

Among the founders of this organization were Jane Addams, Helen Keller, Eugene Debs, and Felix Frankfurter. Originally established to defend conscientious objectors to World War I, it expanded to defend freedom of expression and privacy. FTP, name this organization best known for its involvement in court cases concerning First Amendment issues.

ACLU (American Civil Liberties Union)

The progenitor of most of the British institutions of government, this body was also known as the magnum concilium. Unlike the witan, it was regularly called three times a year during Christmas, Easter, and Pentecost. FTP, name this Norman organ of government, whose name means king's court in Latin.

\_Curia Regis\_

Discovered in 1592 by John Davis, this island group's main export is wool. With its capital at Stanley, it is located only a short distance from Cape Horn. FTP, name this archipelago best known for a brief 1982 war between Argentina and Britain.

Falkland Islands

Established in 1929 as a national monument and made a park in 1978, the wildlife here includes bighorn sheep and bison. It is an arid region of sedimentary rock that has been eroded into spectacular formations of canyons, gullies, and spires. FTP, name this park located in South Dakota.

Badlands National Park

Subtitled A Novel Without a Hero, this novel is set on the eve of the Battle of Waterloo. It shows the virtues of Captain Dobbin and Amilia Sedley clashing with the schemes of Becky Sharp. FTP, name this Thackeray work.

\_Vanity Fair\_

It temporarily postponed the struggle between Austria and Prussia over power in Germany. Among other things, this agreement provided that Prussia and Austria would both be sovereign over Schleswig-Holstein, with each country administering one of the republics. FTP, name this treaty reached on August 20, 1865, and named after the Austrian city where it was signed.

A: Convention of Gastein (Badgastein)

Going from its namesake city in Maryland to Vandalia, Illinois, this road was authorized in 1806. Construction began in 1811, and it reached Wheeling in 1818. FTP, name this first federal road.

\_Cumberland\_ Road (accept \_National\_ Road)

Green, Hertford, Brasenose, Linacre, Keble, Nuffield, Pembroke, St. John's, University, and Trinity are all, FAQTP, colleges of what British institution of higher learning?

\_Oxford\_

It is administered by the State Department, and it operates in about 40 countries worldwide. Technical skills and equipment are provided by the recipient nations. It was set forth in Truman's inaugural address to make "the benefits of our scientific advances available for the improvement and growth of underdeveloped areas." FTP, name this program, so called because it was one of the points in Truman's address.

A: Point Four Program

Its title has frequently been used to describe the mid-20th century. This poem concerns three men and a woman who meet in a wartime New York bar. In a common dream they set out on quest in which they discover Hope in Christianity as the solution to their problems. FTP, name this W.H. Auden work.  
A: The Age of Anxiety

The main character allows himself to be fleeced by Dorante, and unscrupulous nobleman, and he then forbids his daughter to marry her beloved Cleonte or any other commoner. Cleonte dresses as the son of the Grand Turk, babbles Pseudo-Turkish until the man grants him his daughter's hand. FTP, name this tale of Monsieur Jourdain, a play by Moliere.

A: The Would-be Gentleman (tr Le Bourgeois Gentilhomme)

His early work was concerned with industrial fluctuations, as presented in The Pure Theory of Capital, and the question of individual values in a capitalist world. Born in 1899, he taught at London University before becoming a professor at the University of Chicago. FTP, name this Austrian-born author of The Road to Serfdom, a pioneer of libertarianism who shared the Nobel Prize for Economics in 1974 with Gunnar Myrdal.

A: Friedrich von Hayek

After taking two years off from Harvard to improve his health, this writer returned in 1836 and graduated at the top of his class. Later becoming a lawyer, he specialized in serving seamen. This was due to the two years he spent away from Harvard as a common sailor on the *Pilgrim*. FTP, name this author of Two Years Before the Mast.

A: Richard Henry Dana, Jr.

The son of an English army officer stationed in Ireland, this dramatist was educated at the Kilkenny School where he was a classmate of Jonathan Swift, with whom he became friends. His first play, "The Old Bachelor," was produced under the auspices of John Dryden. His tragedy The Mourning Bride is the source of the saying "Music hath charms to soothe a savage beast." FTP, name this author of Love For Love and The Way of the World.

A: William Congreve

John and Dot Peerybingle take in an elderly boarder whom John discovers is a young man in disguise. John grows suspicious when he sees the man with his arm around Dot. The young man is Edward Plummer, who bursts in with his young wife May Fielding, and he explains that he was only seeing if his wife truly loved the man she was supposed to marry. Happiness returns to the household, in part due to the efforts of the family cricket, who only sings when all is well. FTP, name this Charles Dickens Christmas tale.

A: Cricket on the Hearth

Set in Hollywood, where the author spent the last years of his life writing screenplays, this novel deals with a man named Homer Simpson, who arrives in southern California to find a group of misfits living boring lives. The book ends with a surrealistic riot at a movie theatre. FTP, name this Nathaniel West novel.

A: The Day of the Locust

He created a new accentual verse in Russian known as dolniki, which is based only on the number of stresses per line. Among his well known poems are "The Scythians" and "Songs of the Beautiful Lady." FTP, name this greatest Russian symbolist poet, best known for "The Twelve."

A: Aleksandr Blok

He was briefly employed by Samuel Richardson as a printer's assistant. His literary career began with a didactic poem entitled "The Traveler." His later works include many well known tales such as

"Reverie at the Boar's Head Tavern." FTP, name this author of The Vicar of Wakefield and She Stoops to Conquer.

A: Oliver Goldsmith

His earliest novels are witty satires of London society, the English upper classes, and the young intellectuals of the 1920's, with all of whom he consorted. Among his better known novels are Black Mischief, The Loved One, and Decline and Fall. FTP, name this author, best known for Brideshead Revisited.

A: Evelyn Waugh

The Idea Men, Chairface Chippendale, Dinosaur Neil, The Midnight Bomber That Bombs at Midnight, and El Seed have all been foes of this blue-suited defender of "The City." FTP, name this crusader for justice whose sidekick is Arthur.

A: The Tick

In computer science, it designates a piece of memory designated for temporary storage of information. In chemistry, it is a solution prepared by combining a weak acid or base with its conjugate. This allows the solution to be resistant to pH change if a strong acid or base is added. FTP, name this scientific term.

A: Buffer

This type of flowering plant has flower parts arranged in threes, parallel veins in the straplike leaves, a fibrous root system, and only one seed leaf. FTP, name this plant class which includes grasses, lilies, and orchids.

A: Monocot

Found in amylase or amylopectin form, these compounds, like maltose, have alpha-1,4 linkage of glucose elements. They are often composed of 1000 glucose units, and are first broken apart by enzymes in the saliva. FTP, name these compounds found in potatoes.

A: Starch

21) On June 30, 1908, a large piece of a broken-up comet approached Earth's atmosphere. This large chunk of ice created an explosion similar to a hydrogen bomb which was felt over 600 miles away. Over 2000 square km of pine forest was flattened by the blast. FTP, name this extraordinary event, named for a river in Central Siberia over which the explosion took place.

A: Tunguska Event

23) In the eighteenth century, Great Britain offered a sum of 20,000 pounds to any scientist who could figure out a way to calculate this value, a number central to the trade of the country. A clockmaker, John Harrison, spent 46 years working on the problem and discovered that the solution was a weatherproof, motionproof, and oceanproof clock. This helped the captains of the ships by the fact that there would be one hour difference between the clock and Great Britain time for every 15 degrees you sailed west. FTP, what value am I alluding to?

A: Longitude

T. It begins when acetyl coenzyme A reacts with oxaloacetate to form citrate, and ends with the conversion of malate to oxaloacetate. Along the way, two molecules of carbon dioxide and one molecule of adenosine triphosphate are formed. FTP name this process by which living cells complete the oxidation of foodstuffs, name for the German-born British biochemist who shared the 1953 Nobel Prize in Medicine with Lipmann.

A: Krebs (or citric acid or tricarboxylic acid or TCA) cycle

T. Surfaces on which a multivalued function of a complex variable may be interpreted as single-valued are named for him. His curvature tensor is ubiquitous in general relativity, and his zeta function is the subject of a famous unproved conjecture. His non-Euclidean geometry postulated that, through a point outside a line, there are no parallels to that line. FTP, name this German mathematician of the 19<sup>th</sup> century.

A: Georg Friedrich Bernard Riemann

T. Consider a rectangular block of unequal dimensions. If the block is lying on one of its largest faces, it is said to be in a stable equilibrium; if balanced on a corner, the block is unstable and will fall. But if balanced on a small face, the block will remain there unless a moderate force is applied to knock it out of equilibrium, tipping it over into the more stable equilibrium. FTP, what term describes this condition, desirable in metal alloys, where a system trapped in a local energy minimum needs an influx of energy to achieve a global minimum?

A: Metastable

T. The redness of blood is due to hemoglobin, but the red color of vertebrate muscle comes from this simliar protein about one-fourth the size. It combines with oxygen more readily than hemoglobin does, facilitating the transfer of oxygen from the bloodstream to muscle cells. FTP, name this protein, the elucidation of whose structure earned John Kendrew a share of the 1962 Nobel Prize in chemistry.

A: Myoglobin

T. Along with her brothers Osgood and Sacheverell, she was active in the London literary scene of the twenties and thirties, promoting Modernism and attacking Georgian poetry. She wrote *Facade*, an eccentric musical, a poorly received novel, and a poem comparing Europe to pre-colonial Africa before finally winning acclaim for her World War II poems on the blitz and the atom bomb. FTP, name this author of *Street Songs*, *The Song of the Cold*, and *The Shadow of Cain*.

A: Dame Edith Sitwell

T. His brilliant first novel was followed by the critically panned works *Barnaby Shore* and *Deer Park*. He revived his popularity, if not his critical reputation, with 1959's *Advertisements for Myself*, followed by the novel *An American Dream*. He was better respected for his journalistic essays like *The Armies of the Night*, and pieces on the 1968 Democratic convention and the moon landing. FTP, name this author of *Tough Guys Don't Dance*, *The Executioner's Song*, and *The Naked and the Dead*.

A: Norman Mailer

T. This short-lived Chinese dynasty, originated by a small feudal state in the Wei River valley, came to full flower under the boy king Chao Cheng, who pronounced himself Shih Huang-Ti, or "first sovereign emperor". Its authoritarian government standardized writing and measurements, built the Great Wall, and burned subversive books and rogue scholars. FTP, name this dynasty which ruled China from 221 to 206 B. C.

A: Qin or Ch'in (CHIN)

Bonuses

1.

2. 3. Identify these figures prominent in the development of aviation for the stated number of points.

5 - He made the first successful flight in a heavier-than-air airplane on Dec. 17, 1903, but he was almost killed while making a test flight at Fort Meyer, Virginia on Sep. 17, 1908.

Orville Wright

10 - This physics professor produced the first heavier-than-air aircraft to achieve sustained flight. Unfortunately, his planes were uncontrolled, and one crashed into the Potomac River just 9 days before the successful Wright Brothers flight.

Samuel Langley

15 - This Brazilian won the Deutsch-Archdeacon Prize in 1906 for achieving the first officially observed powered flight in Europe.

Alberto Santos-Dumont

4.

5.

6. For 10 points apiece, name these English laws.

A. First enacted in the 12th century, the last of these laws was finally repealed in 1846 following food shortages caused by the Irish potato famine.

Corn laws

B. This 1832 law abolished rotten boroughs and pocket boroughs and expanded representation for urban areas.

Reform Act

C. This 1834 law ended the system of direct subsidies for the poor and instead limited welfare relief for the able-bodied to employment in workhouses.

New Poor Law

7. For 10 points apiece, name these U.S. political figures.

A. From 1918 to 1921 he served as chairman of the Republican National Committee, in 1921 he became Postmaster General and in 1922 president of the Motion Pictures Producers and Distributors of America.

William Hays

B. He was Secretary of War from 1911 to 1913, Secretary of State from 1929 to 1933, and Secretary of War again from 1940 to 1945.

Henry Stimson

C. Although appointed by Wilson to become chairman of the

War Industries Board in 1918, he was noted more for his political work behind the scenes, helping Hoover to form a bipartisan coalition to create the Reconstruction Finance Corporation and advising FDR on war mobilization efforts as an "elder statesman."

Bernard Baruch

8. Answer the following questions about Byzantine emperors.

5 points - Emperor from 527 to 565, he is known for his expansion of the empire and codification of laws.

Justinian I

10 points - Emperor from 976 to 1025, he extended imperial rule in Bulgaria, Georgia, and Armenia, but failed to establish a Greek pope in Rome as he wished.

Basil II

15 points - The final Byzantine emperor, ruling from 1449 to 1453, he died during the fall of Constantinople to the Ottomans.

Constantine XI (or XII)

9. Identify the U.S. based on biographical information for 10 points or a famous work for 5 points.

A. 10 points - He was Secretary of the Navy 1845-1846, Minister to England 1846-1849, and Minister to Prussia 1867-1871.

5 points - History of the United States  
George Bancroft

B. 10 points - At Harvard he was blinded in one eye by a crust of bread thrown in a student melee.

5 points - History of the Conquest of Mexico  
William Prescott

C. 10 points - After a breakdown in health in his final year at Harvard, he toured Europe for a year, living for a time in a monastery in Rome.

5 points - The Jesuits in North America in the 17th Century

Francis Parkman

10. For 10 points apiece, identify these Civil War figures from their quotes.

A. His dying words on May 12, 1864 were "I am going fast now. I am resigned. God's will be done."

JEB Stuart

B. On August 29, 1861, she wrote, "I think these times make all women feel their humiliation in the affairs of the world. With men it is on to the field - "glory, honor,

praise, power." Women can only stop at home - and every paper reminds us that women are to be violated - ravished and all manner of humiliation. How are the daughters of Eve punished."

Mary Bokyin Miller Chestnut

C. On May 1, 1863, he boasted, "I have got Lee just where I want him; he must fight me on my own ground."

Joseph Hooker

11. For 10 points apiece, name these African-American leaders of the 1960s.

A. Becoming chairman of SNCC in 1967, he published Die Nigger Die in 1969 before being engulfed in legal problems that culminated in his conviction for armed robbery in 1973.

H. Rap Brown

B. Granddaughter of a slave, she helped organize the Mississippi Freedom Democratic Party in 1964 to challenge the Democratic Party's hegemony in her native Sunflower County and even tried to run against Representative Jamie Whitten although her name was not permitted on the ballot.

Fannie Lou Hamer

C. Presidential candidate for the Peace and Freedom Party in 1968, he fled the U.S. in that year, travelling to Cuba and Algeria where he established international sections of the Black Panther Party.

Elridge Cleaver

12. Answer the following questions for ten points.

A. This Dominican priest became known as the Apostle of the Americas because of his impassioned defense of indigenous peoples both before royal councils and in works such as A Brief Report on the Destruction of the Indians written in 1542.

Bartolome de las Casas

B. From 1544 to 1547, Las Casas was bishop of this region, then a part of colonial Guatemala, now a state of Mexico.

Chiapas

C. Because of his labor in Chiapas, this city, the state's capital until 1892, was named for him.

San Cristobal de las Casas

13. Name the following African kingdoms for 10 points apiece.

A. Organized by Osei Tutu, this empire dominated what is now southern Ghana from the 1670s until the last 19th century.

Ashanti (or Ashante)

B. This empire reached its greatest power during the reign

of Mansa Musa from 1307 to 1332, during which time it absorbed the cities of Gao and Timbuktu.

Mali

C. This state, characterized by an inner-core of centralized provinces surrounded by loosely-affiliated vassal states, flourished in western Zaire and northeastern Angola from the 17th to 19th centuries before its final destruction by Belgian forces in 1909.

Lunda

14. For 10 points apiece, answer the following heresies and heretics questions.

A. This emperor of Rome and nephew of Constantine the Great tried to return the empire to paganism during his reign from 361 to 363.

Julian the Apostate

B. This heretical group, based upon a gnostic conception of deity, began in Cologne in the 1140s, spread to France by the 1160s, and was ruthlessly suppressed by a crusade initiated in 1208.

Cathari (or Catharists)  
accept Albigenses

C. This British-born monk stressed the efficacy of human works in salvation in contrast to Augustine's teaching of divine grace, earning him excommunication from the Church in 417.

Pelagius

15. Name these colonial governors on a 5, 10, 15 point basis.

5 - The first governor of the Massachusetts Bay Colony, he served in this position from 1630 to 1633, 1637 to 1640, 1642 to 1644, and 1646 to 1649.

John Winthrop

10 - Appointed by James II to be governor of the Dominion of New England in 1686, he so antagonized colonists with unpopular laws and taxes that he was removed from office by the Boston militia in 1689.

Sir Edmund Andros

15 - Becoming the last civilian governor of Massachusetts in 1771, he helped caused the Boston Tea Party when he refused to allow ships to return their cargoes of tea to England in 1773.

Thomas Hutchinson

16. For 10 points apiece, name these Canadian prime ministers.

A. 1st prime minister of the Dominion of the Canada, he served from 1867 to 1873 and again from 1878 to 1891.

Sir John Macdonald

B. Longest-serving prime minister, he held that post from 1921 to 1926, 1926 to 1930, and 1935 to 1948.

W.L. Mackenzie King

C. Prime minister from 1963 to 1968, he was in office when Canada adopted the maple leaf flag and celebrated the 100th anniversary of the Dominion of Canada.

Lester Pearson

17. For 10 points a pop, name these African political figures.

A. When Guinea voted in 1958 not to join a new federal community and instead opted for independence, he was elected the nation's first president and continued to serve until his death in 1984.

Sekou Toure

B. A strong supporter of Pan-African unity, he became the first president of Ghana in 1946, but was overthrown by the Ghanaian army while he was away on a trip to Beijing.

Kwame Nkrumah

C. President of Cote d'Ivoire from its independence in 1960 until his death in 1993, he transformed that nation from an under-developed colony to one of the most successful independent states in Africa.

Felix Houphouet-Boigny

18. Answer these questions about assassinated South Asian leaders on a 5-10-15 points basis.

5 - While serving her fourth term as prime minister, she was assassinated by her Sikh bodyguards in response to the storming of the Golden Temple of Amritsar.

Indira Gandhi

10 - This Berkeley-educated lawyer served as Pakistan's president and prime minister in the years from 1971 to 1977, but was ultimately overthrown, and hanged in 1979.

Zulfikar Ali Bhutto

15 - As president he negotiated the withdrawal of Indian peace-keeping forces from Sri Lanka, but he was assassinated in May of 1993 by a suicide bomber linked to the Tamil Tigers.

Ranasinghe Premadasa

19. Name the European historians for 10 points apiece.

A. This Swiss historian, considered to be one of the first great cultural historians, published The Civilization of the Renaissance in Italy in 1860.

Jacob Burckhardt

B. Executed by a firing squad for his participation in the French Resistance, this historian, a co-founder of the Annales movement of historiography, published French Rural History in 1931.

Marc Bloch

C. Although he published few works himself, this Cambridge professor coordinated the production of The Cambridge Modern History and wrote in a letter, "Power tends to corrupt, and absolute power corrupts absolutely."

Lord Acton

30-20-10. Name the place.

30) Its highest elevation is in the Cypress Hills. Other highland regions in this province are Pasquia and the Missouri Coteau.

20) Its name derives from an Indian word meaning "rapid river".

10) Its cities include Moose Jaw, Prince Albert, and Regina.

A: Saskatchewan

Identify the following Supreme Court cases for the stated number of points.

a. For five points, identify the case in which Marshall held that Congress was supreme in all aspects of interstate commerce and could not be limited by state powers in that area.

A: Gibbons v. Ogden

b. For ten points, in this case, the Court ruled that Federal Courts have the power and duty to pass on the validity of distribution of state legislative seats.

A: Baker v. Carr

c. For fifteen points, identify the case in which the court invalidated the Keating-Owen Act of 1916, which forbade interstate shipment of the products of child labor. It was overturned by U.S. v. Darby.

A: Hammer v. Dagenhart

FTP each, answer the following questions about the Plymouth Colony.

a. Name the group which granted the colony its patent. They were a reorganized branch of the Plymouth Company.

A: Council for New England

b. Name the first governor of Plymouth Colony.

A: John Carver

c. Name the second governor, who held the position for thirty years from 1621-1651.

A: William Bradford

Answer the following questions about the work, Institutes of the Christian Religion, for the stated number of points.

a. For five points, who wrote it?

A: John Calvin

b. For ten points, name the doctrine which became known for, which states that God has arbitrarily chosen to grant salvation to certain souls, and men have no control over this.

A: predestination

c. For fifteen, what French king tried to suppress protestantism and drove Calvin out of France?

A: Francis I

30-20-10. Identify the legendary figure.

30) This priest-king ruled over an utopia of enchanted castles, vast wealth, pepper forest, and emerald waters.

20) The first account of him by Otto of Friesing said he was a Nestorian priest-king descended from the Magi.

10) After searches in Asia proved fruitless, his legend was attached to the then-mysterious kingdom of Ethiopia.

A: Prester John

For ten points apiece, answer the following questions about musical instruments around the world.

a) This Russian instrument resembling a guitar has a triangular body and evolved from the domra of Central Asia.

A: Balalaika

b) Also known on Java as the kroncong, this instrument was derived from a Portugues instrument and derives its name from the Hawaiian word for flea.

A: Ukelele

c) A mechanized fiddle, this instrument (also known as the vielle) was played by depressing keys to shorten the length of a melody string and cranking a wheel at the base to sound the strings.

A: Hurdy-Gurdy

Answer these questions about the U.S. and the Phillipines for ten points apiece.

a. Name the insurrectionist leader whom the U.S. sent back to the Phillipines to direct a native uprising against the Spanish.

A: Emilio Aguinaldo

b. Name the Cornell University president whom President McKinley appointed to head the first Phillipine Commision in 1899.

A: Jacob Schurman

c. Name the Federal Circuit Court Judge whom McKinley appointed to head the second Phillipine Commission in 1900.

A: William Howard Taft

Given the first line of a well-known English poem, give the title and author of that poem FFP apiece.

"April is the cruelest month.."

A: The Waste Land by T. S. Eliot

"The curfew tolls the knell of the parting day"

A: Elegy Written In a Country Churchyard by Thomas Gray

"I met a traveller from an antique land"

A: Ozymandias by Percy Bysse Shelley

Identify the following novels for 10 points given the protagonist, for five if you need the author.

a. (10) Catherine Sloper

(5) Henry James

A: Washington Square

b. (10) Harry Morgan

(5) Ernest Hemingway

A: To Have and Have Not

c. (10) Becky Sharp

(5) William Makepeace Thackeray

A: Vanity Fair

Name the author from works, 30-20-10

(30) Random Harvest

(20) Lost Horizon

(10) Goodbye, Mr. Chips

A: James Hilton

Identify the poet from works, 30-20-10

(30) "Altarwise by owl-light"

(20) "And death shall have no dominion"

(10) "Fern Hill"

A: Dylan Thomas

Identify these F. Scott Fitzgerald novels from clues, for ten points each.

a. Name his last novel, which is unfinished, but often considered his best.

A: The Last Tycoon

b. This novel tells the story of midwesterner Amory Blain who attends Princeton and falls into an ill-fated love with Rosaline Commase.

A: This Side of Paradise

c. This post-WWI novel tells the story of Nicole, a wealthy mental patient, and her psychiatrist Dick Diver. Nicole leaves him for another man, and Dick becomes an alcoholic.

A: Tender is the Night

Identify these Leo Tolstoy works for the stated number of points.

a. For five points, identify the novel in which the title character falls in love with a young officer named Aleksei Vronski.

A: Anna Karenina

b. For ten points, identify the collection of three stories based on his observations during the Crimean War.

A: Sevastopol Sketches

c. For fifteen points, name the novel which deals with the spiritual regeneration of a young nobleman named Prince Nekhlyudov.

A: Resurrection

Answer these questions about important people in the development of modern realism for ten points each.

a) This British empiricist, known for his essays, agreed with Descartes in an early espousal of modern realism.

A: John Locke

b) This Cartesian contemporary of Locke was known for the quote "God's will is the true cause of motion."

A: Nicolas MALEBRANCHE

c) An 18th century French Jesuit, his beliefs were taken by the Scottish realists. The beliefs were based explicitly on common sense for accepting the world's external existence.

A: Claude BUFFIER

The 4th Amendment was just one of those attacked during the "constitutional revolution" of 1960.

a) First, for five points, what two-word phrase was used by defense lawyers to keep illegally obtained evidence out of criminal cases?

A: Exclusionary Rule

b) For ten points, in what 1914 Supreme Court case was the exclusionary rule first enunciated?

A: Weeks v United States

c) For five points, what 1962 case directly upheld the exclusionary rule in all criminal cases, state and federal?

A: Mapp v. Ohio

d) Finally, for ten points, Mapp v Ohio directly overruled what 1949 case which said only federal cases were subject to the exclusionary rule?

A: WOLF V COLORADO

FTP apiece, describe the bacterial structures.

This bacterial structure surrounds the cell walls of some disease-causing bacteria, and helps to prevent detection by immune systems.

A: Capsule

These hairlike projections are used for attachment to surfaces and used in sexual conjugation.

A: Pili

A protective resting structure, this contains genetic material, a few enzymes, and a thick cell wall.

A: Spore