1. This man's capitol near Qantir, abandoned shortly after his death, was excavated by Manfred Bietak. Most of this man's sons were buried at a site known as KV5. Succeeded by Merneptah, this ruler along with Hattusili III of the Hittites signed what is considered the first peace treaty in history. The son of Seti I, this ruler with temples dedicated to him at (*) Karnak and Abu Simbel was the victor at the Battle of Kadesh. For 10 points, name this New Kingdom Egyptian pharaoh often referred to as "the Great."
ANSWER: Ramses II [or Ramesses the Great; or Ozymandias; prompt on Ramses; prompt on Ramesses]

084-10-19-15102
2. This figure's enemies included Camilla of the Volsci and Turnus of the Rutuli, whom he defeated to avenge Pallas. His father was a mortal lover of Aphrodite, whom he carried on his back out of a burning city. His son (*) Ascanius founded Alba Longa, a precursor of Rome. After landing at Carthage, he had an affair with Dido, whom he later spurned. For 10 points, name this hero of an epic poem by Virgil. ANSWER: Aeneas
3. Helical grooves in a thin layer of carbon or metal are used in the construction of the film type of these components, while nichrome (NYE-krome) is used in making the wirewound type. Like capacitors, a four color band code is used to label these devices. Potentiometers are made from three terminal ones, and four of these elements are used in a (*) Wheatstone bridge. They are commonly indicated using a zig-zag symbol. For 10 points, name these circuit components that cause a voltage drop when a current runs through them.
ANSWER: resistors
4. One of this artist's works resubtitles the namesake figure as "controller of the universe," while in another work a man bends down as a large basket is strapped to his back. In addition to The Flower Carrier, he also painted an art museum's lobby with workers at a car assembly line in Detroit Industry and created several portraits of himself with his unibrowed wife. A depiction of his fellow Communist Vladimir Lenin led to the destruction of his mural (*) Man at the Crossroads. For 10 points, name this husband of Frida Kahlo, a prominent Mexican muralist.
ANSWER: Diego Rivera
5. The first one of these identified, bombykol, induces the flutter dance in silkworm moths. The Flehmen response aids in the detection of these by helping them reach the vomeronasal organ. Social insects have alarm ones. Aphrodisin is an example in hamsters, and others are believed to be responsible for $\left(^{*}\right)$ menstrual cycle synchronization. Ants uses these to mark paths to food. For 10 points, name these chemicals that allow for communication within a species which often aid in sexual reproduction.
ANSWER: pheromones [prompt on semiochemical]
6. In one work by this author, Father Delaura is forced to serve at a leper colony after he falls in love with a child whose exorcism he is overseeing after she is bitten by a rabid dog. This author of Of Love and Other Demons included the story "A Very Old Man with Enormous Wings" in the collection Leaf (*) Storm. His most famous work is based around the descendants of Colonel Aureliano Buendia in Macondo. For 10 points, name this Colombian magical realist author of Love in the Time of Cholera and One Hundred Years of Solitude.
ANSWER: Gabriel Garcia Marquez [prompt on Marquez]
001-10-19-15107
7. One composer from this nation wrote a Fantasia Concertante on a Theme of Corelli and the oratorio A Child of Our Time. Another composer from this nation arranged the 'Fantasy on the Dargason" from his Second Suite for Military Band for the finale of his St. Paul's Suite. A third composer from this country wrote In the Fen Country, as well as Antarctic and Sea Symphonies. The home of Michael Tippett and the composer of (*) The Planets, Gustav Holst, it is also the home of Ralph Vaughn Williams. For 10 points, name this nation whose capital Vaughn Williams commemorated in his second symphony, London.
ANSWER: Great Britain [or the United Kingdom; or England]
040-10-19-15108
8. With Maclaurin, this man lends his name to a formula for evaluating finite sums and infinite series with integrals. His namesake formula relates trigonometric functions and the complex exponential function. He names a constant symbolized lowercase gamma with Mascheroni, considered the father of (*) graph theory for his solution of the Seven Bridges of Königsberg Problem. For 10 points, name this mathematician whose namesake number is approximately 2.718 and denoted with a lowercase e.
ANSWER: Leonhard Euler
9. This President signed the Gramm-Leach-Bliley Act, which repealed the Glass-Steagall Act. His administration began the "wet foot/dry foot" policy towards Cuban immigrants. This President brought the peace negotiations of the Bosnian War to Dayton, Ohio. He ensured background checks would be mandated for gun buyers by signing the Brady Bill. With Secretary of State Warren Christopher, this President presided over American entrance into the (*) World Trade Organization and NAFTA. For 10 points, name this Democratic predecessor to George W. Bush.
ANSWER: Bill Clinton [or William Jefferson Clinton; or William Jefferson Blythe III]
10. This comic strip spawned an animated special which featured several songs by Jimmy Thudpucker. Other characters include the news reporter Roland Hedley; Zipper Harris, who is an undergraduate at Walden College; and B.D., who is often seen wearing a helmet of some sort. Its notable use of symbols to represent (*) political figures have included Newt Gingrich as a bomb with a lit fuse, and Bill Clinton as a waffle. For 10 points, name this newspaper comic strip that frequently espouses a liberal point of view, by Garry Trudeau.
ANSWER: Doonesbury
11. As an old man, this character builds his castle on land reclaimed from the sea through dykes. He is respected by villagers because his father cured many from the plague. This character wins a duel against Valentine before failing to rescue his lover from a dungeon. He becomes the lover of Helen of Troy and an advisor to the emperor in one work, and in another he attends (*) Walpurgis Night and causes the decline and death of Gretchen. For 10 points, name this scholar who is aided by Mephistopheles after selling his soul to the devil in a Wolfgang von Goethe play.
ANSWER: Faust
12. In one story, one of this deity's sons is a war god that was raised by six women, resulting in the formation of his six faces; that son is named Skanda. He is attended by the Ganas and is the husband of Parvati, who bore him another son with an elephant's head. This rider of the bull Nandi also has a blue (*) throat from drinking the world's poison and has a third eye in his forehead whose opening will cause the destruction of the universe. For 10 points, name this Hindu deity, a member of the Trimurti known as the Destroyer.
ANSWER: Shiva
13. This poet asked "when the ghost begins to quicken, ...is it sent out naked on the roads" in his poem '"The Cold Heaven." He wrote about a place where he will have 'nine bean-rows'" and 'a hive for the honey-bee" in a locale where he wishes to build a "small cabin" made "of clay and wattles." In addition to penning "The Lake Isle of (*) Innisfree," he wrote a poem in which "things fall apart" and "the centre cannot hold." That poem is "The Second Coming." For 10 points, name this Irish poet of "Sailing to Byzantium."
ANSWER: William Butler Yeats
14. This leader was responsible for the massacre of a garrison in Drogheda (DROY-eh-duh). A mutiny of soldiers who supported the Levellers was put down by this man, who served in the army of those soldiers under Thomas Fairfax. This man received power from the Instrument of Government and dissolved the Rump Parliament and the Parliament of Saints. Before coming to power, he served in the (*) New Model Army. For 10 points, name this man briefly succeeded by his son Richard who came to power after the execution of Charles I to serve as the Lord Protector of England.
ANSWER: Oliver Cromwell
023-10-19-15115
15. Similarly to Rayleigh scattering, the intensity of the scattered light is proportional to the fourth power of the light's wavelength when a light beam is passed through this kind of system. That phenomenon is known as the Tyndall Effect. Particles separate from this state via flocculation (FLOCK-'you"-LAY-shun). This system consists of a (*) dispersed phase and a continuous phase, and this type of mixture includes aerosols and emulsions. For 10 points, name this type of mixture that includes fog and mayonnaise, in which dispersed particles are larger than in solutions and smaller than in suspensions.
ANSWER: colloids [accept Tyndall Effect before "system"]
16. This project was originally conceived by historian Doane Robinson. Its creator also created a monument for the North Carolina dead on Seminary Ridge at Gettysburg and received funding from the Ku Klux Klan for Stone Mountain in Georgia. Initially meant to depict its four figures from the waist up, this (*) Gutzon Borglum work was halted in 1941 with only the presidents' faces completed. For 10 points, name this South Dakota monument in which the heads of Washington, Jefferson, Lincoln, and Roosevelt are carved into granite.
ANSWER: Mount Rushmore National Memorial
015-10-19-15117
17. This dynasty's first emperor won the Battle of Lake Poyang after coming to prominence during the Red Turban Rebellion. The Yong-le emperor moved this dynasty's capital to Beijing after taking over from the Hong-wu emperor, who founded this dynasty after the fall of the Yuan. It established its capital in the $\left(^{*}\right.$ ) Forbidden City. For 10 points, name this Chinese dynasty that ruled from the mid-fourteenth to mid-sixteenth centuries, which was famed for its porcelain vases.
ANSWER: Ming Dynasty [or Empire of the Great Ming; or Ming Chao]
026-10-19-15118
18. This city's namesake basin is a source of oil first tapped by Edward Doheny, and nearby cities that grew up around that oil supply include Signal Hill. That basin includes the Palos Verdes Peninsula, and its geologic center is in the city of South Gate. Other oil sources around this city include an area where prehistoric (*) animals are trapped in tar pits, La Brea, and the Huntington Beach Oil Field in Orange County. For 10 points, name this city whose most profitable oil well is found in Beverly Hills.
ANSWER: Los Angeles
003-10-19-15119
19. This man learned Italian by means of playing chess games wherein the loser had to learn part of the language. This first U.S. Minister to Sweden once made fun of Harvard students in letters to The New England Courant that he signed 'Silence Dogood." He was also the first (*) Postmaster General. His scientific experiments led him to set the convention for electric charge, and he wrote Poor Richard's Almanac. For 10 points, name this American who probably did not actually fly a kite in a thunderstorm. ANSWER: Benjamin Franklin

081-10-19-15120
20. At the end of this novel, one character decides to marry her former fiancé, Mike Campbell. The protagonist of this work is impotent from an injury in the First World War, thus preventing him from marrying Brett Ashley. In Paris, the protagonist of this novel meets an aggressive former boxing champion named Robert Cohn. The central characters of this novel watch the running of the ${ }^{(*)}$ ) bulls in Pamplona, where they meet Pedro Romero the bullfighter. For 10 points, name this novel about the veteran Jake Barnes, written by Ernest Hemingway.
ANSWER: The Sun Also Rises
080-10-19-15121
21. The Coco Islands is an archipelago controlled by this country, whose main river names an endangered species of dolphin known for cooperating with human fishers. This country's government recently moved its capital to the planned city of Naypyidaw. (*) U Thant, a diplomat from this country, served as UN Secretary-General during most of the 1960s. Mandalay was a former capital of this country that lies on its chief Irrawaddy River. Until 2006, its capital was Yangon, also known as Rangoon. For 10 points, name this Southeast Asian nation also known as Burma.
ANSWER: Myanmar [or Burma before it is read]
22. One character ends this play by exclaiming he cannot sign his name to a piece of paper because he has already given up his soul. Another character in this play is pressed to death and is named Giles Corey. This play starts shortly after girls are seen dancing in the woods with the slave Tituba. The events of this play were meant to be an allegory of (*) McCarthyism. For 10 points, name this play about Abigail Williams and the Proctors, which describes the Salem witch trials and was written by Arthur Miller.
ANSWER: The Crucible
023-10-19-15123
23. The cosmic microwave background radiation exists slightly above this condition, as do both lambda points for helium. Bose-Einstein condensates also exist at points near this condition. The Third Law of Thermodynamics states that the entropy of a perfect crystal is $\mathbf{~}^{*}$ ) zero at this condition. A simple way to determine the value for this condition is to graph the relationship between a gas's temperature and its pressure, then extrapolate the line to where pressure equals zero. For 10 points, name this temperature roughly equal to negative 273 degrees Celsius.
ANSWER: absolute zero

1. Left to die at birth, she was fed by a she-bear, and she was turned into a lion after making love in a shrine of Cybele. For 10 points each:
[10] Name this Greek huntress renowned for her speed, a lover of Meleager (MEL-ee-EY-grr).
ANSWER: Atalanta
[10] Atalanta drew first blood on the hunt for this boar, which was ultimately slain by Meleager.
ANSWER: Calydonian Boar
[10] Atalanta offered to marry anyone who could outrun her and speared those whom she defeated. She lost a race to Hippomenes after that figure dropped one of these items of the Hesperides, which Atalanta stopped to pick up.
ANSWER: apple
2. One of this man's plays takes place on a park bench and sees Jerry kill himself with his own knife. For 10 points each:
[10] Name this American playwright of The Zoo Story and a play which ends with George asking the titular question to his wife Martha.
ANSWER: Edward Franklin Albee III
[10] Albee is best known for this play in which Nick and Honey's after party with George and Martha turns disastrous as George "kills" his imaginary son in the play's climax.
ANSWER: Who's Afraid of Virginia Woolf?
[10] The actual writer Virginia Woolf is known for this novel, which takes place at the Ramsey's home in Scotland. In its last section, members of the Ramsey family make the titular journey.
ANSWER: To the Lighthouse
3. This man served as the President of the Second Continental Congress for two years, during which time he became the first signer of the Declaration of Independence. For 10 points each:
[10] Name this Massachusetts merchant and Founding Father whose signature stood out from the others in size.
ANSWER: John Hancock
[10] This man drafted the Olive Branch Petition to try and reconcile with Britain in 1775, although he had earlier been the "Penman of the Revolution" with his Letters from a Farmer in Pennsylvania. ANSWER: John Dickinson
[10] This delegate to the Continental Congress helped to found and lead the Sons of Liberty, and he also started up committees of correspondence in Massachusetts.
ANSWER: $\underline{\text { Samuel Adams [prompt on Adams] }}$
4. For a reversible process of this type, the pressure equals a constant divided by the volume. For 10 points each:
[10] Name this type of process for which Boyle's Law holds, in which the change in temperature is zero. ANSWER: isothermal process
[10] Two isothermal processes and two adiabatic processes comprise this maximally efficient engine cycle. ANSWER: Carnot cycle
[10] Adiabatic processes, on the other hand, are those in which the change in this other thermodynamic quantity equals zero. It can be expressed in joules, calories, or BTUs.
ANSWER: heat [or $\mathbf{Q}$ ]
064-10-19-15204
5. The highest sales one is $9.75 \%$, which exists in Los Angeles and Cook County, Illinois. For 10 points each:
[10] Name this financial charge, also exemplified by income and property types, that a citizen must pay to his or her government.
ANSWER: taxes
[10] Tax rates are plotted again the revenue a government has raised through taxation on this economic curve. Its namesake allegedly explained it to Dick Cheney by drawing it on a napkin.
ANSWER: Laffer curve
[10] The Laffer curve is central to this school of economic thought that was named by Jude Wanniski. Practiced by Ronald Regan, it seeks to promote the production of goods and services by lowering tax rates. ANSWER: supply-side economics

079-10-19-15205
6. Name these myth systems from clues about their creation myths, for 10 points each.
[10] This myth system holds that in the beginning, Musspellheim (MUSS-pell-hyme) and Niflheim
(NEE-ful-hyme) were separated by Ginnungagap (gih-NUN-guh-GAP), and that the first giant, Ymir, was killed in order to build the universe with his bones.
ANSWER: Norse mythology
[10] In this myth system, the world is created by Tepeu and Gucumatz, as told in the Popol Vuh (POE-pole WOO), which also tells of the Hero Twins.
ANSWER: Mayan mythology
[10] The Enuma Elish tells the creation story of this myth system. Marduk slays the chaos monster Tiamat, whose body becomes the world.
ANSWER: Babylonian mythology
024-10-19-15206
7. One of this artist's paintings depicts a Greek poet being crowned by Nike, while another of his paintings depicts several naked women in a bath house. For 10 points each:
[10] Name this French Neoclassical painter of The Apotheosis of Homer and The Turkish Bath.
ANSWER: Jean Auguste Dominique Ingres (ANG)
[10] The title figure of this Ingres work holds a fan made of peacock feathers and lies on a bed with her back to the viewer. That woman also appears to have too many vertebrae.

## ANSWER: La Grand Odalisque

[10] Early in his career, Ingres studied under this other Neoclassical artist, best known for such paintings as The Death of Socrates and Oath of The Horatii (hoe-RAY-she-"eye").
ANSWER: Jacques-Louis David (dah-VEED)
8. One author of this nationality, Karel Capek (KAIR-uhl CHAH-pek) wrote War with the Newts and introduced the word "robot" in R.U.R. For 10 points each:
[10] Name this eastern European nationality of Vaclav Havel, a playwright and author of the play The Garden Party who became President after the end of the Prague Spring.
ANSWER: Czech Republic
[10] In this Czech novel by the author of The Book of Laughter and Forgetting and The Joke, the surgeon Tomas takes up window washing and is unfaithful to his wife Tereza.
ANSWER: The Unbearable Lightness of Being [or Nesnesitelná Lehkost Bytí]
[10] This man wrote The Unbearable Lightness of Being.
ANSWER: Milan Kundera
9. This statue shows a man, slightly bent, with his left arm at his knee and his right arm extended. For 10 points each:
[10] Name this bronze sculpture by Myron, which shows an athlete preparing to hurl the namesake object.
ANSWER: Discobolus [or Discus-Thrower]
[10] Myron was a rival of this other Greek sculptor, who sculpted the Diadumenos and the Doryphorus, also known as the Spear-Bearer or the Canon.
ANSWER: Polyclitus [or Polycleitus; or Polykleitos]
[10] Both Discobolus and Doryphorus were statues created to honor victors in these Greek athletic events.
ANSWER: Olympic games [or Olympics]
003-10-19-15209
10. Answer these questions about DNA replication, for 10 points each:
[10] The opening stages of DNA replication sees the unwinding of this DNA structure proposed by Watson and Crick that consists of two DNA strands coiled around each other.
ANSWER: double helix
[10] This general class of enzymes reads a single strand of DNA to synthesize a new DNA strand.
ANSWER: DNA polymerase
[10] DNA replication produces these small strands of DNA named for a pair of Japanese scientists that are linked together with the enzyme ligase.
ANSWER: Okazaki fragments
11. Starbuck is the first mate of the Pequod in this novel. For 10 points each:
[10] Name this novel about Ahab's quest to kill the title whale.
ANSWER: Moby-Dick
[10] Moby-Dick was written by Herman Melville, who also wrote a novel about this titular sailor, who is accused of conspiracy to mutin by Claggart.
ANSWER: Billy Budd [accept either name]
[10] Babo leads a slave rebellion, as described by Amasa Delano, in this short story by Melville.
ANSWER: "Benito Cereno"
12. This composer abandoned his first Violin Concerto to work on The Gambler, but later premiered it with a very young Vladimir Horowitz. For 10 points each:
[10] Identify this Russian composer who put a sleigh-bell troika in his Lieutenant Kije Suite and a dance of the pagan monsters in his Scythian Suite.
ANSWER: Sergei Sergeyevich Prokofiev
[10] Prokofiev composed this musical children's story, whose title characters are represented by the strings and French horns.
ANSWER: Peter and the Wolf [or Petya i Volk]
[10] Prokofiev wrote a ballet adaptation of this play, in which a "Dance of the Knights" precedes songs by Mercutio and Tybalt at the ball where the title male first meets the title female.
ANSWER: Romeo and Juliet
020-10-19-15212
13. Name these pharaohs of ancient Egypt, for 10 points each.
[10] Howard Carter's discovery the tomb of this eighteen year old sparked intense speculation into the cause of his death and a renewed Egypt mania.
ANSWER: Tutankhamen [or Tutankhaten]
[10] The Amarna letters reveal details from the reign of this pharaoh, who attempted to set up a monotheistic religion centering on Aten.
ANSWER: Akhenaten [or Amenhotep IV; prompt on Amenhotep]
[10] This eighteenth dynasty ruler became the longest ruling female pharaoh after the death of her consort Thutmose II.
ANSWER: Hatshepsut
015-10-19-15213
14. For 10 points each, name these moons of Saturn.
[10] This moon is the second-largest in the solar system, and contains an unusual dense, smog-like atmosphere.
ANSWER: Titan
[10] In 2005 NASA discovered water vapor on this other moon of Saturn, which had been previously known for having an unusually high albedo.
ANSWER: Enceladus
[10] Along with Rhea, this moon about the size of Enceladus is considered Saturn's most heavily cratered moon. The most noticeable one is the Herschel Crater, a giant impact crater that allegedly makes it look like the Death Star.
ANSWER: Mimas
003-10-19-15214
15. This work opens with a conversation between Gabriel Utterson and Richard Enfield. For 10 points each:
[10] Name this work about a doctor with a split personality.
ANSWER: The Strange Case of Dr. Jekyll and Mr. Hyde
[10] Dr. Jekyll and Mr. Hyde was a work by this Scottish author who wrote of Jim Hawkins in Treasure Island.
ANSWER: Robert Louis Stevenson
[10] Stevenson also wrote this work which opens with David Balfour seeking out his uncle Ebenezer at the mysterious House of Shaws.
ANSWER: Kidnapped
16. \{MODERATOR: Do not read the full answer to part 2 if it is not given, lest you reveal the answer to part 3.\}
A bridge from Jamestown over Narragansett Bay connects this city to Conanicut Island. For 10 points each: [10] Name this city on the south end of Aquidneck Island, which is home to the oldest synagogue in America, the Naval War College, and the former summer homes of New York elites, such as The Breakers. It was also the namesake of important jazz and folk festivals.
ANSWER: Newport
[10] Newport is, like Warwick, Pawtucket, and Cranston, a city in this smallest American state.
ANSWER: The State of Rhode Island and Providence Plantations
[10] The official name of Rhode Island incorporates this two-word phrase, which founder Roger Williams coined to credit God as the source of new settlements.
ANSWER: "Providence Plantations"
17. This discipline is considered the forerunner of chemistry. For 10 points each:
[10] Name this discipline probably best known for being studied by crackpots searching for the "philosopher's stone" and trying to turn base metals into gold.
ANSWER: alchemy
[10] Known as the "Luther of Medicine," this sixteenth-century alchemist wrote The Great Surgery Book and developed precursors to modern homeopathy and psychiatry.
ANSWER: Paracelsus [or Philippus Theophrastus Bombastus von Hohenheim]
[10] Paracelsus also invented a mercury-containing cure for this disease, which was later treated with the arsenic-containing Compound 606.
ANSWER: syphilis
003-10-19-15217
18. Name these sports, for 10 points each.
[10] Tidus and Wakka lead the Besaid Aurochs in this underwater ballgame from Final Fantasy 10.
ANSWER: blitzball
[10] The only rule of this game is that it cannot be played the same way twice. Its namesake plays it against the tiger Hobbes.
ANSWER: Calvinball
[10] This sport's notable players include Arnold Palmer, Lee Trevino, and Tiger Woods.
ANSWER: golf
080--0-15218
19. This country's 1974 Constitution served as a preface to its breakup into many smaller countries such as Serbia and Croatia. For 10 points each:
[10] Name this Balkan nation that existed in some form during the middle parts of the twentieth century. Its capital was Belgrade.
ANSWER: Yugoslavia
[10] This communist leader of Yugoslavia was one of the founders of the Non-Aligned Movement, and his regime suppressed the Croatian Spring uprising.
ANSWER: Josep Broz Tito [or Josip Broz]
[10] This monarch presided over the creation of Yugoslavia with his January 6th Dictatorship. He was later assassinated by Vlado Chernozemski in Marseilles while on a state visit to France.
ANSWER: Alexander I of Yugoslavia [prompt on Alexander]
20. This battle ended with the annihilation of the forces under Leonidas, which probably numbered around one thousand and not three hundred. For 10 points each:
[10] Name this battle that occurred in a small pass during a Persian invasion of Greece under Xerxes I. ANSWER: Battle of Thermopylae
[10] This sea battle occurred sometime in the weeks after the Battle of Thermopylae, and it ended in a decisive Greek victory for Themistocles over the Persian fleet in the namesake strait.
ANSWER: Battle of Salamis
[10] During the Battle of Marathon, this runner supposedly ran from the battlefield either to seek assistance for the Greeks or to announce a Greek victory.
ANSWER: Phidippides
023-10-19-15220
21. The prefixes $S$ and $R$ are added to pairs of molecules with this property. For 10 points each:
[10] Name this chemical equivalent of "handedness," the property of not being able to be superimposed on a mirror image of oneself.
ANSWER: chirality
[10] Chirality is important in this field of chemistry, which deals with spatial isomers rather than structural isomers.
ANSWER: stereochemistry
[10] Structural isomers include the hexoses fructose, galactose, and this other sugar, all of which have formula $\mathrm{C}_{6} \mathrm{H}_{12} \mathrm{O}_{6}$.
ANSWER: glucose

