



1. One novel by this writer depicts the aimless search for happiness by the intellectual friends of Theodore Gubril, Jr. In another novel by this author of *Antic Hay*, The Director secretly fathers a child with Linda, who dies while on a soma holiday. In that novel, Henry Foster's success with Lenina inspires the jealousy of the undersized Bernard Marx, who brings John the Savage to his dystopian society. For 10 points, name this English writer who wrote *Brave New World*.

ANSWER: Aldous Leonard **Huxley**

130-12-55-07101

2. This god became the namesake of a court after he was tried for murdering Halirrhothius (hal-ih-ROW-thee-us), who had raped his daughter Alcippe (al-SIP-ee). In the *Odyssey*, Demodokos sings that this god fled to Thrace after being caught in a net. During the Trojan War, this god was wounded by Diomedes (dye-OH-med-ees) and struck with a boulder by Athena. In one account, Hephaestus (huh-FAY-stus) cursed Harmonia's necklace out of anger at this god's affair with Aphrodite. This god is accompanied by Phobos, Deimos (DEE-mohs), and Eris. For 10 points, name this Greek god of war.

ANSWER: **Ares**

105-12-55-07102

3. In one work by this author, Abram ignores instructions about the "Ram of Pride" and sacrifices Isaac. This author of "The Parable of the Old Man and the Young" wrote the lines, "if anything might rouse him now the kind old sun will know" in "Futility." He described an encounter in Hell in "Strange Meeting." This poet asked, "What passing bells for these who die as cattle?" and critiqued "the old lie" set down by Horace. For 10 points, name this World War I poet of "Anthem for Doomed Youth" and "Dulce et Decorum Est" (DULL-kay eht deh-COR-uhm EHST).

ANSWER: Wilfred **Owen**

105-12-55-07103

4. This man's succession of Stephen of Blois (bl-WAH) was secured by the Treaty of Wallingford and ended the Anarchy. The use of juries began to replace ordeals when this man issued the Assizes of Clarendon. After submitting to the Constitution of Clarendon, this king had men kill Thomas Beckett at Canterbury Cathedral. This man's son fought Saladin during the Third Crusade and was Richard the Lionhearted. For 10 points, name this first Plantagenet king who was married to Eleanor of Aquitaine.

ANSWER: **Henry II** of England [or **Henry FitzEmpress**; or **Henry Curtmantle**; prompt on **Henry**]

149-12-55-07104

5. The speaker of one of this man's poems states that he will "live alone in the bee-loud glade." Another of his poems asks, "And what if excess of love bewildered them till they died?" in reference to executed revolutionaries. That poem contains the refrain, "A terrible beauty is born." One poem by this author claims that "things fall apart, the center cannot hold" and describes a "rough beast" that "slouches towards Bethlehem to be born." For 10 points, name this Irish poet of "Easter, 1916" and "The Second Coming."

ANSWER: William Butler **Yeats** (YATES)

002-12-55-07105

6. Following one battle in this war, high ransoms caused a rebellion led by Jack Goodfellow known as the Jacquerie. The Peace of Bretigny was signed during this war following the capture of John the Good. French knights were routed in this war after dismounting due to a fear of English longbowmen at the Battle of Poitiers, which was fought by Edward, the Black Prince. For 10 points, name this war that began in 1337 when Edward III of England declared himself king of France.

ANSWER: **Hundred Years'** War

149-12-55-07106

7. This character's cries for water are largely ignored after he is put on trial and sentenced to two hours of torture by Master Florian Barbedienne (bar-BED-ee-EHN). Pierre Gringoire (grin-GWAHR) witnesses him leading a procession as Pope of the Fools. He kills a man named Jehan (zheh-HAHN), and is arrested by Phoebus (FEE-bus) de Chateaupers (SHAT-toe-PAIR). This character is raised by the Archdeacon Claude Frollo, and is deafened by his job of ringing the cathedral bells. For 10 points, name this deformed man who loves the gypsy Esmerelda, the title character of Victor Hugo's *The Hunchback of Notre Dame*.

ANSWER: **Quasimodo** [prompt on "the Hunchback of Notre Dame" before mentioned]

015-12-55-07107

8. In the 1970s, this team's frontcourt scoring of Chet Walker and Bob Love complemented the backcourt defensive intensity of Norm Van Lier and Jerry Sloan. In 1995, this team added flamboyant star rebounder Dennis Rodman to a team that was led at the time by Toni Kukoc (KOO-coach) and Scottie Pippen. Following the 1989 playoffs, this team replaced coach Doug Collins with the triangle-offense-oriented Phil Jackson. For 10 points, name this team that won six NBA championships during the leadership of Michael Jordan.

ANSWER: Chicago **Bulls** [or **Chicago Bulls**]

130-12-55-07108

9. In one play by this writer, the abuse and death of an adopted child at the hands of Mommy and Daddy is recounted by Grandma for Mrs. Barker. In another play by this writer, the central group plays games including "Hump the Hostess" and "Get the Guests." In that play, a biology professor named Nick and his wife Honey stop at the house of a couple who kill off their imaginary son. For 10 points, name this American playwright who wrote *The American Dream* and created George and Martha in *Who's Afraid of Virginia Woolf?*

ANSWER: Edward Franklin **Albee**

130-12-55-07109

10. This man's choral works include the oratorio *The Dream of Gerontius*, (jer-ON-tee-US) while one of his orchestral works provided the melody for the patriotic song *Land of Hope and Glory*. Woodwinds depict the stutter of a friend in one piece by this composer. In addition to "Dorabella," he included a movement dedicated to Augustus Jaeger (YAY-gur), named "Nimrod," in his *Enigma Variations*. His most famous work is played at graduations. For 10 points, name this composer of the *Pomp and Circumstance* marches.

ANSWER: Sir Edward William **Elgar**, 1st Baronet

020-12-55-07110

11. At the end of this short story, it is noted that the title character spends his days telling his story to everyone at Jonathan Doolittle's hotel. That title character of this story spends his days listening to Derrick Van Bummel and Nicholas Vedder before he runs into an odd group of men playing ninepins in the Catskills. Upon his return, he finds that he has missed the American Revolution. For 10 points, name this short story written by Washington Irving about a man who sleeps for twenty years.

ANSWER: "**Rip Van Winkle**"

023-12-55-07111

12. The partition coefficient describes differences in this quantity for a hydrophobic and hydrophilic (HIE-drow-FILL-ick) substance. The common ion effect describes a situation in which this quantity is decreased. When this quantity is exceeded, crystallization can be induced by the addition of a seed. Henry's Law relates this value for a gas with its partial pressure. Everything with a chloride anion has a high value for it in water. For 10 points, name this measure of how much a substance can dissolve in a solvent.

ANSWER: **solubility** [or ability to **dissolve** before mention; accept word forms like "how **soluble** a substance is"]

020-12-55-07112

13. Defunct languages in this group include the only member of its Eastern branch, Akkadian (uh-KAY-dee-an), as well as Phoenician (fuh-"KNEE"-shun). The only member of this group written in a Latin script is Maltese. The most spoken African members of this group are Tigrinya (tee-"GRIN"-ya) and Amharic. The spoken form of one of this group's languages was revived by Eliezer (EL-ee-AY-zar) ben Yehuda. For 10 points, name this branch of the Afro-Asiatic language family whose members include Hebrew and Arabic.

ANSWER: **Semitic** languages

131-12-55-07113

14. Watson and Crick used the tautomers (TAW-toh-mers) of the DNA bases to maximize this interaction. Most of Kevlar's high strength comes from pi (PIE) stacking and this type of interaction. This type of interaction occurs between amino acids n and n+4 in an alpha helix. Ice assumes a honeycomb like structure to maximize these interactions that account for the high boiling point of water. For 10 points, name this type of strong intermolecular force that occurs with nitrogen, oxygen, and fluorine and the lightest element.

ANSWER: **hydrogen bonding**

064-12-55-07114

15. In one novel by this author, Macon evicts the grandmother of his son's friend Guitar Bains. In another novel by this author, Sammy runs away from an apartment that has windows stuffed with rags after Cholly rapes his daughter Pecola (peh-"COAL"-ah). This author who created Milkman Dead in *Song of Solomon* also wrote a novel in which an escapee from Sweet Home Plantation is haunted by the title child, whom she killed to prevent a return to slavery. For 10 points, name this author of *The Bluest Eye* and *Beloved*.

ANSWER: Toni **Morrison** [or Chloe Anthony **Wofford**]

105-12-55-07115



1A. These structures, examples of which are do-while and for, are used to repeat operations several times in programs.

ANSWER: **loops**

1B. The IMF is disavowed after allegedly bombing the Kremlin in what 2011 movie, in which Tom Cruise plays Ethan Hunt for the fourth time?

ANSWER: ***Mission: Impossible -- Ghost Protocol*** [prompt on partial answer]

2A. This is a 10-second calculation question. A data set is graphed on a box-and-whiskers plot. The box has edges at 3 and 8 and the whiskers extend to -1 and 11. There are no outliers. What is the range of this data set?

ANSWER: **12**

2B. This is a 10-second calculation question. In terms of pi, what is the area of a circle with diameter 64?

ANSWER: **1024 pi**

3A. In the essay "Invisible Bullets," Stephen Greenblatt applied his New Historicism to the plays *Henry IV* and *Henry V*, both of which were written by what playwright?

ANSWER: William **Shakespeare**

3B. Ajax and Odysseus fought over what son of Thetis and Peleus' shield at Troy?

ANSWER: **Achilles**

4A. What man painted the *Girl with a Pearl Earring* in which a girl wears a blue and yellow turban?

ANSWER: Johannes **Vermeer** [or Jan **Vermeer**]

4B. What Miami-based rapper founded the Maybach Music Group Label and has released the albums *Teflon Don* and *Deeper than Rap*?

ANSWER: Rick **Ross** [or William Leonard **Roberts II**]

5A. This is a 20-second calculation question. What is the real root of $x^3 - 8$?

ANSWER: **2**

5B. This is a 20-second calculation question. I am thinking of a two-digit number. When its digits are reversed, it is one less than twice the original number. The sum of the digits is 10. What is the number I am thinking of?

ANSWER: **37**

6A. What experiment used bacteriophages (back-TEE-ree-oh-fay-jez) and radioactive phosphorus labels to prove that DNA transmits genetic material?

ANSWER: **Hershey-Chase** Experiment [prompt on **blender** experiment]

6B. What French author wrote such stories as "Ball of Fat" and "The Necklace"?

ANSWER: Henry Rene Albert Guy de **Maupassant** (GEE duh MOE-puh-sahnt)

7A. This is a 30-second calculation question. Given that the weight of a box can be modeled by a normal random variable with mean 10 and standard deviation 5, what is the probability, in terms of the statistical coefficient phi, that a randomly selected box weighs at least 5 pounds?

ANSWER: **1 - phi(1)** ("one minus phi of 1")

7B. This is a 30-second calculation question. What is the cosine of four times the quantity arcsine square root 3 over 2 minus arcsine 1 over 2, end quantity?

ANSWER: **-1/2**

8A. Which current Speaker of the House came under fire in December 2011 for opposing a payroll tax cut plan?

ANSWER: John **Boehner** (BAY-nur)

8B. What female British novelist wrote *To the Lighthouse* and *Mrs Dalloway*?

ANSWER: Adeline Virginia **Woolf**

9A. The linen weaver's guild commissioned which man's depiction of Saint Mark for the Orsanmichele (or-SAHN-mee-"SHELL") church?

ANSWER: **Donatello** [or **Donato** di Niccolo di Betto Bardi]

9B. In what opera does Prince Calaf (KAH-laf) sing the aria "Nessun dorma?"

ANSWER: **Turandot** ("TOUR"-an-"dot")

10A. These lower-class French Revolutionaries were known for lacking the fancy breeches worn by the bourgeois (boor-ZWAH).

ANSWER: **sans-culottes**

10B. *The 42nd Parallel*, *1919*, and *The Big Money* comprise what trilogy of novels by John Dos Passos?

ANSWER: **U.S.A.**



1. One experiment named for this location offered participants a chance to join "Miss Rivers' Lodge" and led to the Belmont Reports. That experiment, led on-site by Dr. Vonderlehr (VON-der-"LAIR"), observed patients with syphilis. Members of a group named for this location began the Freeman Field Mutiny and were led by Benjamin Davis, Jr. African-American pilots who fought during World War II trained in this city. For 10 points, name this site of an Institute established by Booker T. Washington.

ANSWER: **Tuskegee**

149-12-55-07117

2. Truncated icosahedrons (iy-kah-sah-HEE-drons), like a buckyball, are composed of pentagons and this polygon. The area of a regular type of this polygon can be calculated as three-halves radical three multiplied by the side length squared. The interior angles of a regular type of this polygon are each one hundred twenty degrees. The total sum of the interior angles of it is seven hundred twenty degrees. For 10 points, name this polygon with six vertices and six edges.

ANSWER: **hexagon**

130-12-55-07118

3. One of this country's leaders promoted the political philosophies of Marhaenism (mar-"HAY"-niz-um) and the Pancasila (pahn-kah-SEE-la). That leader was overthrown in 1967 by a general who established the "New Order." This country occupied East Timor under the rule of Suharto, who succeeded this country's first president, Sukarno. A Japanese invasion during World War II ended its domination by the Dutch. For 10 points, name this Southeast Asian archipelago including the islands of Sumatra and Java.

ANSWER: Republic of **Indonesia** [or Republik **Indonesia**]

014-12-55-07119

4. A mathematician with this last name discovered a type of function useful in solving inhomogeneous differential equations, as well as a special case of Stokes' theorem in two dimensions. Nickel two plus usually has this color in solution. One mineral with this color is made of beryl and colored by chromium and vanadium (vah-NAY-dee-um). Light with this color has a wavelength between blue and yellow. For 10 points, identify the color of emeralds and cells containing chlorophyll (KLO-"row"-"FILL").

ANSWER: **green**

132-12-55-07120

5. Prior to this battle, a fleet of 50 ships were assembled by Alexander Cochrane (kok-RIN) to be commanded by Edward Pakenham ("PACK"-en-am). During this battle, former Haitian slaves, frontiersmen from Kentucky and Tennessee, and a colorful band of outlaws led by Jean Lafitte (luh-"FEET") fought for the victorious side, which used barricades of cotton bales to fortify the Mississippi River. For 10 points, name this War of 1812 battle in which Andrew Jackson successfully defended a certain Louisiana city.

ANSWER: Battle of **New Orleans**

130-12-55-07121

6. This gospel repeatedly states that Jesus committed no crime against Rome. This book opens by tracing Jesus' heritage to Adam. It is the only gospel to contain the story of the Good Samaritan and the parable of the Prodigal Son. The author of this book also wrote the Acts of the Apostles. For 10 points, name this gospel written by a "beloved physician," the third book of the New Testament and a "synoptic gospel" along with Mark and Matthew.

ANSWER: Gospel of **Luke**

002-12-55-07122

7. This structure contains JG cells, which release an enzyme that leads to angiotensin (AN-geo-TEN-sin) production and are located on the efferent arteriole (ar-TEER-ee-ole). The vasa recta wraps around a part of this structure that is situated between the proximal and distal tubules. Molecules leave this structure through the collecting duct. Bowman's capsule encloses the glomerulus (gluh-MER-uh-LUSS) in this structure, which also contains the loop of Henle (HEN-lee). For 10 points, name this unit of a kidney.

ANSWER: **nephron**

140-12-55-07123

8. When it was a colony, this state was known for its indigo production, which was begun by Eliza Lucas. Andrew Butler and Preston Brooks were both congressmen from this state. The Stono Rebellion and Denmark Vesey's rebellion both occurred in this state, whose politicians included John Calhoun. The first state to secede from the Union prior to the Civil War, it was the site of the nullification crisis. For 10 points, name this state governed from its capital of Columbia.

ANSWER: **South Carolina**

140-12-55-07124

9. One thought experiment dealing with this experiment was proposed by John Wheeler and allows for the experimenter to make a "delayed choice" to remove the detector. The spacing between the fringes of the interference pattern caused by this experiment is given by the distance z times wavelength over the distance between the namesake objects. For 10 points, name this experiment that was conducted by Thomas Young that showed that matter exhibits both wave and particle properties.

ANSWER: **double-slit** experiment [or **Young's** experiment before mentioned]

149-12-55-07125

10. One minister from this country called William McKinley "weak and catering to the rabble" in a stolen letter. This country ceded its claim to the Oregon Territory in 1819 and gave the U.S. navigational rights and the use of a harbor in a 1795 treaty signed by Pinckney. This kingdom was defeated in one war by George Dewey's fleet and a Rough Rider charge. For 10 points, name this country that fought the United States in a war that began with the sinking of the USS *Maine*.

ANSWER: Kingdom of **Spain** [or Reino de **Espana**]

020-12-55-07126

11. This is the only fundamental force whose gauge boson has not yet been observed. The distortion of light from an astronomical object as it travels towards the observer is known as this type of lensing. A torsion balance was used to measure this force's namesake constant by Cavendish, and near the earth's surface, this force causes objects to accelerate at 9.8 meters per second squared. For 10 points, identify this fundamental force, the attraction occurring between massive bodies.

ANSWER: **gravity** [or word forms; or **gravitational** force]

126-12-55-07127

12. In December of 2011, the UN deployed troops to this country as part of the peacekeeping mission UNMISS. Those troops were sent to Pibor (PEE-bor), where the Murle and Lou Nuer (noo-AIR) ethnic groups have been fighting in this country's Jonglei (JONG-lee) region. In January of 2011, this country held a week-long referendum that resulted in its July 9th independence and the establishment of a capital at Juba. For 10 points, name this newest country in Africa that seceded from the northern Khartoum government.

ANSWER: Republic of **South Sudan** [do not accept or prompt on "Sudan"]

023-12-55-07128

13. The rate of this process increases when enhancer-binding proteins bind to enhancers. This process begins with the binding of TBD to the TATA box. It begins at a unit of nucleotides called a "promoter." Introns are removed after this process in a step called splicing. In this process, an adenine (AH-duh-noon) molecule in the template strand is matched with a uracil rather than a thymine (THIGH-meem) by RNA polymerase (poh-LIH-mer-ase). For 10 points, name this process, which creates a messenger RNA molecule from a DNA template.

ANSWER: RNA **transcription**

080-12-55-07129

14. Beneath this city's Aurora Bridge is a giant sculpture of a creature called the Fremont Troll. Its founding, on Alki Point, is usually attributed to the Denny Party. Among its skyscrapers are the Smith Tower and the Columbia Center, and its suburbs include Magnolia and Wallingford. The most notable landmark in this city was built for the 1962 World's Fair and provides views of such sites as Elliott Bay and Mount Rainier. For 10 points, name this city, home to the Space Needle, found in the U.S. state of Washington.

ANSWER: **Seattle**

040-12-55-07130

15. Oligopolies (OH-luh-GAH-poh-lees) have been noted to produce a "kink" in graphic representations of this quantity. Potatoes during the Irish famine were once held to be the only example of a good where this quantity rises with cost, but to date no such Giffen good has been identified. Because of the income and substitution effects, graphs of this concept usually slope downwards. For 10 points, name this concept representing desire to own a good, which, at the equilibrium point, crosses the good's supply curve.

ANSWER: **demand** curve

002-12-55-07131



1. In 1895, the U.S. and Britain almost warred over this other country's namesake "boundary dispute." The boundary in question, on the east of this country, includes the Essequibo (ESS-ay-"KEY"-bo) River. One feature found in this country is located on Auyantepui ("eye"- "YAWN"-tuh-POO-ee) and is named after an aviator who crash landed at its top. Another body of water in this country is plagued by a duckweed infestation. It is home to Angel Falls and Lake Maracaibo (MAR-uh-K"EYE"-bo), and much of this country's llanos (YAH-noz), or plains, are found along the shores of the Orinoco River. For 10 points, name this South American country between Colombia and Guyana.

ANSWER: **Venezuela**

040-12-55-07132

2. The classification scheme for these objects was developed by Luke Howard. The highest variety of these objects glow electric blue and are called noctilucent (noc-tuh-LOO-sent). The lenticular variety of these objects can display iridescence and is shaped like a flying saucer. Silver iodide can be used to "seed" these objects. These objects form when the air reaches its dew point and are associated with precipitation. For 10 points, name these objects that come in cirrus and cumulus varieties.

ANSWER: **clouds**

105-12-55-07133

3. It is not Canada, but a boom in the cat population once plagued this country's Prince Edward Islands. One sporting center in this country is found on Algoa Bay and called Port Elizabeth. A march to Orlando Stadium was the cause of civil unrest in 1976 in Soweto, a slum district of another city here. The Cape Mountains and the Drakensberg Mountains are both found in the country, which contains the southern reaches of the Kalahari Desert and completely surrounds Lesotho. For 10 points, name this African nation, home to the cities of Pretoria and Johannesburg.

ANSWER: **South Africa**

040-12-55-07134

4. This entity's magnetic field is in the shape of a Parker Spiral, and one of the unsolved mysteries involving it is the low amount of neutrinos emitted from it. Darkened areas on this body are described by Sporer's law. Phenomena called prominences occur on this body, whose sections include a convective zone. Loops and mass ejections are events on its corona, and it emits a stream of charged particles called the solar wind. For 10 points, name this star found in the center of the solar system.

ANSWER: the **Sun**

140-12-55-07135

5. This disease is caused by a defective gene on chromosome 15 that results in a lack of the protein hexosaminidase (hecks-oh-sih-MIN-ih-days) A. The lack of that protein causes the ganglioside (GANG-lee-oh-side) GM2 to build up in the nerve cells of the brain. A characteristic feature of this disease is a cherry red spot on the retina. For 10 points, name this disease which typically results in death by age 4 and which predominately affects French Canadians and Ashkenazi Jews.

ANSWER: **Tay-Sachs** disease [or **TSD**; accept **hexosaminidase A deficiency** or **hex-A deficiency** before "hexosaminidase A" is read; prompt on **GM2 gangliosidosis** before "GM2" is read]

066-12-55-07136

This is a second calculation question. How many different ways can five horses be arranged on a merry-go-round, assuming the merry-go-round can only move counter-clockwise?

ANSWER: **24** [on a merry-go-round or other circle, 5-4-3-2-1 is the same as four other arrangements, e.g., 3-2-1-5-4]

066-12-55-07137

Which chemical indicator becomes clear in acidic solutions and pink in basic solutions?

ANSWER: **phenolphthalein**

066-12-55-07137