hsapq

1. **This composer collaborated with the librettist Richard Genee on a piece written for Bianca Bianchi,** *Voices of Spring.* **Another of his pieces may have been inspired by a Karl Beck poem. The woodwinds resemble birds and the zither plays part of the main theme of a piece by him that represents the forest near his homeland. His "Roses from the South" and "Tales from the (*)** Vienna Woods" popularized a form which he perfected with a piece depicting the "beautiful" river going through Vienna. For 10 points, name this composer of "The Blue Danube," known as the "Waltz King."
ANSWER: Johann **Strauss the Younger** [prompt on **Strauss**; prompt on **Johann Strauss** accept anything that designates him as the **younger** or **second** or **jr.** Johann **Strauss**, do not accept "Richard Strauss" or "Johann Strauss the Elder"]

192-14-86-04101

2. **This monarch gained access to the Black Sea with the successful Azov campaign against the Ottoman Empire. This ruler introduced the Table of Ranks to alter the order of precedence of military and government positions. This ruler put down a revolt of the (*)** Streltsy, and he personally built his country's first naval vessel after studying shipbuilding in The Netherlands as part of his Grand Tour. This monarch introduced a controversial tax on beards as part of his Westernizing reforms. For 10 points, name this tsar who led Russia to victory in the Great Northern War.
ANSWER: **Peter the Great** [or **Peter I**; prompt on **Peter**]

230-14-86-04102

3. **In some places, this period of time begins with the feast day of St. Martin. Gaudete Sunday occurs on the penultimate week of this season and is commemorated by the wearing of rose-colored priestly garments. It is the first season of the liturgical year, and it is often commemorated by the lighting of three (*)** purple candles and one pink candle on its namesake "wreaths." It corresponds to the Orthodox season of the Nativity Feast. For 10 points, name this season in the Christian calendar that prepares for the coming of Christ and precedes Christmas.
ANSWER: **Advent** [or **Nativity Feast** until it is read]

192-14-86-04103

4. **This man posited that fear of new challenges leads to fear of success, which he termed the "Jonah Complex." This student of Harry Harlow created and contrasted B-values with D-values after studying monkeys, and he stated that "problem-centered" and "reality-centered" people could have moments of extreme happiness known as (*)** "peak experiences." He studied people such as Einstein and Gandhi to create a construct that places safety, love, and esteem below self-actualization. For 10 points, name this psychologist who created a namesake, pyramid-shaped "hierarchy of needs."
ANSWER: Abraham **Maslow**

227-14-86-04104

5. **One class of these compounds has four-membered rings with a carbonyl bonded to nitrogen, which can bind to DD-transpeptidase. That class of these compounds contains a beta-lactam ring and breaks cross-links in peptidoglycan. Some common types of these compounds are ineffective against MDR-TB and MRSA (MER-sah). Imipenem and (*)** amoxicillin are examples of "broad-spectrum" ones. Over-prescription of these compounds led to the evolution of superbugs like *Staphylococcus aureus*. For 10 points, name these compounds that kill bacteria and include penicillin.
ANSWER: __antibiotic__s [or __antibacterial__s; prompt on "penicillin" before mention]

6. **This character is chased by an insane companion named Dolly before Francois kills Dolly with an axe. This character earns another man $1600 when he is able to lug a thousand pounds of flour one hundred yards. A gardener named Manuel kidnaps this character because, according to the first line of the novel, he "could not read the newspapers." He defeats (*)** Spitz in a fight and massacres dozens of Yeehats to save his master John Thornton. This character is brought from Judge Miller's estate to the Yukon. For 10 points, name this dog, the protagonist of *The Call of the Wild*.
ANSWER: __Buck__

7. **The cryoEDM and nEDM experiments will use measurements of this particle in an attempt to explain CP violation, and two of these non-electron particles are emitted when beryllium-16 decays. Uranium fission releases three of these particles, which can then drive a chain reaction. This particle can undergo beta decay into a (*)** proton, electron, and antineutrino via the weak force, and it was discovered by James Chadwick. For 10 points, identify this uncharged subatomic particle which forms part of the atomic nuclei.
ANSWER: __neutron__

8. **Harpagus was ordered to kill this man, but spared him, only for Astyages to kill Harpagus's son and feed it to him as punishment. This man was succeeded by a son who died from accidentally stabbing himself in the thigh, Cambyses II. An ancient cylinder named after this man has been described as the world's "first charter of human rights." His empire conquered the (*)** Medes, Lydians, and Neo-Babylonians. This man's Edict of Restoration allowed the Jews to return to Jerusalem. For 10 points, name this Persian ruler, the founder of the Achaemenid (OCK-uh-mee-nud) Empire.
ANSWER: __Cyrus the Great__ [or __Cyrus II__; prompt on __Cyrus__]

9. **According to a Chippewa legend, the Great Spirit told the tribe to settle on Madeline Island in this state, near Chequamon Bay. The Fox River flows out of the largest lake in this state, Lake Winnebago, and the St. Croix River rises in this state near Solon Springs. A tourist destination in this state is near its namesake (*)** "Dells." The Door Peninsula borders a colorfully-named arm of a Great Lake that juts into this state's northeast, Green Bay. For 10 points, name this Midwestern state west of Lake Michigan whose cities include Madison and Milwaukee.
ANSWER: __Wisconsin__

10. **This author died after being shot by Georges d'Anthes in a duel. The protagonist of one of his stories becomes obsessed with finding out a secret that the Count of St. Germain revealed to Tomsky's grandmother. In that work, Hermann goes mad after losing at cards. This author of "The (*)** Queen of Spades" also wrote about a tsar before the Time of Troubles and a man who dances with Olga, angering her fiancee Vladimir Lensky. For 10 points, name this Russian poet who wrote *Boris Godunov* and *Eugene Onegin.*

ANSWER: Alexander **Pushkin**

11. **This composer wrote an opera in which a woman is locked up by the idiotic John Styx. In that opera, a lively piece of music appears in a scene where Jupiter can apparently only dance minuets. This composer wrote "The Doll Song" in an opera based on such short stories as "The Sandman." In a comic opera based on Greek mythology, he created a scandal with his (*)** "Infernal galop" music, which is known today as the "Can-can." For 10 points, name this composer of *The Tales of Hoffman* and *Orpheus in the Underworld*.

ANSWER: Jacques **Offenbach**

12. **This author wrote a poem that laments that nature is "red in tooth and claw." One of his speakers hopes for "no moaning of the bar" and "to see his Pilot face to face" after dying. This author ended another poem with the line, "To strive, to seek, to find, and not to yield." He asked, "When can their (*)** glory fade?" in a lyric poem about the "Noble six hundred." For 10 points, name this British poet of "Ulysses" and "The Charge of the Light Brigade."

ANSWER: Alfred, Lord **Tennyson**

13. **These devices displaced slide rules. One company developed the RPL programming language to work with these devices, which they normally designed to use reverse Polish notation, as in their 12c, 35 and 48 models. That company was Hewlett-Packard. The first of these devices that was able to (*)** plot a function was introduced by Casio. For 10 points, identify these devices manufactured and designed by Texas Instruments that come in "graphing" types.

ANSWER: electronic **calculator**s [or Computer Algebra System graphing **calculator**s]

14. **The release of prisoners from this event was negotiated by James Donovan after attempts to trade them for five hundred tractors failed. The broadcasts of Radio Swan and eight B-56 bombers aided this attack, whose end result prompted Operation (*)** Mongoose. Attackers in this campaign were stymied by coral reefs after a local resistance group called the People's Revolutionary Movement was excluded from this CIA plan of June 1961. For 10 points, name this failed attempt to topple Fidel Castro, an American attack on Cuba that began on a beach.

ANSWER: **Bay of Pigs** invasion [or **Bahia de Cochinos**; or Battle of **Playa Giron**]

15. **Peleus' murder of Acastus allowed this man's son, Thessalus, to take the throne. He helped a disguised Hera cross the Anauros River. Phineus advised this person to let a dove fly past the Symplegades, a pair of crashing rocks. A prophecy about a man with one sandal led Pelias to send this man on an impossible quest. After arriving in (*)** Colchis, he was given three tasks by King Aeetes, whose daughter Medea fell in love with him. For 10 points, name this man who searched for the Golden Fleece as leader of the Argonauts.

ANSWER: **Jason**

16. **At relativistic speeds, the one-half term in the formula for these substances's energy goes away, leaving just three times T times the Boltzmann constant. When these substances are monatomic, their heat capacity ratio "gamma" is five-thirds. An a over v-squared term is added to P in an equation used when that is not the case. One equation governing them is derived by combining Avogadro's, (*)** Boyle's, and Charles's Laws. For 10 points, identify these theoretical substances which satisfy the equation PV equals nRT.
ANSWER: **ideal gas**es [prompt on **gas**es]

17. **A character in this novel instructs another to claim that his injury came from having his hand caught in a machine. That character in this novel recounts how he almost drowned his friend by telling him jump into the Sacramento River. This novel features an arrogant boxer whose wife is killed after she allows a character to (*)** pet her hair. One of its protagonists dreams of owning a farm where he can raise hundreds of rabbits before killing Curley's wife. For 10 points, name this novella about George and Lennie written by John Steinbeck.
ANSWER: *Of Mice and Men*

18. **This painter included the Tarpeian rock in the background of a canvas focusing on a woman with outstretched arms between two warring armies. People ascend a staircase in the background of another painting by this artist of *The Intervention of the Sabine Women,* in which a man in red tearfully looks away while offering the title character a cup of (*)** poison. Three brothers salute toward a bundle of swords being held by their bearded father in his most famous painting. For 10 points, name this French Neoclassical painter of *The Death of Socrates* and *The Oath of the Horatii*.
ANSWER: Jacques-Louis **David**

19. **This non-Yankees team retired the number five to honor Joe DiMaggio. This team won its first World Series behind stars Kevin Brown and Gary Sheffield, but then quickly traded away most players in Wayne Huizenga's "fire sale." Their ballpark features a tacky sculpture in which animals seem to emerge from water whenever a home run is hit. This team's disastrous 2012 season ended in the firing of manager (*)** Ozzie Guillen and featured mass injuries to stars such as slugger Giancarlo Stanton. For 10 points, name this MLB team located in Miami.
ANSWER: Miami **Marlins** [or **Florida** Marlins; or **Miami** until it is read]

20. **This building's dedication ceremonies inspired the text *On the Spectacles,* which described a bear attack. One of its first uses featured a *naumachia* recreating a Corcyrean (core-SEER-ee-un) battle. This building was connected by an underground passage to the *Ludus Magnus* school; also nearby was the *Spoliarium,* where (*)** dead bodies were placed. Completed during the reign of Titus, it seated fifty thousand people and could even host mock sea battles. For 10 points, name this huge Roman amphitheater frequently used for gladiatorial contests.
ANSWER: **Colosseum** [or **Flavian** Amphitheater]

21. **The sum of two consecutive triangular numbers will always be one of these numbers, and Lagrange proved that any number can be written as the sum of at most four of them. Numbers of this type have an odd number of positive integer factors. Their difference can always be factored as** (*) a minus b times a plus b. For 10 points, name these numbers like 1, 4, and 9, which are equal to an integer raised to the second power.
ANSWER: perfect **squares**

22. **Shortly before the birth of this woman's first son, she fell down a staircase at Sandringham. This woman's conversations with James Gilbey caused a scandal known as "Squidgygate." This woman's marriage fell apart under the suspicion that her husband was having an affair with (*)** Tiggy Legge-Bourke. Her involvements with charity included her presidency at the Royal Marsden Hospital. In 1997, she died in Paris alongside Henri Paul and Dodi Fayed in a car crash. For 10 points, name this princess, the first wife of Prince Charles.
ANSWER: **Diana**, Princess of Wales [or Diana Frances **Spencer**]

23. **This character gains access to a convent by assuming the identity of Ultime Fauchelevent. After saving a man on a ship, he fakes his death by leaping from a mast. This man becomes a mayor after developing an efficient factory system, but loses that position after confessing that he is not Monsieur (*)** Madeleine. He is told to become an "honest man" by a bishop who gives him silver candlesticks. For 10 points, name this convict and adoptive father of Cosette, the protagonist of Victor Hugo's *Les Miserables.*
ANSWER: Jean **Valjean** [or **Jean** Valjean]

1. This character has a vision of a swampland before going on vacation, and he believes that excess passion hinders artists like himself. For 10 points each:
[10] Name this aging writer who collapses on the beach after falling in love with the Polish boy Tadzio.
ANSWER: **Gustav** von Aschenbach [or Gustav von **Aschenbach**]
[10] Gustav von Aschenbach is the protagonist of this short novel, in which he dies during a cholera outbreak in the title Italian city.
ANSWER: *Death in Venice* [or Der *Tod in Venedig*]
[10] *Death in Venice* was written by this German novelist of *The Magic Mountain.*
ANSWER: Thomas **Mann**

014-14-86-04201

2. Positive examples of this phenomenon can come from vaccines and education. For 10 points each:
[10] Name these costs or benefits from a transaction which affect people not involved in the transaction. Negative examples include air pollution and congestion.
ANSWER: **externality** [or **externalities**]
[10] Arthur Pigou proposed an excise form of this phenomenon for negative externalities to reduce their amount. Similarly, positive externalities could be granted a subsidy, the opposite of this phenomenon.
ANSWER: **tax** [or **tax**ation; or other equivalents]
[10] Pigouvian taxes raise the marginal private cost of a transaction to be equal to the marginal value of this quantity, whose "problem" appears in the title of a book on externalities by Ronald Coase.
ANSWER: **social cost**

187-14-86-04202

3. Suppose you have the periodic function y equals A times sine of omega t plus k. For 10 points each:
[10] A is equal to this value, the magnitude of the oscillation.
ANSWER: **amplitude**
[10] Two pi divided by omega is equal to this value.
ANSWER: **period**
[10] If another function were to have the same period and frequency as the original function but have a different value for the same value of x, this parameter is said to be shifted for the two functions.
ANSWER: **phase**

064-14-86-04203

4. This man was the first person to use the title "Holy Roman Emperor." For 10 points each:
[10] Name this son of Henry the Fowler who defeated the invading Magyars at the Battle of Lechfeld.
ANSWER: **Otto I** [or **Otto the Great**; prompt on **Otto**]
[10] Otto I was crowned with the Iron Crown of this Germanic people that settled in northern Italy. They later gave their name to an alliance of Italian states against Frederick Barbarossa.
ANSWER: **Lombard**s
[10] Otto tried to improve the Holy Roman Empire's relations with this empire by marrying his son to a princess from here. This empire's relations with Western Europe declined due to the Fourth Crusade and the Great Schism.
ANSWER: **Byzantine** Empire [prompt on **Eastern Roman** Empire]

232-14-86-04204

5. These diagrams are produced by the CALPHAD approach. For 10 points each:
[10] Name these diagrams showing the pressure and temperature at which a compound undergoes the namesake transitions, such as transitioning from solid to liquid.
ANSWER: **phase** diagrams
[10] This point on a phase diagram marks the point at which the phase boundary between liquid and gas ceases to exist, and the two become indistinguishable.
ANSWER: **critical** point
[10] This point on a phase diagram for a mixture of compounds marks the composition at which the mixture has the lowest freezing point.
ANSWER: **eutectic** point

6. This myth system's death god is the rotting skeleton Ah Puch. For 10 points each:
[10] Name this mythos which contains stories about the "hero twins" and their fight against the Lords of Xibalba.
ANSWER: **Maya**n mythology
[10] Aztec myth holds that we live in the age of the fifth one of these astronomical objects. In Greek mythology, it is represented by Helios.
ANSWER: the **sun**
[10] Mayan mythology holds that humans were created from this substance. The "tonsured" Mayan god of this substance was also the god of the cocoa bean.
ANSWER: **maize** [or **corn**]

7. During World War II, control of this city was given to Kurt Eberhard. For 10 points each:
[10] Name this Ukrainian city whose Jewish residents were killed by the Nazis near Babi Yar during World War II.
ANSWER: **Kiev**
[10] The massacres at Babi Yar was part of this larger event. Also known as the Shoah, this is the name given to the Nazis genocide of Jews and other peoples during World War II as part of a "Final Solution."
ANSWER: the **Holocaust**
[10] Members of the "C" of Einsatzgruppen carried out the Babi Yar massacre; they were formed by this SD leader, whose assassination in Czechoslovakia sparked massive reprisals by the Nazis.
ANSWER: Reinhard **Heydrich**

8. This composer wrote such operas as *La Silvia* and *Griselda.* For 10 points each:
[10] Name this Italian Baroque violinist who collected twelve violin concertos apiece in his *La Cetra* and *The Contest Between Harmony and Invention.*
ANSWER: Antonio **Vivaldi**
[10] Vivaldi is best known for these four violin concertos, each of which depicts a certain time of the year.
ANSWER: The ***Four Seasons*** [or Le ***Quattro Stagioni***]
[10] This other Italian violinist wrote several sets of trio sonatas for two violins and continuo as well as his famous Opus 6, a set of twelve concerti grossi.
ANSWER: Arcangelo **Corelli**

9. This collection of stories is framed around a pilgrimage to Thomas Becket's shrine. For 10 points each:
[10] "The Knight's Tale" is the first of what never completed group of stories that depict medieval English life?
ANSWER: The *Canterbury Tales*
[10] *The Canterbury Tales* were penned by this man, who depicted two lovers in the Trojan War in *Troilus and Criseyde.*
ANSWER: Geoffrey **Chaucer**
[10] In "The Wife of Bath's Tale," a knight convicted of rape is put on a task to discover what these type of people desire the most.
ANSWER: **women**

192-14-86-04209

10. This battle was the high point in the military career of Israel Putnam, who performed less valiantly at Long Island. For 10 points each:
[10] Name this early battle from the American Revolution fought mostly on Breed's Hill.
ANSWER: Battle of **Bunker Hill**
[10] The British forces at Bunker Hill were commanded by this man, who captured New York and Philadelphia after replacing Thomas Gage.
ANSWER: William **Howe**
[10] William Prescott told the Americans at Bunker Hill not to fire until they saw this part of the British troops' bodies.
ANSWER: the **whites of their eyes** [prompt on partial answer]

014-14-86-04210

11. This poem's speaker describes a "lost battalion of platonic conversationalists jumping down the stoops." For 10 points each:
[10] Identify this poem published in 1956, whose speaker claims "I saw the best minds of my generation destroyed by madness."
ANSWER: "**Howl**"
[10] "Howl" was written by Allen Ginsberg, a member of the Beat Generation. This other Beatnik wrote about the travels of Sal Paradise and Dean Moriarty in his *On the Road.*
ANSWER: Jack **Kerouac**
[10] This other Beat poet referenced Bosch, Picasso, and Chagall in the title poem of his collection *A Coney Island of the Mind,* which also includes his poem "The Junkman's Obbligato."
ANSWER: Lawrence **Ferlinghetti**

229-14-86-04211

12. This ruler developed a political philosophy he called "marhaenism." For 10 points each:
[10] Name this leader targeted by the 30 September Movement. He was ultimately overthrown by Suharto.
ANSWER: **Sukarno**
[10] Sukarno was the president of this Southeast Asian archipelago, the most populous Muslim country.
ANSWER: Republic of **Indonesia**
[10] Sukarno dubbed his political arrangement the "guided" form of this system. A "wall" named for this concept was built by dissidents in Beijing in 1978.
ANSWER: **democracy**

014-14-86-04212

13. Ribosomes consist of proteins and the ribosomal type of this molecule. For 10 points each:
[10] Name this type of nucleic acid which is single-stranded, in contrast to DNA.
ANSWER: **RNA** [or **ribonucleic acid**]
[10] This type of RNA has a cloverleaf secondary structure and matches its anticodon to its corresponding codon during translation.
ANSWER: **tRNA** [or **transfer** RNA]
[10] RNA lacks nucleotides with this nucleobase, replacing it with uracil.
ANSWER: **thymine**

14. The title character of this English play sells his soul to Lucifer. For 10 points each:
[10] Name this play featuring a famous scene in which the title character asks "Was this the face that launched a thousand ships?" after raising Helen of Troy from the dead.
ANSWER: *Doctor Faustus* [do not accept "Faust"]
[10] *Doctor Faustus* was written by this contemporary of Shakespeare.
ANSWER: Christopher **Marlowe**
[10] A Marlowe poem beginning "Come live with me and be my love" is narrated by a "passionate" person of this profession.
ANSWER: **shepherd**

15. The mass and charge of this particle were determined by Millikan's oil-drop experiment. For 10 points each:
[10] Name these small particles with a charge of -1.
ANSWER: **electron**s
[10] These particles are the antiparticles of electrons. They are emitted in a namesake form of beta decay.
ANSWER: **positron**s
[10] Positron emission also results in the emission of one of these particles.
ANSWER: **electron neutrino** [prompt on **neutrino**]

16. Answer the following about religious festivals, for 10 points each.
[10] This "festival of lights" begins with Dhanteras and celebrates the return of Rama from his exile. In Jainism, this holiday commemorates Mahavira's attainment of Nirvana.
ANSWER: **Diwali**
[10] Rangapanchami brings an end to celebrations involving this holiday, whose most visible practice is the throwing of paint on other people.
ANSWER: **Holi** [or **Festival of Colors**]
[10] Both Diwali and Holi are observed in this broadly defined religion, which involves the worship of gods such as Vishnu or Shiva.
ANSWER: **Hindu**ism

17. This artist contributed several frescoes to the Sistine Chapel, such as his *The Temptation of Christ*. For 10 points each:
[10] Name this Renaissance artist who depicted two satyrs playing with a sleeping god's armor in his *Venus and Mars,* but is better known for showing Three Graces dancing together in his *Primavera.*
ANSWER: Sandro **Botticelli**
[10] In this most famous Botticelli painting, a handmaid arrives to robe the title goddess, who emerges fully formed from the sea on a shell.
ANSWER: *The **Birth of Venus***
[10] In Botticelli's *Primavera*, Zephyrus can be seen abducting this nymph of spring, who has flowers springing from her mouth.
ANSWER: **Chloris**

18. The Hungarian Orban built cannons to facilitate this offensive. For 10 points each:
[10] Identify this campaign by Mehmet II, which ended with the taking of a city ruled by Byzantine Emperor Constantine XI.
ANSWER: Siege of **Constantinople**
[10] Mehmet the Conqueror was a sultan of this empire, which ruled Anatolia for centuries before turning into Turkey after World War I.
ANSWER: **Ottoman** Empire
[10] Constantine XI was from this final ruling family of the Byzantine empire. Other members of this dynasty included Michael VIII, who helped instigate the Sicilian Vespers.
ANSWER: **Paleologus** [accept **Palaiologos** or **Palaeologan**]

19. R. Lee Ermey devised many of his own insults playing the role of the Parris Island drill instructor in this film. For 10 points each:
[10] Name this film whose first act follows the training of "Joker" and other Marines and whose second act follows his experience in Vietnam, culminating in a traumatic encounter with a sniper.
ANSWER: *Full Metal Jacket*
[10] *Full Metal Jacket* was directed by this endlessly innovative American filmmaker. He collaborated with Arthur C. Clarke on *2001: A Space Odyssey.*
ANSWER: Stanley **Kubrick**
[10] In the first segment of *2001: A Space Odyssey,* two rival clans of apes fight over possession of one of these geographical features.
ANSWER: a **water hole** [or obvious equivalents like a **pool of water**]

20. In this film, Aubrey Plaza voices Claire, who co-hosts a competition called the "Scare Games" run by Greek life. For 10 points each:
[10] Name this 2013 movie in which Sully and Mike Wazowski attend the title institution to learn how to scare children.
ANSWER: *Monsters University*
[10] *Monsters University* was created by this animation studio based in Emeryville, California. Its parent company is Disney, and its films have included *Toy Story* and *Cars.*
ANSWER: **Pixar** Animation Studios
[10] *Monsters University* is preceded by a short film about a blue type of this object. In the short, it falls in love with a red counterpart but gets injured after being blown away by the wind.
ANSWER: an **umbrella**

21. Thomas Jefferson asked Lewis and Clark to look for these animals on their journey to the West. For 10 points each:

[10] Name these extinct species, once larger than elephants, which had foot-long claws. Their significantly-smaller modern-day descendants are classified as having two toes or three toes.

ANSWER: giant **ground sloth**s [prompt on "sloths"]

[10] Another gigantic animal running around South America was proposed by this early British sci-fi author in his short story "Empire of the Ants." He also wrote *War of the Worlds* and *The Time Machine*.

ANSWER: Herbert George **Wells**

[10] This region of South America was named because Magellan and other Spaniards thought the inhabitants were huge giants. This region extends south to the Tierra del Fuego.

ANSWER: **Patagonia**

190-14-86-04221