1. Tlön, Uqbar, Orbis Tertius ends with the narrator "revising ... an uncertain Quevedian translation" of this work, which observes that "the large Discourses of Cæsar, Tacitus, and Strabo are silent" about its central topic. This work calls people who "credit the story of the Phoenix" by "animall burning" "thick skinned." In another section, this work notes that "these dead bones have already out-lasted the living ones of Methuselah" before quoting an elegy by Tibullus. Dedicated to (*) Thomas le Gros, this work opens by stating that no one expects people from "future ages should comment upon their ashes." This work, which claims "But man is a Noble Animal, splendid in ashes," was published alongside The Garden of Cyrus. For 10 points, a number of "Sepulchral" objects uncovered in Norfolk inspired what Thomas Browne essay?

ANSWER: <u>Hydriotaphia</u>, <u>Urn Burial</u>, or, a Discourse of the Sepulchral Urns lately found in Norfolk [accept either underlined portion]

<Bass, Literature, British>

2. In Neo Yokio, Kaz Kaan battles a work by this artist possessed by a demon. This artist created The Fate of a Banished Man for an exhibit that he claimed was collected by a freed slave named Cif Amotan II. That exhibit by this artist has a namesake pseudo-documentary about its works being recovered from the bottom of the ocean, titled (*) Treasures from the Wreck of the Unbelievable. This artist of In and Out of Love is controversial for his mass slaughter of butterflies for certain works. This artist placed a bug zapper, a colony of flies, and a cow head together in a box for his work A Thousand Years, and he bejeweled a skull to create For the Love of God. For 10 points, which Young British Artist's The Physical Impossibility of Death in the Mind of Someone Living consists of a tiger shark suspended in formaldehyde?

ANSWER: Damien (Steven) **Hirst** <Bass, Fine Arts, Other Visual Arts>

3. People who claim this identity are categorized as "outtalucks" and "should-bes" in a book by Circe Sturm, whose book *Blood Politics* is about people with this identity. A December 2019 Los Angeles Times article claims that business owners with "unsubstantiated claims to" this identity have received "more than \$800 million in federal contracts." The label "Black Dutch" was used to avoid discriminatory policies by people with this identity, many of whom were listed on the (*) Baker Roll. "Blood quantum" is controversially used as a requirement to claim this identity by groups like the United Keetoowah Band and Eastern Band, but Bill John Baker only claims one thirty-second heritage of this identity, despite having been a leader of this identity's Nation. Many White American "racial shifters" claim, for 10 points, what identity formerly claimed by Elizabeth Warren?

ANSWER: Cherokee [accept Native American, Indigenous American, or American Indian; prompt on partial answers]

<Bass, Other Academic>

4. A character in this play complains that the word "free" in the National Anthem is "so high nobody can reach it." One character in this play justifies selling her house because "Aunt Libby thought she'd smelled radon gas in the basement." In this play, a character rejects a certain label because people with that label "are men who know nobody and who nobody knows, who have zero clout." That character in this play is haunted by the ghost of a (*) woman whose trial he rigged, and tries to prevent his imminent disbarment by offering Joe Pitt a new job. A character in this play has four "emanations" including Fluor and Phosphor, and takes another character to Heaven, which looks like San Francisco. Louis Ironson abandons Prior Walter in, for 10 points, what "Gay Fantasia on National Themes", a Tony Kushner play about the AIDS epidemic?

ANSWER: <u>Angels in America</u>: A Gay Fantasia on National Themes <Bass, Literature, American>

5. The Bates distribution describes the mean of random variables with this distribution, while the Irwin-Hall distribution describes the sum of random variables with this distribution. The Box-Muller transform begins

with two random variables with this distribution. The maximum value of this distribution can be estimated to be one less than quantity n plus one over n times the maximum value of a sample of size n from this distribution. That formula is the solution to the (*) German Tank Problem. This distribution's variance is equal to the difference between its parameters squared times one-twelfth, and its kurtosis is always negative six-fifths. This distribution has a pdf equal to the reciprocal of the size of the base of this distribution, and is theoretically sampled from by Python's "random" function. For 10 points, name this distribution that has a constant pdf. ANSWER: continuous uniform distribution

<Bass, Science, Math>

6. It's not consciousness, but Saul Smilansky once stated, "We cannot afford for people to internalize the truth" about this concept, and founded Illusionism, a metaphysical theory about this concept. One essay uses a cake and an Oxfam tin to illustrate an issue with the existence of this concept, which is Galen Strawson's Basic Argument. Daniel Dennett titularly compared this concept to (*) elbow room. Arthur Schopenhauer divided this concept into "physical", "moral", and "intellectual" types. Libertarianism involves a view of this concept that excludes compatibilism. John Calvin's belief in predestination rejects the existence of this concept. Determinism is often seen as incompatible with the existence of, for 10 points, what concept that would allow you to choose to answer this question?

ANSWER: <u>free will</u> [prompt on <u>moral responsibility</u>] <Bass, Thought, Philosophy>

Note to reader: Don't mention anything about the over-capitalization or the asterisk in the song titles to the players!

7. In one song on this album, the artist sings, "Land at your driveway and put it in park / Then do the third line of this verse." That song from this album concludes with the line, "But at some point, you come to your senses," spoken by Jerrod Carmichael, who opens another song on this album with, "Sometimes you gotta close a door to open a window." This album opens with Lil Uzi Vert repeating the word, (*) "What?" on a song titled "[this album's] THEME". The line "Like magic, like magic, like magic, gone" is repeated in a song in this album that is followed by "A BOY IS A GUN*". On this album, its artist sings "'Cause when it all comes crashing down I'll need you" after repeatedly begging "Don't leave, it's my fault," on the song "EARFQUAKE". For 10 points, name this winner of the 2020 Grammy Award for Best Rap Album, Tyler, the Creator's fifth studio album. ANSWER: IGOR

<Bass, Popular Culture, Music>

8. The Flongle is a device that performs this task by measuring disruptions of an ionic current. One method to perform this task requires tagmentation to be completed beforehand. The Min·ION is another device for performing this task created by a company named for Oxford. If shotgunning is used to complete this task, contigs must be combined for assembly. Bridge amplification is used in the method for performing this task that was invented by (*) Illumina, in which certain molecules bind to oligos on a flow cell. That device uses a tether to guide a certain molecule into a nanopore, allowing this task to be performed with long reads. One method to perform this task uses d·d·N·T·Ps to achieve chain termination and is named for Frederick Sanger. For 10 points, what task was performed on an entire genome by the Human Genome Project?

ANSWER: DNA <u>sequencing</u> [accept <u>RNA sequencing</u>] <Bass, Science, Biology>

9. Description Acceptable. Leland Wilkinson's best-known work is about this practice. It's not nursing, but the journal of a society dedicated to this practice is titled Nightingale. Methods for this practice include sparklines and small multiples. Beautiful Evidence is a book about this practice. This practice can be performed in the JSON language via Vega. This practice, which was pioneered Edward Tufte, [TUFF-tee] can be combined with (*) cartography in a cartogram. Chartjunk is a common mistake in this practice. It's not tidying,

but Hadley Wickham is an advocate for certain techniques in this practice and wrote the package g·g·plot·2 for performing this practice. In R, the plot function can be used for this practice. For 10 points, name this practice that can be performed by making a graph out of a data set.

ANSWER: <u>data visualization</u> [accept any answer that involves displaying data graphically; prompt on partial answer, <u>data science</u>, <u>describing data</u>, <u>descriptive statistics</u>, or <u>information design</u>] <Bass, Science, Any Science>

- 10. Two answers required. In one film written by these two people, a character asks "Am I nautically sensual?" after being texted "Ahoy sexy." In another film written by these two people, Mamie-Claire steals the protagonist's cats and Tracy Fishko moves in with Brooke, her soon-to-be step-sister. These two people wrote a film in which the protagonist disapproves of her best friend Sophie's engagement to Patch. That film written by these two people ends with the protagonist abbreviating her surname from (*) Halladay to make her name Frances Ha. In separate directorial projects, one of these two people cast Laura Dern as Marmee March, while the other cast her as the divorce lawyer Nora. "The First Couple of Film" headlines a Hollywood Reporter cover featuring these two people. For 10 points, name these directors of the 2019 films Little Women and Marriage Story. ANSWER: Greta Celeste Gerwig and Noah Baumbach

 <Bass, Popular Culture, Movies and TV>
- 11. Barrier height can be calculated as the difference between another material's work function and the electron affinity of one of these materials. These materials can be described by their intrinsic carrier concentration. The Schottky barrier occurs at the junction of a metal and one of these materials.

 Microscopic examples of these materials photoluminesce when excited and are called (*) quantum dots. These materials may contain areas lacking mobile charge carriers called depletion regions. Boron is commonly added to these materials to increase hole concentration via doping, resulting in the p-type of these materials, which is contrasted with their n-type. Germanium and silicon are common examples of, for 10 points, what materials that are between insulators and conductors by conductivity?

ANSWER: **semiconductor**s <Bass, Science, Physics>

12. A now-debunked paper by Ahmad, Galland, Ritz et al. claimed that Arabidopsis thaliana could interact with this entity via cryptochrome, a molecule that appears in some species' eyes, causing interaction with this entity to be light-dependent in some species. It's not organic, but MTB is a group of bacteria characterized by the ability to interact with this entity, which causes them to (*) align in parallel. Members of one species born in Japan use this non-ocean entity to navigate back to their birthplace from Baja California. Fluctuations in this identity's strength have been observed to influence sea turtle nesting locations, despite the fact that this entity only has an average strength of approximately point-5 Gauss. For 10 points, name this entity that some organisms use to orient themselves with respect to the North Pole.

ANSWER: <u>Earth's magnetic field</u> [accept <u>geomagnetic field</u> or <u>Earth's magnetosphere</u>; prompt on partial answers; prompt on anything mentioning <u>magnetism</u>]

<Bass, Science, Earth/Space>

13. In one work from this movement, a man's hat and two beards make a star shape as he performs for a crowd of men in grey robes. Besides *The Juggler (The Magician)*, another work in this movement depicts six blond women seated in a red tower. That work, *Embroidering the Earth's Mantle*, is by an artist from this movement who depicted a glowing orange woman tiptoeing in a painting titled *The Call*, Remedios Varo. It's not Dada, but *Dog Barking at the Moon* is by an artist from this movement who also painted scenes from (*) Mont-roig del Camp in *The Farm* and *The Tilled Field*. Another artist from this movement painted *The*

Disintegration of [his most famous painting], which features ants covering an orange clock. For 10 points, name this artistic movement practiced by Spanish painters like Joan [joo-AHN] Miró and Salvador Dalí.

ANSWER: **surrealism** [accept word forms]

<Bass, Fine Arts, Painting>