

Tossups^{by} Illinois (2)

1. He was educated at University College School, Exeter, Merton College, Oxford, and St. Mary's Hospital in London where he completed his medical training. He was appointed Master of Pembroke College in 1985 and was knighted in 1975. He enjoyed a distinguished medical career, but it was an extracurricular activity through which he gained his fame. He won his event four consecutive times in the Oxford vs. Cambridge matches, and was a finalist in the 1952 Helsinki Olympic Games. He became an instant celebrity after an effort he turned in at an athletics meeting at Iffley Road, Oxford, in 1954. For ten points, name this man who shattered Gunder Hagg's record as well as the 4 minute mark in the mile run.

Answer: Sir Roger Gilbert _Bannister_

2. During this time period the country saw intense Westernization and modernization with the introduction of Occidental scientific knowledge, culture, and literature. A constitution was established, parliamentary government was instituted, and the country changed from an isolated feudal nation to a world power. This time period also witnessed military victories over China and Russia and the annexation of Korea. It lasted from 1868-1912, during which Mutsuhito was the sole ruler. For ten points, name this time period which immediately followed the end of the Tokugawa shogunate.

Answer: The _Meiji Restoration_

3. He probably trained in Urbino and is first documented in 1477 working on fresco decorations at the Palazzo del Podesta in Bergamo. His earliest surviving work is a 1481 engraving of an elaborate architectural fantasy. The finest painting attributed to him is the somber and poignant "Christ at the Column" which hangs in the Brera, Milan. He moved to Rome and there is no evidence he did any painting there, although Vasari said he designed the setting for Raphael's "School of Athens." For ten points, name this Renaissance figure who, in 1506, began the rebuilding of St. Peter's.

Answer: Donato _Bramante_

4. This Italian composer had an enormous output which included some 200 masses, 10 oratorios, and 500 cantatas in addition to many madrigals and motets. He began his musical career in Rome where he produced his first opera, "Gli equivoci nel Sembiante." His pupils included Hasse and Germiniani. He held the title of maestro in Santa Maria Maggiore as well as maestro of the Capella reale in Naples in 1708. Some of his other operas include "Statira", "Mitridate Eupatore", and "Eraclea" which were all composed between 1690 and 1700. For ten points, name this man regarded as the founder of the so-called Neapolitan school and creator of the *opera seria* whose most famous work is considered to be "Tigrane."

Answer: _Alessandro_ Scarlatti

5. This character appears to a group and claims that because of his clear conscience and common

sense that he knows the way. However, the group must help him with a task first; some agree, but others abandon their duty. The task the group is set about to do is allegorical in that their task represents working towards true salvation and haven from the abuses of rulers. And thus this character comes to represent Jesus, who tries to show the group the way. For ten points, name this title character of an English poem who asks those in the group to help him plow his half acre before he can show them the way.

Answer: Piers Plowman

6. The five major ones are H1, H2A, H2B, H3, and H4, and they are only found in eukaryotes. They have a net positive charge, which is why they can bond to molecules with negative net charges such as DNA. The displacement of these is necessary for an activator to bind a promoter, which in turn is necessary for the assembly of the transcription factor complex. Once transcription has begun, RNA polymerase pushes these aside as it traverses the nucleosome. For ten points, what are these proteins that number 8 in a single DNA molecule, that are puck-shaped clusters around which 146 nucleotide base pairs wrap twice?

Answer: histones

7. An alkyl halide, such as tert-butyl chloride is reacted with aluminum chloride to form a Lewis acid-Lewis base complex. The chlorine is then transferred entirely to the aluminum chloride which results in a tert-butyl cation and a tetrachloroaluminate anion. The t-butyl cation is then free to attack the delocalized electrons on a benzene ring. It is added to one of the carbons of the ring which interrupts the delocalization. To compensate, the hydrogen on the carbon containing the t-butyl group is pushed off and the benzene ring reforms, but now there is a t-butyl group in place of where a hydrogen had been. For ten points, what type of reaction have you carried out that involves alkylation of a benzene ring in the presence of aluminum chloride, a process that is named for it's two discoverers?

Answer: Friedel-Crafts reaction

8. They are one-dimensional objects thought to have a length scale of about ten to the negative 35 meters and involve supersymmetry. Since very short distances are associated with very high energies, they should have energy scales of about ten to the nineteenth GeV, which is far beyond the energy of any accelerator than can be envisaged. It is also thought that they are free of the infinities that cannot be removed by renormalization, which plague attempts to construct a quantum field theory incorporating gravity. However, there is not a complete proof yet to prove that they are free of these infinities. For ten points, name these objects who have features that are compatible with the experimental facts of elementary particles, such as the possibility of particles that do not respect parity, as found in the weak reactions.

Answer: superstrings

9. He became enamored of a Giant's beautiful daughter and became determined to have her as a wife. He sent his friend and servant to woo her for him, but the trip was perilous. The servant,

Skirnir, had to brave the dangers of the Giant's dwelling which even included riding through a wall of flame. Once there, Skirnir, offered the Giant's daughter, Gerda, gifts and riches but to no avail. However, like any resourceful being would do, Skirnir threatened Gerda that he would turn her into a withered old maid and she capitulated. They returned to Asgard where Gerda took this god as her husband. For ten points, who was this member of the Vanir who the Norse god of sailing, vegetation, and fertility?

Answer: Frey

10. He appeared in the film "Abraxas Guardian of the Universe" where he plays a renegade alien peace officer who flees to Earth and impregnates a woman. He played "Captain America" in the movie "The Running Man" in which a computer generated image of him threw Arnold Schwarzenegger's image into a wall of spikes. In Predator, he played the character Blaine, who was a hard-ass with a big machine gun that ends up getting a large hole blown through his torso. Despite all these Oscar-worthy performances, he may be better remembered as a professional wrestler who pranced around the ring wearing a feather boa. For ten points, name this newly elected governor of Minnesota.

Answer: Jesse "The Body" Ventura (prompt if only Ventura or Jesse Ventura is given because "the body" is cool; grudgingly give points if only Ventura or Jesse Ventura is given)

11. The unsuspecting commander, who had been deployed to put down a rebellion, marched his army between the Ems and Weser rivers. In this terrain full of thick woods, marshes, and bogs, the soldiers were severely limited in their maneuverability. An auxiliary soldier in the army slipped away unnoticed and returned with an army of Germans. The Germans surprised the enemy Romans and inflicted heavy casualties using darts and arrows. The Romans held their ground but when they tried to march the next day their cavalry became disorganized and were cut to shreds. By the end of the day most of the Roman army had been annihilated, and the Roman leader Varus committed suicide to avoid capture. For ten points, name this battle which was one of the worst defeats in Roman history.

Answer: Teutoburger Wald

12. Henry Bennet, Lord Arlington, was Secretary of State and a closet Papist who had lived most of his life on the Continent. Sir Thomas Clifford, the only honest man of the bunch, was a Commissioner of the Treasury. Along with Lauderdale, Buckingham, and Ashley, they helped the king conspire with Louis XIV and engaged in extensive bribery of Parliament. They were so hated that the word of the English language by which they were known acquired a negative connotation because of them. For ten points, name this group of five Cabinet ministers to Charles II of England, known to history by an anagram of their initials.

Answer: The Cabal

13. Born in 1911, this American theoretical physicist developed the equation of state for cold, dead matter and a complete catalog of stars that have reached rigor mortis, thereby strengthening evidence that massive stars must form black holes when they die. He argued with Oppenheimer about the possibility of formation of black holes but later withdrew his argument and became one of the leading proponents of black holes. For ten points, name this man who first coined the

phrase "black hole" and developed foundations for the laws of quantum gravity.

Answer: John Archibald _Wheeler_

14. This man's start as a writer began with the 1970's novels *Pride of the Bimbos* and *Union Dues*. He soon got a job writing screenplays such as *Piranha*, *Alligator*, and *The Howling* for independent film producer Roger Corman. His directorial debut, *Return of the Secaucus Seven*, established his reputation as a ultra-low-budget filmmaker who refused to yield his vision to any Hollywood studio. As a result, he gets the final cut on all of his films. FTP, name this man, whose better known films include *The Brother From Another Planet*, *Matewan*, *Eight Men Out*, and *Lone Star*.

A: John _Sayles_

15. This mathematician was destined to be a mathematician from the beginning. The wallpaper covering the children's room was lecture notes of this mathematician's father, who happened to be a general of engineers. Some of this mathematician's work was good enough to win prizes from both the French and Swedish Academies. The paper that won these prizes concerned the rotation of a solid body about a fixed point. Other focal interests of this mathematician were differential equations, Abelian functions, the structure of Saturn's rings, and the propagation of light. These accomplishments are outstanding in their own right but are more impressive when one considers the fact that this mathematician was a woman, who had to deal with constant discrimination. For ten points, name this female Russian mathematician, one of the greatest thinkers of the 19th century.

Answer: Sonya Vasilyevna_Kovalevskaya (accept Kovalevsky)

16. His major contributions have been in the fields of welfare economics, critiquing assumptions that lay at the heart of economics with works such as "Collective Choice and Social Welfare," "Hunger and Public Action," and "Rational Fools". His selection signifies a change in the academy's philosophy, from rewarding more specialized and empirical work to rewarding broader contributions to the social sciences. For ten points, name this 1998 recipient of the Nobel Prize in economics.

Answer: Amartya _Sen_

17. Though it took 26 days before he died, he was fatally wounded at the battle of Zutphen in 1586, fighting for the independence of the Low Countries. A legend says that, languishing in the battlefield, he offered his bottle of water to a fellow soldier saying that "thy need is greater than mine." He is better known for his poetry and prose, however, composing a sonnet sequence thought to be addressed to Lord Robert Rich's wife Penelope Devereaux, and dedicating a major work to his sister Mary Herbert, the Countess of Pembroke. For ten points, name this write of *The Defense of Poesy*, *Astrophil and Stella*, and *Arcaadia*.

Answer: Sir Philip _Sidney_

18. The only two true "battles" in this war were Great Swamp and Hadley. During the battle of the Great Swamp, Governor Josiah Winslow marched his army southeast from Wickford and into the Great Swamp. The enemy held a stronghold on the island of South Kingstown, but were overrun by Winslow's force. The war was fought in hit and run style and sporadic skirmishes for

the most part, but is percentage-wise the bloodiest war in American history. The war was effectively ended after the battle of Hadley in which Major Talcot crushed the Indians. Two months later in 1676 Benjamin Church hunted down and killed the Indian leader Metacomet and sold Metacomet's wife and children into slavery. For ten points, name this war that lasted from 1675-1676 in New England that was waged between the European settlers and the Wampanoag Indians.

Answer: King Philip's War

19. The author of this novel set most of his works in the slums of Chicago and this one is no different. It was written in 1949 and won the 1950 National Book Award. It revolves around a character who lives the life of a low-class worker who is an excellent pool hustler as well as a gambler, drummer, and heroine addict. The main character, Frankie Machine, is unable to come to terms with the fact that he'll never escape the slums so he eventually commits suicide. For ten points, name this novel which derives its name from the body part that Frankie is most skilled with that was written by Nelson Algren.

Answer: The Man with the Golden Arm

20. The term can be applied to the works of Cranach, Ugo da Carpi, and Baldung Grien. The first one was "The Emperor Maximilian on Horseback" by Hans Brugkmair in 1508. The technique was developed more or less simultaneously in Germany and Italy though there is an interesting difference in approach of the two schools. In Germany great importance was given to the key block, which was to all intents and purposes a complete design itself, the resulting print being a richly worked woodcut with the addition of background tints. In Italy the medium was handled with much greater breadth, the design being visualized in large areas of tone punctuated by dark accents. For ten points, name this form of woodcut, which can also be applied to the works of Caravaggisti and Rembrandt in painting, which comes from the Italian for "bright-dark."

Answer: chiaroscuro woodcut

21. Influenced by Theophile Gautier's theory of "Art for Art's Sake", they reacted against excessive emotion and subjectivity that was seen in Romanticism. They preached that poetry should be exact, unemotional, and detached. They flourished from around 1860 to 1880 and their growth closely mirrored that of Realism and Naturalism in drama and fiction. Their leader was Charles Leconte De Lisle and other members included Theodore de Banville, Sully Prudhomme, and Paul Verlaine. FTP name this French school of poetry.

Answer: Parnassians