

1. The term was first applied to art in a 1925 essay by Franz Roh. Arturo Usler Pietri first applied it to fiction in the 1960s, and it caught on when Miguel Ángel Asturias used it to describe his Nobel-winning novels. Including such works as Milan Kundera's *Immortality*—FTP—name this literary genre best represented by García Márquez's *One Hundred Years of Solitude*.

Answer: magic(al) realism [accept word forms]

2. In semiconductors, this property is inversely related to temperature. In wires, it is proportional to length and inversely proportional to the cross-sectional area. Normally considered localized, impedance in AC circuits reduces to this quantity in DC circuits. FTP—name this quantity, which in DC circuits is simply voltage divided by current.

Answer: resistance

3. In 1952, he joined the faculty at MIT, and published *Real Algebraic Manifolds* in the *Annals of Mathematics*. After teaching there for seven years, he was diagnosed with schizophrenia, and spent over 30 years in treatment. Termed “cured” in 1990, he won the 1994 Nobel Prize in Economics. When two competitors reach maximum utility—FTP—they have reached the equilibrium named for what mathematician?

Answer: John Forbes Nash

4. In 1996, three-quarters of its forces defected. Founded in 1967, it reached its largest size in the late 1970s. In four years in power, it killed 1.5 million academics and skilled workers. Overthrown in 1979, it was replaced by a Vietnamese puppet government. FTP—name this militant group in Cambodia, led until 1997 by Pol Pot.

Answer: Khmer(s) Rouge(s) or Red Khmer(s)

5. In its inaugural season, Nancy Lieberman-Cline played for this team. Its current roster includes Lisa Harrison, *Playboy*'s sexiest player, Bridget Pettis, Maria Stepanova, and Jennifer Gillom. Though it made the playoffs in 2000 and the finals in 1997, it struggled to a 13-19 record in 2001. FTP—name this WNBA team coached by Cheryl Miller and Cynthia Cooper.

Answer: Phoenix or Phoenix Mercury

6. It can be manufactured by the Verneuil [vur-NOY] process; its mixtures with iron oxides are called emery. Its high melting point makes it useful in refractories; its hardness of 9 makes it a good abrasive. FTP—name this aluminum oxide whose finer varieties include ruby and sapphire.

Answer: corundum

7. Debundscha Point, in this nation's northern mountain ranges, receives an average of over 400 inches of rain a year. The Chari and Logone Rivers form its eastern border with Chad. Founded on the Wouri River, its estuary is home to its largest city and port, Douala. FTP—name this nation whose capital is Yaoundé.

Answer: Republic of Cameroon or République de Cameroun

8. It is home to the “Dryad's Bubble,” the “Lake of Shining Waters,” and a “Lover's Lane.” Its inhabitants include the Lyndes, the Barrys, the Cuthburts, and Anne Shirley, an orphan adopted by Marilla and Matthew Cuthbert. FTP—name this fictional Canadian town described in the novels of Lucy Maud Montgomery.

Answer: Avonlea, Prince Edward Island

9. As a “preventative action,” 600 youths were arrested. During the trial of 24 youths arrested for the Sleepy Lagoon murder, an expert witness testified that Mexicans were biologically prone to violence. When Mexican *pachucos* attacked 11 sailors, servicemen responded by leading assaults on East Los Angeles. FTP—name this June 1943 incident named for a thick, brightly colored wool suit worn?

Answer: Zoot Suit Riots

10. On the left, a man kneels by a lake to catch a fish. In the center, before a group of eleven men, that same man argues with Christ and a tax collector in a short orange tunic. On the right, that same man, Peter, stands before a building rendered in linear perspective, and pays the tax collector with coins he found in the fish's mouth. FTP—name this fresco by Masaccio.

Answer: *The Tribute Money*

11. Some people who tried to purchase one on Ebay found out they had bought oddly shaped storage crates. It includes a signature green jewel, a 733 megahertz Intel processor, and an Ethernet port for network play. The first game console to include a hard drive for information storage, FTP name this product released for sale on Nov. 15 by Microsoft.

Answer: Microsoft Xbox

12. Some historians believe he may have been killed for his role in an attempt to kill King Haakon IV of Norway. His greatest work is believed to be a handbook for novice poets who wanted to preserve pagan stories and traditions, though it may be more famous for its compendium of Scandinavian myths. FTP—name this Icelandic author of the Prose, or Younger, Edda.

Answer: Snorri Sturleson or Snorri Sturluson

13. While the *E. coli* form of this enzyme requires NAD as a cofactor, the most common form requires ATP and is derived from the T4 bacteriophage. It is used in gene cloning in the step directly after digestion of the vector and insert by restriction enzymes. FTP—name this enzyme whose main function is a 5' to 3' [5 prime to 3 prime] transesterase reaction that fuses two "sticky ends" of DNA.

Answer: ligase

14. In 1908, he was moved to tears by the slow, muffled drumbeats accompanying the funeral cortege of a New York fireman. The last movement of his last symphony, completed after his death by Deryck Cooke, incorporated those drumbeats. FTP—name this composer of *The Song of the Earth*.

Answer: Gustav Mahler

15. As king, this member of the Lords Appellants put down a Welsh rebellion and the Hotspur revolt. The eldest surviving son of John of Gaunt, he was banished from England in 1398; a year later, he seized power after Richard II tried to steal his inheritance. FTP—name this first king from the house of Lancaster to rule in the 15th century.

Answer: Henry IV or Henry Bolingbroke

16. This work quotes scenes from *'Tis Pity She's a Whore* and *Miss Julie*. The main character in this semi-autobiographical play is Henry, a two-timing playwright who deals with questions of infidelity and identity as he struggles with his marriage and career. FTP—name this Tom Stoppard play that opens with a play-within-a-play.

Answer: *The Real Thing*

17. The bright-white pigment lithophone contains ions of zinc and this metal. Its nitrate and chlorate are used in green signal flares and fireworks. Its carbonate is used to make glassware and glass lenses, to purify brines for electrochemical cells, and in rat poison. FTP—name this alkaline earth metal whose sulfate is used to study the GI tract.

Answer: Barium

18. Originally intended as a meeting on commerce regulations, it was attended by just 12 delegates, including Alexander Hamilton and James Madison. It adjourned when it became clear that no action could be taken without altering the Articles of Confederation. FTP—name this September 1786 meeting whose most important action was a resolution to call for a Constitutional Convention in May 1787.

Answer: Annapolis Convention

19. A Turing machine computes the same set of languages as a modified pushdown automaton with two of these; a standard pushdown automaton has only one. Recursive algorithms save environments to this data structure in memory when they are invoked. Searches are $O(n)$ [O of n], but pushes and pops take constant time in—FTP—what data structures, linked lists that obey last-in-first-out?

Answer: stack(s)

20. This Enlightenment figure spent his childhood in Switzerland with a distant and depressed father. Eventually he ended up in Paris, where he put the five children that he and his mistress had in an orphanage. This personal failing often discredits one of his most famous essays in which he argues for the importance of strong childhood education to create a well-rounded and healthy adult. FTP—name this philosopher, author of *Emile* and *The Social Contract*.

Answer: Jean-Jacques Rousseau

21. Nathan Hale. William Rose Benet. William Howard Taft. Dean Acheson. Maya Lin. Noah Webster. Eli Whitney. John C. Calhoun. Gerald Ford. Bill and Hillary Clinton. FTP—all of these people have graduated from what Ivy League institution in Connecticut?

Answer: Yale

22. Discovered by George Palade, during embryogenesis, these organelles are first synthesized during the gastrula stage. Consisting primarily of RNA, they float freely throughout cells, and can also attach to the endoplasmic reticulum. FTP—name these granular structures in cells where proteins are synthesized.

Answer: ribosome(s)

1. Identify the following about the ultraviolet catastrophe FTP each.

[10] This is an idealized object which absorbs and emits all frequencies of radiation.

Answer: blackbody

[10] Classical physics can be used to derive this equation which describes the intensity of blackbody radiation as a function of frequency for a fixed temperature and which diverges as frequency increases towards the ultraviolet.

Answer: Rayleigh-Jeans law

[10] This physicist explained the blackbody radiation in 1900 by assuming that the energies of the oscillations of electrons which gave rise to the radiation must be proportional to integral multiples of the frequency.

Answer: Max Planck

2. Given three characters, name the Roald Dahl book, FTPE.

[10] Violet Beauregard, Augustus Gloop, Veruca Salt

Answer: Charlie and the Chocolate Factory [do not prompt on “Willy Wonka”]

[10] Gloworm, Aunt Sponge, Aunt Spiker

Answer: James and the Giant Peach

[10] Miss Ernst, Bruno Jenkins, Helga

Answer: The Witches

3. 30-20-10. Name the man.

[30] He fought the Moors at Oran in 1791, and served Spain in the War of the Oranges in 1801.

[20] After defeating loyalists at San Lorenzo in 1813, he was sent to Tucumán to relieve the forces of General Manuel Belgrano.

[10] He liberated Argentina, then crossed the Andes, liberated Chile, and was made protector of Peru when he marched into Lima in 1821.

Answer: José de San Martín

4. Name these psychological defense mechanisms, FTPE. [HN: accept word forms]

[10] The transformation of undesirable impulses into socially approved activities.

Answer: sublimation

[10] The ego unconsciously makes unacceptable impulses look acceptable.

Answer: reaction formation

[10] The redirection of sexual or aggressive impulses from one person to another, more acceptable or accessible person or object.

Answer: displacement [do not accept “projection” or “transference”]

5. Name the TV series from cast members, FTPE.

[10] Josh Charles, Peter Krause, and Sabrina Lloyd

Answer: Sports Night

[10] John Rhys-Davies, Cleavant Derricks, Jerry O’Connell, and Sabrina Lloyd

Answer: Sliders

[10] Roy Dotrice, Gabriel Byrne, . . . and Sabrina Lloyd

Answer: Madigan Men

6. Name these two political philosophers who disagreed about most everything from works, 15-10, 15-5.

[15] On Conciliation With the American Colonies

[10] Reflections on the Revolution in France

Answer: Edmund Burke

[15] The Age of Reason, The Rights of Man

[5] Common Sense

Answer: Thomas Paine

7. Given the brightest star in a constellation, name the constellation, FTPE:
- [10] Deneb Answer: Cygnus
- [10] Regulus Answer: Leo
- [10] Vega [VAY-guh] Answer: Lyra
8. A widow, after the death of her husband, declares a long mourning period in which she forbids her five daughters to leave the house. 10 points per answer.
- [10] Name this title character of this 1936 Spanish drama.
Answer: Bernarda Alba [accept either name]
- [10] Name the author of *La casa de Bernarda Alba*.
Answer: Federico Garcia Lorca [prompt on Garcia or Lorca]
- [10] Within 25%, how long a mourning period did Bernarda decree?
Answer: 8 years [accept 6 years to 10 years]
9. Oops. Name these biologists who published erroneous theories, FTPE.
- [10] In 1801, this Frenchman published a theory of inheritance of acquired traits.
Answer: Jean Baptiste Pierre Antoine de Monet, Chevalier de Lamarck
- [10] In the 1780s, this Italian claimed that “animal electricity” explained how a brass hook and an iron rod caused a frog’s muscles to contract.
Answer: Luigi Galvani
- [10] In 1745, this English clergyman claimed he had observed spontaneous generation when he broiled chicken broth, sealed it in a flask, and later observed the growth of microorganisms.
Answer: John Needham
10. [30] In US history, there have been two sets of three Presidents in which one President’s Vice-President later became President, and *that* President’s Vice-President later became President. For 5 points each—name the six men who make up these trios. *You have 15 seconds to begin your answer.*
Answer: George Washington , John Adams , Thomas Jefferson
Dwight David Eisenhower , Richard Milhous Nixon , Gerald Rudolph Ford, Jr.
11. Name these American women who have written extensively about nature, FTPE.
- [10] This author of *Under the Sea Wind* primarily studied oceanic topics, but she is best known for *Silent Spring*.
Answer: Rachel Louise Carson
- [10] Her *Pilgrim at Tinker Creek* focuses on minute details of life in the Virginia woods.
Answer: Annie Dillard or Annie Doak
- [10] This advocate for conservation of the Everglades wrote *River of Grass* and *Voice of the River*.
Answer: Marjory Stoneman Douglas or Marjory Stoneman
12. 30-20-10. Name the author from works.
- [30] The poems “A Nocturnal upon St. Lucy’s Day,” “The Ecstasy,” and “Love’s Alchemy”; the essay *Biathanatos*
- [20] The poem “A Valediction: Forbidding Mourning” and the prose work *Devotions upon Emergent Occasions*
- [10] The poem “No Man Is an Island”
Answer: John Donne
13. Answer these questions about angels, FTPE. Hint: none of the answers are lingerie models or Jessica Alba.
- [10] This ancient Persian religion is credited as the first to suggest the existence of angels.
Answer: Zoroastrianism
- [10] These angels wielded flaming swords to keep Adam and Eve out of Eden. In Ezekiel, they are living chariots for Jehovah, standing beside topaz “wheels within wheels.”
Answer: Cherubim or cherub(s)
- [10] In Islamic tradition, this angel will sound the trumpet on the Day of Judgment.
Answer: Izrail [iz-RAH-eel] or Israfael or Israfil

14. Given a baseball team, name the pitcher who led that team in wins in the 2001 season FTSNOP:
- [5] New York Yankees Answer: (William) Roger **Clemens** [20]
 [5] Arizona Diamondbacks Answer: Curt(is) Montague **Schilling** [22]
 [10] Pittsburgh Pirates Answer: Todd **Ritchie** [11]
 [10] Boston Red Sox Answer: Hideo **Nomo** [13]
15. Name these geographic features of New Zealand, FTPE.
- [10] This strait separates New Zealand's two main islands.
 Answer: **Cook** Strait
- [10] First settled in 1850 by the British, this city, the largest on South Island, was named for a college at Oxford.
 Answer: **Christchurch**
- [10] The coast of this bay has been called "the coast with the most." Located off North Island's northern coast, it is bordered by Mount Maunganui and White Island.
 Answer: Bay of **Plenty**
16. Name these European monarchs, FTPE:
- [10] Born in 1595, he was the son of Sweden's Charles IX.
 Answer: **Gustavus Adolphus** the Great or **Gustav II Adolph**
- [10] This daughter of England's George VI married Philip Mountbatten, Duke of Edinburgh.
 Answer: **Elizabeth II** or **Elizabeth Alexandra Mary**
- [10] Best known for defending Vienna from the Ottomans, neither the son nor father of this Polish king were royalty.
 Answer: **John III** or **John Sobieski** or **Jan Sobieski**
17. Name the authors of these plays that deal with British history, FTPE.
- [10] *Murder in the Cathedral* Answer: T(homas) S(tearns) **Eliot**
 [10] *A Man for All Seasons* Answer: Robert Oxtan **Bolt**
 [10] *Anne of a Thousand Days* Answer: Maxwell **Anderson**
18. Name these New Deal agencies founded in 1933 FTPE.
- [10] It advised and assisted farmers, and regulated farm production.
 Answer: **AAA** or **Agricultural Adjustment** Administration
- [10] It granted long-term, low-cost mortgages to homeowners with financial problems.
 Answer: **HOLC** or **Home Owners Loan Corporation**
- [10] It gave jobs on conservation projects to about 2 million mostly young workers and housed them in nearby camps.
 Answer: **CCC** or **Civilian Conservation Corps**
19. Edward Steichen's photographs of this sculptor's *Balzac* increased public appreciation of his work. FTPE.
- [10] Name this French sculptor.
 Answer: (François) Auguste René **Rodin**
- [10] Originally titled *The Vanquished One*, this sculptor of Auguste Neyt was rumored to have been cast from Neyt's body.
 Answer: *The Age of Bronze* or *L'Age d'Airain*
- [10] Rodin created an *Apotheosis* honoring this French writer.
 Answer: Victor-Marie **Hugo**
20. Name these functional groups, FTPE.
- [10] A carbon triple-bonded to a terminal nitrogen.
 Answer: **nitrile** [do not prompt on "cyanide"]
- [10] An oxygen single-bonded to two carbons
 Answer: **ether** [do not prompt on "alcohol"]
- [10] A carbon single-bonded to a sulfur atom
 Answer: **thiol** or **mercaptan**

21. Name these men who appear in the Bible from their names in the Qur'an, FTPE.

[10] Isa [EE-suh] Answer: Jesus of Nazareth (or Galilee) or Jesus (the) Christ

[10] Haroun Answer: Aaron

[10] Yahya Answer: John the Beloved or John the Baptist or John of Patmos

22. 30-20-10. Name the composer from works.

[30] *Mass for Three Voices and Orchestra*; the oratorio *Mors et Vita*

[20] The pastoral *The Dove*, the oratorio *The Redemption*, and the opera *Romeo and Juliette*

[10] The opera *Faust* and the "Funeral March for a Marionette" used by Alfred Hitchcock

Answer: Charles François Gounod [goo-NO]

23. Name these terms from geology, FTPE.

[10] A set of flat or wavy planes produced in metamorphic rock by structural deformation.

Answer: foliation

[10] This term refers to all the chemical and physical changes that buried sediments undergo when they are lithified and compacted into rock.

Answer: diagenesis

[10] The sinking of an oceanic plate beneath an overriding plate at a convergent plate boundary.

Answer: subduction