

TOSSUP 1

For wood on wood, it is 0.3. For ice on ice, it is 0.03. It is applied in a multiple-object system as soon as one object moves in relation to another and is multiplied by the normal force to find the frictional force. For ten points, name this value, often contrasted with its static counterpart.

Answer: Coefficient of Kinetic Friction (accept answers with different word orders)

TOSSUP 2

This scientist was the first to create holes in a living, healthy animal, allowing for observation of the digestive system at work. He proved that the secretion of fluids in digestion is elicited by the central nervous system. He is also known for pioneering studies in classical conditioning. Winner of the Nobel Prize in Physiology in 1904, for ten points, name this Russian scientist, perhaps best known for the discovery that ringing a bell could cause a dog to salivate.

Answer: Ivan Petrovich Pavlov

TOSSUP 3

In this sport, the Duckworth-Lewis method can be used to officially decide which team would have won a rained-out one-day match, which is distinct from the 20/20 and test match forms of the game. The most important sport in India and Pakistan, this cousin to baseball is played chiefly in former British colonies. For ten points, name this sport with tea breaks in the middle of play, centered on the batsman's quest to score runs while guarding a wicket.

Answer: Cricket

TOSSUP 4

This structure was built over the filled-in lake Nero built for his Domus Aurea. In the Middle Ages, the Frangipani family used it as a fortification. The outer façade, comprised of three arcades atop one another with half-columns in the three classical orders, supported the velarium, an awning which kept sun and rain out. It is best known for hosting bloodthirsty events, including animal and gladiatorial combat. For ten points, name this large Roman stadium.

Answer: Colosseum (or Flavian Amphitheatre)

TOSSUP 5

This man left a teaching career at Transylvania University for a political career. As Speaker of the House early in his career, he helped the "War Hawks" incite the War of 1812. He brokered the Compromise Tariff of 1833. Never elected President, he lost to Polk in 1844, to Jackson in 1832, and gave his support to Quincy Adams in the "corrupt bargain" of 1824. Also the architect of the Compromises of 1820 and 1850, for ten points, name this statesman from Kentucky.

Answer: Henry Clay

TOSSUP 6

In one of his works, this author tells of a dream in which Scipio Africanus leads him into a garden where the titular entity argues about the tercel eagle's mate, a metaphor based in part on the marriage of Richard II of England to Anne of Bohemia. As in the aforementioned Parliament of Fowls, eagles are featured in his uncompleted House of Fame, though his poem Troilus and Criseyde is relatively bereft of eagles. His best-known work is a collection of stories told at the Tabard Inn after Harry Bailly proposes a contest, whose entries include yarns about Absalom branding Nicholas's rear end with a red-hot iron, and Palamon and Arcite's battle over Emily. For ten points, name this early English author who created the stories of a Manciple, Parson, Pardoner, Nun's Priest, Knight and several others in his Canterbury Tales.

Answer: Geoffrey Chaucer

TOSSUP 7

This man portrayed the philanderer Henry Hutton, whose wife dies after being poisoned by Henry's mistress, Doris, in "The Gioconda Smile". Late in his career, he indulged in heavy LSD use in an attempt to emulate a mystical state, which inspired his later novels, such as *The Genius* and *The Goddess and Island*. Mark Rampion represents his contemporary, D.H. Lawrence, in his novel *Point Counter Point*, while Anthony Beavis is a quasi-autobiographical character in his *Eyeless in Gaza*. He is best known for a novel which takes its title from Shakespeare's *The Tempest*, in which the Bokanovsky process segregates characters like Mustapha Mond, Lenina Crowe, and Bernard Marx into groups designated by Greek letters. For ten points, name this British author who introduced John the Savage in his dystopian novel *Brave New World*.

Answer: Aldous Huxley (prompt on "Huxley")

TOSSUP 8

This group's greatest defeat, the Amboina Massacre, was followed by the establishment of modest trading enterprises, especially on the Hooghly River. In the 18th century, it changed from a mercantile operation into a political organization led by such military leaders as Lord Cornwallis and Robert Clive, who conquered Bengal for it in the Battle of Plassey. In 1857, it would be dissolved, as the Sepoy Mutiny forced direct action from the British Crown. For ten points, name this company founded in 1600 which conquered India.

Answer: British (or English) East India Company

TOSSUP 9

The villain in this novel uses characters such as Tamenund and Hard Heart as pawns to capture the object of his obsession, whom he eventually stabs before being shot off a cliff. The action begins with orders to escort two sisters from Fort Edward to Fort William Henry, but Major Duncan Heyward and the singer David Gamut don't know how to navigate the wilderness, so they hire the treacherous Magua to lead them. For ten points, name this novel in which the lover of Uncas, Alice Munro, is rescued by Natty Bumppo, or Hawkeye, the second and most popular of the Leatherstocking tales by James Fenimore Cooper.

Answer: The Last of the Mohicans

TOSSUP 10

This man was the main focus of a 2006 documentary by Oxford professor Richard Dawkins that ended with threats of legal action when he accused Dawkins of calling his children animals. That led Dawkins to conclude that this man was upset Dawkins defended the theory of evolution. For years, this evangelical opposed same-sex marriage, although he conceded that states should be free to enact civil unions for same-sex couples. For ten points, name this former preacher and founder of the New Life Church, who stepped down upon allegations of methamphetamine usage and that he hired a male prostitute for three years.

Answer: Ted Haggard

TOSSUP 11

Two main characters in this novel, Frazier and Burris, explain the titular community. This work emphasizes its author's belief that a scientific approach to education can remove antisocial tendencies and help achieve a Utopian society. It also promotes the use of elements of its author's theories of behaviorism. For ten points, name this work by B.F. Skinner, presented as a sort of sequel to Thoreau's story of his experience living next to a namesake pond.

Answer: Walden Two (do not prompt on "Walden")

TOSSUP 12

In one of this man's short stories, Fred Anderson is fired and reminisces about his days as a high school basketball star. Like "Ace in the Hole" and his most famous work, his poem "Ex-Basketball Player" features an ex-jock. Other short stories focus on high school life, such as "Pigeon Feathers" and a story in which Sammy is fired for defending three girls from his boss Lengel, "A&P". The author of Brazil, The Poorhouse Fair, and The Witches of Eastwick, his best-known works focus on the basketball star turned salesman, Harry Angstrom. For ten points, name this American author of a tetralogy which includes the novels Rabbit at Rest and Rabbit, Run.

Answer: John Updike

TOSSUP 13

In this man's first term, he carried out campaign promises to form a Federal Trade Commission as part of his "New Freedom" platform. Before coming to national prominence, he had served as Governor of New Jersey and the President of Princeton University. He also established the nation's first income tax after passage of the Sixteenth Amendment. His second term was dominated by war against Germany. For ten points, name this President who failed to bring the United States into his brainchild, the League of Nations.

Answer: Thomas Woodrow Wilson

TOSSUP 14

This general practitioner is famous for finding a superior alternative to variolation. He did this in 1796 using 23 test subjects from the countryside, including a boy named James Phipps. By injecting material from a milkmaid's blisters into James' arms, he found that he could safely induce a cowpox infection. For ten points, name this English scientist, who invented the first vaccination for smallpox.

Answer: Edward Jenner

TOSSUP 15

In Book 7 of the Aeneid, he is described as a porter. He is one of the few figures in Roman mythology that does not have a Greek counterpart. When a boy came of age, this god especially was invoked in the ceremony. His temple was located on a road connecting the forum to housing on the outskirts of the city, and its gates were always left open during times of war. For ten points, name this early Roman deity of gates, doorways, and beginnings who had two faces, after whom the first month of the year is named.

Answer: Janus

TOSSUP 16

In this state, production and supplies are constrained. Price exceeds marginal cost at all quantities of production. Production is determined by the quantity at which marginal cost equals marginal profit. High prices and profits signal consumers' demand for more output. There is no squeeze on profits and thus no pressure to reduce costs or improve product quality. For ten points, these characteristics pertain to what market structure, in which for a given good, there is only one producer?

Answer: monopoly

TOSSUP 17

This 1969 film was the first released by British director John Schlesinger in the United States. The American Film Institute adjudged this movie's much-parodied quote, "I'm walkin' here!", as one of the greatest of all-time. The aforementioned line was delivered by a homeless man in New York City, played by Dustin Hoffman. For ten points, what film also starring Jon Voight is the only X-rated movie ever to win a Best Picture Oscar?

Answer: Midnight Cowboy

TOSSUP 18

Pencil and paper ready: Sarah invents a new game involving a fair six-sided die. If she rolls a 1 or a 2, she automatically wins. If she rolls a 3, she automatically loses. If she rolls a 4, 5, or 6, she must roll again. If on the second roll, an odd number comes up, she wins, otherwise she loses. With these rules in place, for ten points, in lowest terms, what is Sarah's probability of victory? You will have ten seconds.

Answer: 7/12

TOSSUP 19

Exiled by the Empress Sophia to the village of Prebrazhenskoye early in his life, this man later named a new regiment after the town as he replaced the streltsy brigades with modern troops. His new army fought wars to gain ports for his landlocked country, from the Sea of Azov in the south to the Baltic in the Great Northern War against Sweden. In 1703, he moved the capital of his nation to a new city by the sea. For ten points, name this Russian tsar who modernized the empire and built an eponymous city, known in Communist times as Leningrad.

Answer: Peter the Great (or Peter I)

TOSSUP 20

For several generations his History of Great Britain was the most important work on the subject. Of Superstition and Religion reveals the atheism that kept him from achieving high academic office in Glasgow and Edinburgh (ed-in-BUHR-uh). His first work, A Treatise of Human Nature, laid out his chief philosophical argument, that there can be no knowledge beyond firsthand experience. For ten points, name this Scottish skeptic and empiricist who wrote An Enquiry Concerning Human Understanding.

Answer: David Hume

TOSSUP 21

Its western border is a straight line for almost its entire length, except for a stretch where it follows the Fly River. Its landmass is mostly rainforest, but higher elevations, such as its tallest peak Mount Wilhelm, may experience snowfall. Despite being only slightly larger than California, over 850 languages are spoken within this country. For ten points, name this Australasian nation, also including New Ireland and New Britain, with capital at Port Moresby.

Answer: Papua New Guinea

TOSSUP 22

Discoveries in 1996 in the 16 Cygni system and in 2005 in the HD 188753 system proved that these systems can harbor planets. Notable ones include Megrez, the dimmest of the big dipper's seven major stars; the North Star, Polaris; Atlas and Taygeta, both located in the Pleiades; and the sun's nearest stellar neighbor, Alpha Centauri. For ten points, name this type of stellar system, typically consisting of a single star far from the system's center of mass paired with two closely orbiting stars.

Answer: Triple Star System (accept trinary or ternary)

BONUS

Margaret Mead, ten points each.

a. Mead wrote an autobiography of this teacher and close friend. This anthropologist studied Native American culture, as well as Japanese culture in *The Crysanthemum and the Sword*.

Answer: Ruth **Benedict**

b. Mead co-wrote this work with a prominent American author. It was a transcript of a rambling conversation between the two dealing mainly with social issues in the United States.

Answer: **A Rap on Race**

c. This African-American writer who collaborated with Mead in *A Rap on Race* wrote *Giovanni's Room* and *Go Tell it on the Mountain*.

Answer: James **Baldwin**

BONUS

Herman Melville works, ten points each.

a. The title character of this short story, subtitled "A Story of Wall Street", suddenly "prefers not to" do any of his work copying or editing papers. He eventually gets taken to the Tombs as a prisoner.

Answer: **Bartleby the Scrivener**

b. The title figure is impressed onto the HMS *Indomitable*, where he kills the malevolent Captain Claggart with one blow and, like a Christ-figure, is sentenced to be hung.

Answer: **Billy Budd**, Foretopman

c. This Melville novel features characters such as Ishmael and Captain Ahab, who is on a quest to kill the titular white whale.

Answer: **Moby Dick**

BONUS

Scholasticism, ten points each.

a. Hegel traced the roots of what he termed "Christian" school philosophy back to the closure of this Athenian institution of learning in 529 BCE.

Answer: The **Academy**

b. This Latin word, part of the title of Aquinas' best-known work, is defined as the attempt to give a comprehensive view of all of attainable truth.

Answer: **Summa**

c. This founder of Scholasticism is the originator of the ontological argument for the existence of God.

Answer: Saint **Anselm** of Canterbury

BONUS

Do the following organic compounds contain oxygen, sulfur, both, or neither? One correct for 5, two for 10, three for 20, and all four correct for 30 points.

a. Ethanol

Answer: **Oxygen**

b. 2,2,4 Trimethyl Pentane

Answer: **Neither**

c. Polyvinyl Chloride

Answer: **Neither**

d. Naphthalene

Answer: **Neither**

BONUS

Famous Bacons, ten points each. (Note: DO NOT prompt on "Bacon")

a. He led a 1676 rebellion against the Jamestown government by backcountry Virginian settlers that arose due to anger at friendly policies toward Native Americans.

Answer: Nathaniel Bacon

b. A Franciscan friar, he attempted to popularize an early form of the scientific method in the 13th century; his Opus Majus includes studies on physics and optics. He is often credited with discovering how to make gunpowder.

Answer: Roger Bacon

c. A philosopher of the late 15th and early 16th centuries, he formulated the first modern conception of the scientific method, proposing inductive reasoning from natural facts in his Novum Organum; some claim he authored Shakespeare's works.

Answer: Francis Bacon

BONUS

Given a list of supporting characters, name the early 90's Nickelodeon television show, ten points each.

a. Nona Mecklenberg, Bus Driver Stu, Artie- the Strongest Man in the World, Ellen Hickie, and Miss Fingerwood.

Answer: The Adventures of Pete & Pete (accept Pete & Pete)

b. Skeeter Valentine, Patti Mayonnaise, Beebe Bluff, Assistant Principal Lamar Bone, The Beets

Answer: Doug

c. Dr. Kahn, Ug, Z.Z. Ziff, Telly, Donkeylips, Bobby Budnick, Sponge

Answer: Salute Your Shorts

BONUS

U.S. third parties, ten points each.

a. Its first candidate for President, William Wirt, was not actually a member of this group. This was the first third party in United States history, operating in the 1830's.

Answer: Anti-Masonic Party

b. This party opposed the integration of immigrants into society, especially Irish Catholics. Winning many state elections in 1854, Millard Fillmore ran for President from this party in 1856.

Answer: Native American Party (or Know Nothings)

c. This party flourished from Ross Perot's 1992 Presidential candidacy. He ran again from this party in 1996, and its Jesse Ventura served as Governor of Minnesota, but it has since declined due to infighting.

Answer: Reform Party of the United States of America

BONUS

Name the physics term, ten points each.

a. The product of a force and the time interval over which it is exerted.

Answer: Impulse

b. The change in direction of a wave passing from one medium to another.

Answer: Refraction

c. The work done over a period of time.

Answer: Power

BONUS

Given a Latin American President, name the country he leads, ten points each.

a. Hugo Chávez Answer: Venezuela

b. Martín Torrijos Answer: Panamá

c. Óscar José Rafael Berger Perdomo Answer: Guatemala

BONUS

U.S. cities from clues, ten points each.

a. This city is infamous for a 1969 incident in which the surface of its Cuyahoga River caught fire.

Answer: **Cleveland**

b. In 1964, the Good Friday earthquake wrecked this city, the starting point for the Iditarod race.

Answer: **Anchorage**

c. The peace treaty in which Japan officially surrendered was signed in this city, destroyed by a 1906 earthquake.

Answer: **San Francisco**

BONUS

Given a polyatomic ion, identify its charge, ten points each.

*Note: DO NOT prompt on "plus" or "minus".

a. Ammonium, NH_4

Answer: **+1** (plus one OR one plus)

b. Dichromate, Cr_2O_7

Answer: **-2** (minus two OR two minus)

c. Hydroxide, OH

Answer: **-1** (minus one OR one minus)

BONUS

Poets and snow, ten points each.

a. The speaker in this Robert Frost poem wants to stay between the title locale "and frozen lake", but realizes he has "promises to keep, and miles to go before I sleep".

Answer: **Stopping by Woods on a Snowy Evening**

b. In Snow-Bound, this Quaker poet recalls people who were in his home on an exceptionally snowy night. He also wrote poems such as "Maud Muller" and "Barbara Frietchie".

Answer: John Greenleaf **Whittier**

c. This prolific Chinese poet of the 8th century wrote two poems entitled "Facing the Snow", as well as two poems about his contemporary, "Dreaming of Li Po."

Answer: **Tu Fu** (or **Du Fu**)

BONUS

Given songs, name the Broadway show, ten points each.

a. "Prayer for a Duck", "Corner of the Sky", "Magic to Do"

Answer: **Pippin**

b. "Think of Me", "Music of the Night", "All I Ask of You"

Answer: The **Phantom of the Opera**

c. "Whatever Lola Wants, Lola Gets", "Heart", "Bottom of the Ninth"

Answer: **Damn Yankees**

BONUS

Chemistry laws, ten points each.

a. Comparing the effusion rates for two different gases, a greater quantity of a light gas escapes from a given hole than a heavy gas, *ceteris parabus*.

Answer: **Graham's Law**

b. For an ideal solution, the vapor pressure of an individual chemical component is proportional to the mole fraction of that component in the system.

Answer: **Raoult's Law**

c. The entropy of an isolated system can increase but cannot decrease.

Answer: **Second Law of Thermodynamics** (accept similar sounding equivalent answers)

BONUS

Alexander Dumas père works, ten points each.

a. First published in French magazines serially, this novel features the titular characters Athos, Porthos, and Aramis.

Answer: The **Three Musketeers**

b. This famous tale of jealousy and revenge was inspired by the memoir of Jacques Peuchet and relates the tale of Edmond Dantes.

Answer: The **Count of Monte Cristo**

c. This novel, originally the last third of the final book in the d'Artagnan (dar-TAN-yan) romances, features the secret twin brother of King Louis XIV.

Answer: The **Man in the Iron Mask**

BONUS

Nathaniel Hawthorne works, ten points each.

a. In this novel, Hester Prynne must wear the titular patch on her clothing as punishment for committing adultery.

Answer: The **Scarlet Letter**

b. In this short story, the elderly title character tries out water from the fountain of youth on Mr. Medbourne, Colonel Killigrew, Mr. Gascioigne, and Clara Wycherly.

Answer: **Dr. Heidegger's Experiment**

c. The title character of this work goes into the forest, where he discovers that pretty much everyone in the town is participating in a sinful Witches' Sabbath. He becomes bitter and angry shortly thereafter.

Answer: **Young Goodman Brown**

BONUS

Pencil and paper ready: A two-dimensional shape has an area of 16 square centimeters. Ten points each, determine the perimeter of the shape, in centimeters, in the following scenarios. Fifteen seconds per part.

a. The shape is a square.

Answer: **16** centimeters

b. The shape is a rectangle with a length of 8 centimeters.

Answer: **20** centimeters

c. The shape is a rhombus with a side of length 3 centimeters.

Answer: **12** centimeters

BONUS

David Ricardo, ten points each.

a. Ricardo formulated this postulate, which states that attempting to raise the real income of workers above the subsistence level is economically unviable.

Answer: **Iron Law of Wages** (accept equivalent answers)

b. Ricardo is perhaps best known for this concept, which explains how relative costs of production and differences in internal price structures influence trade between countries.

Answer: **comparative advantage** (prompt on partial answer)

c. An 1815 Ricardo essay was prompted by these attempts by the British government to regulate the import and export of grain.

Answer: **Corn Laws**

BONUS

19th century labor organizations, ten points each.

a. These associations made up mostly of Irish miners, based primarily in Pennsylvania, murdered bosses who refused them easy employment.

Answer: **Molly Maguires**

b. James McParlan, who infiltrated the Molly Maguires and caused their downfall, was a member of this private detective agency often employed by large companies against labor organizations.

Answer: **Pinkerton** National Detective Agency

c. An 1892 strike in this Pennsylvania steel town resulted in an all-out battle between strikers and Pinkerton agents.

Answer: **Homestead**

BONUS

Questions about famous Chinese women, ten points each.

a. This heroine of a traditional poem disguised herself as a man in order to take her father's place in war.

Answer: Fa **Mulan**

b. The only female ruler in China's history. She ruled from 690 to 705 AD in the middle of the Tang Dynasty.

Answer: Empress **Wu** Zetian (or Emperor **Shengshen**)

c. This most famous concubine of the Tang Dynasty was accused of inciting the An Lushan rebellion and then executed.

Answer: Lady **Yang** Guifei