

1. Reference books may need to be updated because new satellite data indicates this place's distinction is getting sharper. In the past decade, areas along its shore have subsided an average of 2 _" a year. This followed a 20-foot drop in the water table as more of its sources are siphoned off for agriculture. FTP name this body of water on the Israeli-Jordanian border, roughly 1,360 feet below sea level.

Answer: the **Dead Sea**

2. This novel's protagonist is working on a painting, *The Burning of Los Angeles*. He becomes involved in the lives of several people warped by their proximity to the artificial world of Hollywood. Tod Hackett appears in—FTP—what 1939 novel by Nathanael West that introduced readers to the name Homer Simpson?

Answer: *The Day of the Locust*

3. They cannot weigh more than 200 nanograms, and there cannot be more than one per 10^{29} nucleons. Dirac showed their charge must be 68.5 times that of an electron, or a multiple thereof. None have been found, though t'Hooft's work in Grand Unified Theories say they should exist—which would require rewriting Maxwell's equations. FTP—name these hypothetical magnetic particles.

Answer: magnetic **monopoles**

4. A dispute over the trophy it yielded led to a war between the neighboring Curetes and the Aetolian tribe which had slain it. It was sent by Artemis as punishment for the king, Oeneus, who had neglected sacrifices to her. FTP name this creature of Greek legend, wounded by Atalanta and slain by Meleager.

Answer: the **Calydonian boar**

5. Its last leader, mayor of Scranton, Pennsylvania, at the time, caused a stir at its 1886 convention in Richmond when he was introduced by Frank Ferrell, a Black man. Founded by a Freemason, it disavowed economic coercion, and was designed as a secret society of cooperatives led by a "Grand Master Workman." FTP—name this group headed by Uriah Stephens and Terence Powderley, the first major American labor organization.

Answer: The Noble Order of the **Knights of Labor** or **KOL**

6. His early fiction included: *Antonina; or, the Fall of Rome* and *Basil*, a tale of seduction and vengeance set in the contemporary middle-class. In 1851 he began an association with Dickens that exerted a formative influence on his career, and his first major work, *The Woman in White*, appeared in Dickens' *All the Year Round*. FTP—name this author, whose novel, *The Moonstone*, led to his title of 'one of the first and greatest masters of the mystery story'.

Answer: William "Wilkie" **Collins**

7. It does not produce any ATP until the final step, in which PEP is converted into pyruvate. In its first step, hexokinase converts glucose to glucose-6-phosphate. In its namesake reaction, aldolase splits fructose-1,6-biphosphate into two three-carbon sugars. FTP—name this first process in cellular respiration.

Answer: **glycolysis** or **glycolytic** pathway

8. Like MC Hammer, his given last name is Burrell. A Gulf War veteran, he first surfaced on the charts in 1993 with "Oh Carolina." "Luv Me Luv Me" is the 3rd single from his album *Hotshot*, after one single that featured his virtually incomprehensible advice to sidekick RikRok and another that borrowed from both Marianne Faithful and Steve Miller. FTP name the reggae artist whose hits include "Angel" and "It Wasn't Me."

Answer: **Shaggy**

9. He dropped out of high school to attend the Naval Academy, from which he graduated in 1905. He effectively used submarine warfare in an underpublicized war on Japanese merchant shipping. This was because he favored a more direct approach to Japan than the "island hopping" strategy of MacArthur, whose signature appears directly above his on the Japanese instrument of surrender. FTP name this admiral who, on Dec. 31, 1941, was given command of the US Pacific fleet.

Answer: First Admiral Chester William **Nimitz**

10. About 9,000 of them were manufactured in Dunmurray, Northern Ireland in 1981 and 1982. Codenamed DMC-12, their gas caps were in the trunk, and they had gull wing doors. FTP—name this infamous stainless-steel car featured in *Back to the Future*.

Answer: **Delorean**(s)

11. Trained as a doctor, he graduated from the Medical College of the University of Kiev in 1916. When the Russian Civil War broke out, he joined the Whites as field medic. His career in medicine would influence his early works, including *Notes on Cuffs* and *Notes of a Young Country Doctor*. His best-known work, a surreal tale involving the travails of the mythical Woland and his feline companion, would not be discovered and published until after his death in 1940. FTP, name the Russian author of *The Master and Margarita*.

Answer: Mikhail **Bulgakov**

12. In 1979, Walsh used this effect to discover a multiply-imaged quasar. In 1988, it was observed via an Einstein ring. Its existence was confirmed in 1919 during a solar eclipse that provided the first experimental evidence for relativity. FTP—name this process, in which the gravity of a massive object such as a star causes light to be bent.

Answer: gravitational **lens**(es) or **lensing** [accept word forms]

13. In 1999, he played the title role in a TV version of *David Copperfield* with an all-British cast. He then appeared in *The Taylor of Panama* and began his reputation for being a prankster on the set. By pure coincidence he shares the same birthday, July 31st, with his alter ego in a popular film also shot with an all-British cast. FTP, who plays Harry Potter?

Answer: Daniel **Radcliffe**

14. Originally titled *Der Venusberg*, it is set in 13th century Thuringen. Its main character, a minstrel knight, is ordered to make a pilgrimage to Rome to seek the Pope's forgiveness for falling under the spell of Venus. His lover, Elizabeth dies after the Pope refuses to grant the title character absolution until his staff blooms. FTP name this opera by Richard Wagner.

Answer: **Tannhäuser** [tan-HOY-zir]

15. Born in 161, his twin brother died at four. Against Claudius Pompeianus's advice, his first act as emperor was to make peace with the Quadi and Marcomanni. His rule, characterized by cruelty and violent displays in the circuses, induced assassination attempts, including one by his sister Lucilla. FTP—name this son of Marcus Aurelius, who probably didn't resemble Joaquin [WAH-keen] Phoenix.

Answer: Lucius Aelius Aurelius **Commodus**

16. Architect Antonio Sant' Elia, sculptor Umberto Boccioni, and painters Carlo Carra, Gino Severini, and Giacomo Balla were leading figures of this movement, whose manifesto was written by Filippo Tommaso Marinetti. Like Cubism, which it influenced, this movement's works attacked the old school institutions and glorified war, dangers, and the machine age. FTP name this pre-World War I Italian art and literary movement whose movements and techniques strongly influenced constructivism.

Answer: **futurism**

17. Some accounts have him finishing his years preaching a gnostic form of Christianity in India. His most famous quote goes, "Unless I see the nail marks in his hands and put my finger where the nails were, and put my hand into his side, I will not believe it," when told of Jesus' resurrection. He is mentioned with Matthew when the disciples are introduced and is the first one that Jesus speaks to directly after he leaves the tomb. FTP - name this disciple who is also referred to as Didymus.

Answer: **Thomas**

18. First discovered in 1699, it lies southwest of Sumatra and the Sunda Straits. Popular pastimes on this island include leaping, creeping, and rope-dancing, used by the emperor as a civil service test. Its capital city, Mildendo [mil-DEN-doh] is surrounded by a wall two and a half feet high. At war with its neighbor Blefuscu—FTP—name this island discovered by Lemuel Gulliver.

Answer: **Lilliput**

19. In the discrete case, it is periodic, corresponds to the unit circle of the Z -transform, and can be evaluated in $n \log n$ time. In the continuous case it corresponds to the imaginary axis. A system which has this equal to zero after a certain value corresponds to a low-pass filter. FTP—what is this method of converting a signal from the time domain to the frequency domain, named for a French mathematician?

Answer: **Fourier** transform(ation) [prompt on “FT” or “FFT”]

20. In World War II, he served in Burma for the British, who made him an officer shortly before granting his country independence. He toppled the regime of Milton Obote [ah-BOH-tay] in a 1971 coup; a year later, he crippled his country’s economy by expelling all Asians. FTP—name this dictator who killed an estimated 200,000 people in Uganda.

Answer: Idi **Amin** Dada Oumee

21. TWO ANSWERS REQUIRED: 18th century critic Joseph Byrom was poking fun at two quarreling schools of musicians with negligible differences. He coined these names to satirize them, and they came to represent people whose opinions are as “like as two peas” but still can’t see eye to eye. FTP give these two names, personified as two identical schoolboys who sing “The Walrus and the Carpenter” in Lewis Carroll’s *Through the Looking Glass*.

Answer: **Tweedledum** and **Tweedledee**

22. His important philosophy is contained in the *Instauratio Magna*. He believed philosophy should be kept separate from theology, contrary to the Scholastics, and that science would give man power over nature, as expressed in *The Advancement of Learning*, and contributed to science by describing a method of inductive inference. FTP, name this author of *Novum Organum*.

Answer: Francis **Bacon**

23. Frederick Ashton choreographed a one-act ballet based on this orchestral work. First performed on June 19th 1899, notable among this collection is the ninth piece, “Nimrod,” where the melody drops from a sustained G to E-flat, and the last, titled “E.D.U.” Dedicated by the composer to “my friends pictured within,” it is based on a melody the composer refused to reveal. FTP, name this mysterious work by Edward Elgar.

Answer: **Enigma Variations** or Variations on an Original Theme, “Enigma”, Op. 36

24. In Lithuania, on the feast day of Ligo, the sun is said to observe this event by wearing silver shoes and dancing on a silver hill. It occurs when the North Pole is tilted 23 degrees, 27 minutes towards the sun, so the noon sun is directly overhead at the Tropic of Cancer. FTP—name this moment when the Sun’s apparent path is at its most extreme latitude, on June 21 or 22 in the Northern Hemisphere.

Answer: **summer solstice** [prompt on “solstice”]

25. His decision has been attributed to possible opposition to dairy subsidies or a refusal by Bush’s decision not to invite him to a White House ceremony honoring a teacher of the year from Vermont. Even so, he voted for Clinton’s health care reforms and against Reagan’s tax cuts. FTP—name this Senator who accepted Tom Daschle’s offer for a committee chair in return for leaving the Republican party.

Answer: James Merrill “Jim” **Jeffords**