda. However, she soon charms both the aunt and the town.

Answer: **Rebecca of Sunnybrook Farm.**

3. This L.M. Montgomery title character is a fiery red-headed orphan who is adopted by the elderly siblings Matthew and Marilla Cuthbert. She befriends Diana Barry and eventually falls in love with Gilbert Blythe.

Answer: **Anne of Green Gables or Anne Shirley.**

17. Tell who composed the following operas for 10 points each:

A. Das Rheingold, Siegfried, and The Flying Dutchman

Answer: **Richard Wagner**

B. Don Giovanni and Marriage Of Figaro

Answer: **Wolfgang Amadeus Mozart**

C. Girl of the Golden West and La Boheme

Answer: **Giacomo Puccini**

18. Identify the leaders in the Italian Independence Movement from clues FTPE.

1. After a failed insurrection in Genoa he was exiled to South America where he formed the redshirts and participated in guerilla warfare for Uruguay against Argentina. From 1860-61 his Italian redshirts invaded Sicily and Naples paving the way for Italian unification.

Answer: **Guiseppe Garibaldi.**

2. This leader of "Young Italy" wanted to establish an Italian democracy with capital at Rome. In the wake of 1848 rebellions he was made a triumvir in revolutionary Rome but the city was eventually retaken by French forces ending his influence in Italy.

Answer: **Guiseppe Mazzini.**

3. This King of Sardinia Piedmont, the only constitutional state in Italy and thus an attraction for revolutionaries and nationalists, became the first king of unified Italy after Austria ceded Lombardy and Garibaldi conquered the South.

Answer: **Victor Emmanuel II.** (don't accept Victor Emmanuel I because he kept his dynastic designation after becoming king of Italy.)

19. Friedrich Mohs knew a lot about hard and soft things. FTPE, given the number on Mohs' Hardness Scale, tell what mineral it corresponds to.

1. 10

Answer: **Diamond.**

2. 1

Answer: **Talc.**

3. 8

Answer: **Topaz.**

20. Identify the American historians from clues and works FTPE.

1. He studied the American westward expansion with a "frontier-thesis" and wrote "The Significance of the Frontier in American History." Culturally, he argued, the American frontier was conducive to spreading American traits, including, "That coarseness and strength combined with acuteness and acquisitiveness."

Answer: Frederick Jackson **Turner**.

2. This Chicago based historian and talk-show host wrote oral histories consisting of interviews with participants in the events. His works include *Working*, *American Dreams: Lost and Found*, and the Pulitzer Prize winning WWII history *The Good War*.

Answer: Studs **Terkel**.

3. A Former Librarian of Congress, this pop historians work includes *The Discoverers*, *The Creators*, and *The Seekers*, as well as *The Americans*, a three-volume biography of the American people.

Answer: Daniel **Boorstin**.

21. FTPE, what are the legislative branches of the following Governments called?

A. Spain

Answer: **Cortes**

B. Russia

Answer: **Duma**

C. Israel

Answer: **Knesset**

Round 1, Bonus #4 -- Figure A



Figure B



Figure C

