1. **These structures are used to detect and remove concavities in Graham's scan. The nearest-neighbor chain algorithm uses one of these data structures to keep track of each path that it follows, and Forth and RPL are examples of languages that are "oriented" towards this data structure. When using infinite** recursion, the pointer of the "call" variety of these data types can exceed their bound in their namesake "overflow." "Push" and "pop" are the operations of these data types. For ten points, name these "last-in, first out" data types often contrasted with queues.

Answer = Stacks (accept Call Stacks)

2. **This school of thought posited that a compound called the "Tetrapharmakos" would help individuals led the happiest life possible. The Villa of the Papyri holds many of Philodemus of Gadara's works on this school, which divided a certain sensation into "kinetic" and "katastematic" varieties.** Lucretius summarized this school of thought in his poem *On the Nature of Things*, and it believed in freedom from fear and pain via ataraxia and aponia. Founded in 307 BC by a namesake atomic materialist, for ten points, name this pleasure-based school.

Answer = Epicureanism

3. **This man sent Sir Benjamin Keene to negotiate with Spain at the Convention of Pardo. This man built Houghton Hall in Norfolk, and he had a mistress named Maria Skeritt. The Patriot Party was formed in opposition to this leader who initially served as prime minister with his half-brother Charles Townshend. The** "Robinocracy" was a nickname for this man's dominance, and he started the War of Jenkins' Ear. This man rose to power after the South Sea Bubble. For ten points, name this man, believed to be the first Prime Minister of Great Britain.

Answer = Robert Walpole, 1st Earl of Oxford

4. **Some organisms in this phylum contain sensory structures called Rhopalia. The second life form found to produce red light is in this phylum. The cigar-shaped planula are the larvae of this phylum which contains the siphonophorae, as well as the class Scyphozoa. This phylum contains the "air fern", and** Irukandji syndrome is caused by the venom of a class in this phylum. Swimming medusae and sessile polyps are the two forms of, for ten points, what marine phylum consisting of mesoglea and containing nematocysts, which include sea anemones and jellyfish?

Answer = Cnidarians

5. **One symphony of this number introduces the "Do, Re, Fa, Mi" theme that appears in the finale of it's composer's *Jupiter* symphony and has a C minor *andante* second movement. Another symphony with this number contains an Alphorn tune and has a first movement in "un poco sostenuto"; a** "fate motif" was used in that symphony of this number. Mozart's E-flat major symphony of this

number was composed when he was eight. "Beethoven's Tenth" is a nickname given to, for ten points, what number of the most famous symphony by Johannes Brahms?

Answer = One

6. **In this work, the narrator publishes an article in *Le Figaro*, and it also sees a Vinteuil Sonata featuring a "little phrase" used as a motif for the relationship between two characters who meet at a party designed for a "little clan." This work's narrator meets a "lady in pink" while visiting his uncle Adolphe.** "Sodom and Gomorrah" is one section of this work that sees a character have a flashback of his childhood in Cambray after eating a tea-soaked madeleine cake. "Swann's Way" is a section in, for ten points, what seven-volume novel by Marcel Proust?

Answer = *In Search of Lost Time*

7. **During this conflict, the Battle of Piribebuy took place during the Campaign of the Hills against a nation which became the leading producer of yerba mate crop after it. The "Deed of December" took place during this conflict, after which a country named a department after Rutherford B. Hayes.** The Duke of Caxias led forces during this war which also saw the Gran Chaco given up by a nation led by President Francisco Solano López. For ten points, what is this 1864 war named for a coalition between Argentina, Brazil, and Uruguay, that defeated Paraguay?

Answer = War of the Triple Alliance (accept Paraguayan War before "Paraguay" is read)

8. **One individual from this school believed that society could "complicate or deform" "inborn differences" and believed that women have a "nursing instinct". Variable ratio scheduling is frequently studied in this school, many of whose members were taught by Ivar Lovaas. This school includes the law of** effect, which was pioneered by Edmund Thorndike. This school has a "radical" branch. The "Kerplunk" experiments were conducted by John B. Watson, a member of, for ten points, what school that examines animal and human stimuli and actions?

Answer = Behaviorism (accept Radical Behaviorism or Behavioral Psychology or Behavior analysis)

9. **In one work by this composer, the song "Everything's Alright" is sung as Mary Magdalene tries to calm Jesus with an expensive ointment. Jemina sings fragments of a song in a higher D Major Key after Grizabella sings "Memory" in another work by this composer. This composer included Judas in "**Jesus Christ Superstar", and wrote a work in which the Jellicles try to ascend to the Heaviside Layer. Raoul and Christine are held hostage by the title ghost in another work by him. For ten points, name this American composer of *Cats* and *The Phantom of the Opera*.

Answer = Andrew Lloyd Webber

10. **In January 2020, MSNBC incorrectly called this man a billionaire. Voting-age citizens receive a 100 dollar voucher each year as part of this man's proposed "democracy dollars", and he also proposed a Global Geoengineering Institute and founded Venture for America in 2011. In opposition to job** automation, he proposed a "freedom dividend" in which $1,000 per month is given to American adults. The leader of a namesake "Gang", for ten points, what 2020 Presidential Candidate, an Asian-American notable for his idea of Universal Basic Income?

Answer = Andrew Yang

11. **This figure "fights a lump of pitch" in a certain legend, and in another myth goes to his grandson's remains only to see that the surrounding grass has been eaten, thus deducing that his grandson has become a horse; that grandson was killed by Sky-Down-feather-Brothers. This figure had Black Spider spin a web to fill the** sky's hole and caused Changing Bear to kill her brothers. This figure used balls of mud to create humanity. For ten points, name this canine trickster god, the subject of many Native American myths, who shares many traits with Raven.

Answer = Coyote

12. **This thinker discussed names of things which do not exist and those that do in one work, and in another categorized history into divine, political, and natural types. He stated that physicians would be "instruments and dispensers of God's power and mercy" in his treatise** *History of Life and Death*. **The "Market" and** "Tribe" were part of "idols", logical fallacies that this man posited in a work discussing the use of inductive reasoning. For ten points, name this British philosopher, the "father of the scientific method", who wrote *Novum Organum*.

Answer = Francis Bacon

13. **These entities are examples of Lambertian radiators. A cavity whose walls are in a certain form of equilibrium, called a hohlraum, is an example of these entities. Dividing the hemispherical emissivity of a surface by its radiant flux per unit area gives the radiant flux of these entities. These entities are the subject of** Wien's displacement law and the "ultraviolet catastrophe." The Rayleigh-Jeans Law approximates the wavelength of these bodies. The Planck and Stefan-Boltzmann laws describe, for ten points, what ideal bodies that absorb all electromagnetic radiation?

answer = Blackbodies

14. **This mountain was the subject of an unsuccessful movement to rename it after Winston Churchill following World War II. The "Mountaineer's Route" and the parent peak Pico de Orizaba are at this mountain, as well as the Keeler Needle and Crooks Peak. This mountain rises above Owens Valley and lies near the** Inyo and Tulare counties. This mountain also lies near the San Joaquin River and lies 85

miles from Badwater Basin. The Sierra Nevada range has its peak at, for ten points, what tallest mountain in the contiguous United States, located in California?

Answer = Mount <u>Whitney</u>

15. **In one work by this artist, a boy with a pink collar holds a metal chain up as a squirrel nibbles on it while staring at a glass of water - that boy is this artist's half-brother, Henry Pelham. An Ancient Greek statue lies in the background as Ralph Izard shows his wife a sketch in one work by this artist of The** Death of General Peirson. Two men reach out to grab a naked 14-year-old boy while a man uses a harpoon to spear the title animal in one work by this artist. Havana Harbor is the setting of, for ten points, what American artist's painting *Watson and the Shark*?

Answer = John Singleton <u>Copley</u>

16. **Arvid Horn led one party in this nation. Fort Apollonia was part of a namesake "Gold Coast" that this nation established on the Gulf of Guinea. This nation signed the treaties of Oliva and Cardis with a neighbor, and one of its rulers allegedly rode into the Battle of Rain saying "The Lord God is my armor!" The** Deluge began with this nation invaded Poland. The Caps and the Hats were opposing factions in this home country of a ruler who was killed at the Battle of Lützen. For ten points, name this home country of "Lion of the North" Gustavus Adolphus.

Answer = Kingdom of <u>Sweden</u> (accept <u>Sverige</u>)

17. **One man in this play states that "The seasoning of a play, is the applause." This play includes the eunuch Castrone and judges called The Avocatori. One character in this play states she has read Guarini, Ariosto, and Tasso and asks its protagonist to lend her the dwarf Nano. This play also includes the traveler** Sir Politic-Would-Be, and it sees Bonario prevent an assault on Celia. In this play, Corvino, Corbaccio, and Voltore are tricked by the title man, who fakes his death in order to get gifts. Mosca is a servant in, for ten points, what Ben Jonson play?

Answer = *<u>Volpone</u>*

18. **One of these substances with .04 molarity, boric acid, is named for Britton and Robinson and is called its "universal" type. Sodium cacodylate is used as one of these substances during preparation of samples for electron microscopy. TAPS and HEPES are examples of these substances that are explained by** Le Châtelier's principle. The pK_a of these substances is used in the Henderson-Hasselbalch equation. The bicarbonate system in the blood exemplifies, for ten points, what solutions consisting of a weak acid and its conjugate base, that resist changes in pH?

Answer = <u>Buffer</u> solutions

19. **In one work by this author, Anis submits a blank report to his boss without realizing his pen is out of ink, before being visited by the journalist Samara. This**

author also wrote a work in which the people say "Oppression must cease as night yields today" after the Chief Strongman blackmails the science-symbol Arafa - that work is an allegory of Abrahamic religions. This author chronicled Fahmy, Yasin and other members of the al-Jawad family in one series, and he wrote *Sugar Street*. For ten points, name this Egyptian author who wrote the *Cairo Trilogy*.

Answer = Naguib Mahfouz

20. **One speech in this election year urged not to go "down to the ant heap of totalitarianism" and stated that there is no left or right, only "up or down." *Fact* magazine revealed that 1, 189 psychiatrists believed a candidate in this election year was insane. The *Confessions of a Republican* ad and an ad with a** three-year-old girl picking flowers, as well as the "A Time for Choosing" Speech, were part of this election year. The "Daisy Ad" was aired in, for ten points, what election year that saw Barry Goldwater defeated by incumbent Lyndon B. Johnson?

Answer = Election of 1964

Tiebreaker

1. **This poem's author read a book by Samuel Purchas describing a "sumptuous house of pleasure", which inspired one line in this poem. This poem discusses a "damsel with a dulcimer" and includes a situation "As if this earth in fast thick pants were breathing." This poem also describes a man who "drunk the** milk of Paradise" as well as an "Abyssinian Maid." The "Person from Porlock" interrupted the writing of, for ten points, what poem about a "stately pleasure-dome" in Xanadu and the title Mongol emperor, by Samuel Taylor Coleridge?

Answer = Kubla Khan