- 1. In a parody Genius Verified video about this verse, a man dressed up as its artist spills lean on himself and says "what I mean by those lyrics is uh...I don't really know...you know what I'm saying?". This verse's "LYRICS CANNOT BE (+) TRANSCRIBED" according to a tweet made by the primary artist of the song its featured on. In the music video for that song, this verse plays while a person wearing a blonde wig plays a rotating piano that catches on fire. A person described in this verse as (*) "wicked" was once embroiled in a feud with Bhad Bhabie ["baby"] and is known as "Woah Vicky". This verse begins "We ain't gotta ball, D. Rose." For 10 points, name this verse by a mumble rapper on a song from Tyler the Creator's Igor.
 - ANSWER: Playboi Carti's Earfquake verse [prompt on "Playboi Carti" or "Earfquake" alone]
- 2. This show is referenced by an ad-lib that follows the line "I was crusin' down the street, four deep" in "I <3 ["heart"] My Choppa" by Tay-K. The lines "she got ironic tattoos on her back / that ain't ironic...I love [this show]" appear on Childish Gambino's "L.E.S." Lil Yachty raps "keep that choppa on me at all times / these [people] be snakes," on a song that samples this show's title track. YBN Cordae's raps about how he keeps a (+) submachine gun on him like this show on the chorus of "Kung Fu". On (*) Cocoa Butter Kisses," Chance reminisces about "orange cassette tapes" and this TV how. In its movie adaptation, Busta Rhymes voices the dinosaur Reptar. For 10 points, name this 90s Nickelodeon show about "Timmy and Tommy and Chuckie".

ANSWER: Rugrats

- 3. A song named after this text on Trippe Redd's album "Pegasus" begins with the line "Feel like Ichigo". On the "It G Ma Remix", Dumbfoundead raps "we can all drink, live in fear" like a character from this text. Swae Lee references this text in the first line of "No Type" when he talks about a certain kind of Porsche. Big brain Lupe Fiasco compares this work to (*) "foreplay-less sex" on "Dumb It Down." Two questionable references to this work appear on "My Beautiful Dark Twisted Fantasy", one at the beginning Pusha T's verse on "Runaway" and another in Dark Fantasy where Kanye says he "got so much head" he woke up in this work's titular location. For 10 points, name this story about "Ichabod Crane with that motherfuckin' top off" by Washington Irving.

 ANSWER: The Legend of Sleepy Hollow
- 4. During the recording of this verse, its artist met a young singer named John Stephens whose voice was so inspiring that he dubbed him John Legend. The wife of the artist of this verse inspired a different song on the same album that ends with a cry to get "Stevie outta jail" and reminisces about (+) and sleeping "six to a bed" with your cousins. It's not by Jay-Z, but in the song containing this verse, Kanye raps about how his mother was arrested at the age for a sit-in and with that in his blood he was "born to be different." The artist of this verse says that his "breath is felt by the deaf" and his words are (*) "heard and confined to the ears of the blind." This verse's artist claims that whenever he opens "[his] heart, soul, or mouth, a touch of God reigns out." For 10 points, name this verse by a Chicago spoken word poet on a "College Dropout" track.

ANSWER: J Ivy on Never Let Me Down [prompt on individual components]

- 5. The preface to Hanif Abdurraquib's "They Can't Kill Us Until They Kill Us" juxtaposes the Lil Uzi line "I can not die because this is my universe" with a quote by this author that begins "I wish to live because life has within it which is good." On Jay Electronica's "The Blinding", Jay-Z rhymes "Lou Gossett out the gun sir" with the name of this person's most famous work, whose 1961 film adaptation was Lou Gossett's film debut. Rapsody's "Laila's Wisdom" samples an (+) Arethra Franklin cover of a song that was inspired by this author and which is named after her autobiography. After this author's death, Nina Simone wrote that song, (*) "To Be Young, Gifted, and Black". A 2004 Broadway revival of this author's most famous play starred Sean "Diddy" Combs as Walter Younger. For 10 points, name this author who wrote the play "A Raisin in the Sun" ANSWER: Lorraine Hansberry
- 6. This verse originally appeared alongside a freestyle by Killa Sin on Tony Touch's album "Power Cypha (Featuring 50 MCs)." On his Tumblr, Talib Kweli ranked this song after Rakim's "Follow the Leader" verse as his second favorite of all time. This is the first verse on a song whose music video begins with a newscast about an invasion of killer bees and the appearance of (+) a mysterious "old dirty man" on top of a skyscraper. The artist of this verse raps about (*) "swinging swords like shinobi" and describes himself as the "battle-scarred shogun." He claims he "lyrically perform[s] armed robbery" and says you can't "define how [he] be dropping these mockeries." One of the most acclaimed verses of all time, for 10 points, name this verse by a lesser-known Wu Tang member that begins "I bomb atomically / Socrates philosophies and hypotheses."

ANSWER: Inspectah Deck on Triumph

7. A 2018 posthumously-published poem by Leonard Cohen is titled "Kanye West is not [this person]." The whistling interlude on Kanye's "All Day" was written by Paul McCartney while viewing an artwork by this man in the hospital after the birth of his second child. The music video for a song named after this person was filmed in the (+) Pace Gallery and features its artist rapping in the center of a room while audience members, including Adam Driver, Taraji, Wale, and Marina Abramavoic, interact with him. That song, titled (*) "[this person] Baby" appears on Jay Z's "Magna Carta Holy Grail. Frank Ocean says he's going to "empty his bank account" to buy a painting by this person on Calvin Harris' "Slide." For 10 points, name this artist of "The Old Guitarist" and "Boy with a Pipe"

ANSWER: Pablo Picasso

- 8. A bold claim made on this verse was verified by a May 16, 2016 MTV article published just two days after the release of its artist's subsequent album. A live performance of this verse on the February 13, 2016 episode of SNL included a line about former police officer (+) Jason Van Dyke. In a tweet, the artist of this verse asked RapGenius to change an annotation for one of its lyrics because, according to him, the "the pressure I've been putting...caused Continental Drift." Another line on this verse references a lyric in "Otis" where Kanye claims that because he (*) "made Jesus Walks, [he's] never going to hell". The artist of this verse claims that he's the "Tubman of the underground" and refers to the story of Sodom and Gomorroah when he says that his "ex looking back like a pillar of salt." For 10 points, name this guest verse on the intro song of "The Life of Pablo." ANSWER: Chance the Rapper on Ultra Light Beam
- 9. This phrase, which originated from Uncle Murda's song "Right Now", is portended by a Pastor TL Barrett sample in its most famous appearance. In the 2016 US presidential campaign, one candidate responded that "you probably need to either become honest or explain the reason for their doubts," when asked to explain this phrase during an interview. That candidate was (*) Ben Carson. According to Genius, this phrase's popularity comes from its "jarring juxtaposition" with an "infectious beat drop" and Kid Cudi singing "beautiful morning." For 10 points, Kanye's "Father Stretch My Hands Pt 1." notably features what 10 word phrase, delivered by Future, one of Metro Boomin's producer tags.

ANSWER: "If young metro don't trust you I'm gon' shoot you

10. An August 2020 Twitter thread by user @hoodqueer juxtaposed covers of books by this author with pictures of artists like Kash Doll and Tierra Whack. A song inspired by a work of this author includes the hook "not strong, only aggressive/Not free, we only licensed/Not compassionate, only polite (now who the nicest?)." That song, by Black Star, is titled (+) "Thieves in the Night.

Beyonce's "Homecoming" opens with this author reading her lines (*) "If you surrender to the air, you can ride it." After this artist's passing in August 2019, Chance the Rapper tweeted about how she inspired the title of his 2015 song with the Social Experiment, "Rememory." For 10 points, name this author of Beloved.

ANSWER: Toni Morrison

11. According to RapGenius, a line in this verse might be a reference to a 2008 event in which this artist gave away 300 turkeys to residents of his old neighborhood for Thanksgiving. The artist of this verse followed it up with a song on his album (+) "90059" which includes the lines "andale, vamanos, feelin' like Osama got my llama close." The artist of this verse reflects on the housing project where he was raised, Nickerson Gardens, when he raps about the (*) "gardens where the grass ain't cut." The artist of this verse reminisces about growing around people who "take your J's and tell you to kick it where a footlocker is" and pictures himself in the street, "with a heater under [his] Dungarees." Beginning, "imagine Rock up in them projects," for 10 points, name this guest verse by a TDE member on Kendrick's "good kid m.a.a.d city."

ANSWER: **Jay Rock** on **Money Trees**

12. A 2012 video posted by Duck Down music features Sean Price dressed up like this man while speaking to Pharoahe Monch. On the intro of Mick Jenkins' "Communicate", he asks, "how you figure, who is you, [this person], or something? This man succeeded in getting every major political candidate in the 2004 Canadian federal election other than (+) Steven Harper to perform a "Hip-Flip" with him. Lil Uzi Vert's "Futsal Shuffle" (*) ends with a clip of his conversation with this person. Waka Flocka revealed that he loves salt and vinegar chips to this person, who also tracked down for Pharrell a copy of the first record he ever made, "The Rump Shaker". For 10 points, name this Canadian who interviews a number of celebrities and musicians.

ANSWER: Nardwuar ("nard-war") the Human Serviette ("Ser-vee-ette") [[accept John Ruskin]

13. A 2012 Teju Cole piece for NPR's "My American Dream Sounds Like" series about this song describes how its "voices" of this song have become his "mental weather...as steady as the night and the air.". The Mick Jenkins song Chicago is written over the beat of this song. Kanye apologizes to the artists of this song on a track where he and Ludacris rap about "money, [women], and rims."

This song opens with an audio clip taken from a 1983 documentary about graffiti titled (+) "Style Wars". The third verse of this song begins with a reference to James Baldwin's "The Amen Corner" as (*) Common raps "on the Amen / corner I stood lookin' at my former hood." On this song, Mos Def raps about a city where "the new moon rode high on the metropolis" and Talib Kweli talks about how "not knowin' the ways will get you capped like an NBA salary." For 10 points, name this Black Star song featuring Common, about the city breathing.

ANSWER: Respiration

14. An unreleased song by Drake and Quavo that is supposedly named after this movie includes the lines "all they do is PR double-E me like I'm Dolph," After the release of Lil Uzi Vert's latest album, a popular meme was made depicting a character from this movie reacting to hearing the song (*) "P2." Quavo has a \$250,000 chain depicting himself as a character from this movie. On "Gold" Dom McLennon says he feels like "this movie" when he's "whippin up cheddar," and on "Bad and Boujee" Quavo says that he "still be playing with pots and pans," so call him "this movie." For 10 points, name this Pixar movie about a rat who dreams of being a chef

ANSWER: Ratatouille

15. A 2018 Fader article described a collaboration between this person and Young Thug as Young Thug's "return to iconoclasm." A song whose beat samples a track by this person features Young Thug rapping (*) "Atlanta by my side / different land for my kind." Stelios Phili made the beat for that s ong. Instead of (*) "Kanye West", the final track on Young Thug's "Jeffrey" was originally supposed to be titled after this person. Young Thug collaborated with this man to remix his 1972 hit for the track "High" for his 2018 album "On the Run." For 10 points, name this British singer of Rocket Man.

ANSWER: Sir Elton John [accept Reginald Kenneth **Dwight**]

16. Tumors that overproduce this protein can be identified with a pentagastrin stimulation test A peptide that is produced from alternative splicing of this protein's transcript is inhibited by the small molecule u·bro·gep·ant and monoclonal antibody (+) er·en·u·mab. Cells that produce this protein were once thought to derive from the neural crest but are now known to originate from the ul·tim·o·bran·ch·ial body. This protein's (*) "gene-related peptide" is believed to play a major role in the pathogenesis of migraines. This hormone is overproduced by medullary thyroid carcinomas. This hormone inhibits osteoclasts and is the only calcium-lowering hormone in the body. For 10 points, name this hormone that is secreted in response to hypercalcemia from the thyroid's par·a·foll·ic·u·lar, or C cells.

ANSWER: calcitonin [accept procalcitonin, or calcitonin-gene related peptide]

17. Subtypes of these cells can be sorted based on their expression of C·D·303, neuropilin and throm·bo·mod·u·lin. An I·L·3-diphtheria toxin fusion protein used to treat a neoplasm of these cells is called tag·raz·o·fusp. Examples of these cells that produce large quantities of type I interferon are known as their (+) plasmacytoid subtype. Sipuleucel-T is a "vaccine" based on these cells used to treat advanced prostate cancer. Malignancy of these cells occurs along with with severe eye-bulging and bone lesions of the skull in the gruesome (*) Hand-Schuller-Christian triad. Along with helper T cells and macrophages, the "follicular" type of these cells are a major reservoir for HIV. Tennis-racket shaped structures called Birbeck granules are found in a type of these cells in the skin called Langerhans cells. For 10 points, name these immune cells that resemble trees.

ANSWER: <u>dendritic</u> cells [accept <u>Langerhans</u> cells before mention, prompt on "histiocyte" or "phagocyte"]

18. A 2019 paper by the Carmichael lab showed that inhibition of this protein in the brain following a stroke could enhance recovery. Pro140, or leronlimab, is an inhibitor of this protein. A 2019 paper by Rasmus Nielsen, which claimed that people with mutations in this protein have increased mortality, was (+) retracted following issues with data quality in the UK BioBank. Before treatment with an inhibitor of this protein, patients must undergo a trofile test to determine whether the pathogen they're infected with binds to this protein, CXCR4, or both. That inhibitor of this protein is (*) maraviroc. CRISPR/Cas9 was used to engineer mutations in this protein in the twins Lulu and Nana by He Jiankui. Caucasians homozygous for the delta-32 allele of this protein are immune to HIV infection. For 10 points, name this chemokine receptor that binds to g·p·120 to allow HIV to enter immune cells.

ANSWER: CCR5 [accept C-C chemokine receptor type 5 or CD195]

- 19. An epoxide hydrolase virulence factor secreted by *Pseu·do·mo·nas* prevents cellular localization of this protein and MDR-1 by interfering with host deubiquitination machinery and is known as this protein's "inhibitory factor." A Nature paper by the Rajgopal and Regev Labs used single cell sequencing to localize the expression of this protein to a population of cells called (+) "ionocytes". It's not anoctamin-1, but a drug used to treat diarrhea caused by antiretroviral therapy inhibits this protein and is called crofelemer. People with mutations in this protein have an increased nasal transepithelial (*) potential difference and elevated levels of trypsinogen in their blood. ADP-ribosylation of a Gs protein by cholera toxin causes opening of this protein on the cell membrane, leading to severe diarrhea. The drugs lumacaftor and ivacaftor promote proper folding of this protein. For 10 points, name this chloride channel whose deltaF508 mutation is the most common cause of cystic fibrosis. ANSWER: CFTR or cystic fibrosis transmembrane conductance regulator
- 20. Monoclonal antibodies to P·A·M·G·1 can be used to detect this substance, which contains the highest levels of I·G·F·B·P·1 in the body. The presence of this substance causes salt crystals to assemble in a (+) fern-shaped pattern when mucus is dried on a glass slide. It's not feces, but the nitrazine dye turns blue when exposed to this substance, which is indicative of a condition abbreviated P·R·O·M. This substance is excreted through the u·ra·chus and its deficiency can lead to facial and limb (*) abnormalities in Potter's sequence. It's not surfactant, but the lecithin -to-sphingomyelin ratio in this substance can be used to assess lung maturity. A needle is used to aspirate this substance in order to test for neural tube defects. For 10 points, name this fluid that cushions the fetus during gestation.

ANSWER: amniotic fluid

21. Deficiency of this protein leads to the formation of wood-like plaques on the underside of the eyelid, a condition known as ligneous conjunctivitis. It's not collagen, but cleavage of this protein produces the angiogenesis inhibitor angiostatin. Mass activation of this protein by (+) urokinase can complicate a prostatectomy. The lysine derivatives tranexamic acid and aminocaproic acid are inhibitors of this protein. This protein generates (*) D-dimers and fibrin degradation products. A 3 hour window is used to determine if stroke patients should receive an infusion of an activator of this enzyme, alteplase. For 10 points, name this enzyme that hydrolyzes fibrin clots.

ANSWER: Plasmin [accept plasminogen; do NOT accept "tPA" or "tissue plasminogen activator"]

22. Abnormal imprinting on the p arm of the chromosome of this number causes muscular hemihypertrophy and insulin resistance by dysregulating expression of genes like I·G·F·2 and

W·T·1. A recombinant form of the interleukin of this number can be used to raise platelet counts and is called oprelvekin. Hemophilia C is caused by mutations in the clotting factor of this number. Beckwith-Widemann syndrome is caused by mutations on this chromosome, and translocation of the F·L·1 gene on this chromosome in front of the E·W·S gene on chromosome (+) 22 causes Ewing Sarcoma. Light causes a form of retinal with a cis double bond at this position to convert into its all-trans form. The cranial nerve of this number innervates the (*) sternocleidomastoid and trapezius muscles. For 10 points, the accessory nerve is also known by what number?

ANSWER: 11

23. This protein is activated by the steroid oxime istaroxime. Prostate-specific membrane antigen or PMSA cleaves a prodrug whose active form inhibits this protein. In Plasmodium, this protein is known as PfATP6, and has an E55L mutant that is resistant to artemisinins. Mutations in this protein can cause Brody Disease or a disorder in which dark, crusty, odorous patches appear on the skin, called (+) Darier's disease. The unfolded protein response can be triggered by an inhibitor of this protein, thapsigargin. Beta-adrenergic stimulation causes increased activity of this protein via phosphorylation of its inhibitor, phospholamban, enhancing (*) lusitropy. After calcium is released by the ryanodine receptor, this protein hydrolyzes ATP in order to re-sequester it. For 10 points, name this ATPase that sequesters calcium in the sarcoplasmic reticulum.

ANSWER: **SERCA** or **sarco/endoplasmic reticulum Ca-ATPase**

24. Secretion of this hormone is driven by activation of GRP54 by a protein that is secreted along with neurokinin B and dynorphin A from K·N·D·y neurons. That stimulator of this protein, which is named for the fact that it was discovered in Hershey, Pennsylvania, is (+) kisspeptin. Like P·T·H, when administered intermittently, synthetic forms of this hormone, like leuprolide, function as agonists but when administered continuously, antagonists. During development, cells that release this hormone are induced to migrate by GABA-induced ["gab-uh"] depolarization beginning in the olfactory placode. Defects in migration of those cells can lead to deficiency of this hormone along with an inability to smell in (*) Kallman syndrome. Pulsatile secretion of this hormone from the hypothalamus triggers puberty. For 10 points, name this hypothalamic hormone stimulates FSH and LH secretion

ANSWER: GnRH or Gonadotropin-releasing hormone

25. <u>Dai et al found that expression of these proteins is driven by a downstream extragenic crossover site</u> in contrast to the upstream crossover site used by their analogs in *Borrelia hermsii*. During

differentiation, these proteins are replaced by a family of proteins that contain distinctive glutamate-proline repeats called (+) procyclins. Although they are found in eukaryotes, the genes encoding these proteins are transcribed into a polycistronic mRNA from a bloodstream expression site by RNA polymerase I, before undergoing (*) trans-splicing and RNA editing. "Cleaning" of these proteins occurs when they are internalized through the flagellar pocket in order to remove antibodies. The alternating expression of these proteins leads to the characteristic waves of parasitemia characteristic of African Sleeping Sickness. For 10 points, name these cell surface proteins expressed by Trypanosomes to avoid host immunity.

ANSWER: variant surface glycoproteins or VSG

- 26. Historical names for this complex included "vitamin D receptor interacting proteins", or DRIP, and "thyroid hormone receptor-associated protein," or TRAP. This complex requires the noncoding RNA, ncRNA-a, to function. Cyclin C and CDK9 are found in this complex. Mutations in a protein found in this complex are the most common cause of the neurodevelopmental disorders FG syndrome and Lujan-Fryns syndrome. After discovering RNA Polymerase II, Roger Kornberg (+) discovered that this complex performs essential chromatin looping in transcription to bring enhancers closer to distant promoters. For 10 points, name transcriptional coactivator complex that (*) mediates interactions between transcription factors and RNA Polymerase.

 ANSWER: mediator
- 27. Precursors to these cells express a proteoglycan that is also used by melanoma cells to stabilize cell-substratum interactions in metastasis and is called C·S·P·G·4 or N·G·2. An enzyme expressed by these cells hydrolyzes extracellular 2',3' cyclic A·M·P and is known as C·N·P·ase. The M·O·G antigen, which is targeted in some types of neuromyelitis optica, is found on these cells. Infection of these cells with a polyomavirus named for John Cunningham leads to progressive multifocal leukoencephalopathy. Tumors of these cells have (*) "fried-egg" histologic appearance. Unlike their counterparts, which can only myelinate a single axon, these cells can myelinate 40 to 50. These cells are the C·N·S counterparts to Schwann cells and are lost in multiple sclerosis. For 10 points, name these cells that myelinate C·N·S axons.

ANSWER: oligodendrocyte [prompt on "glia", do NOT accept "dendritic cell"]

28. Mutations in a protein located in this structure cause a syndrome characterized by Dandy-Walker syndrome and encephalocele with an autosomal dominant inheritance pattern. A linear immunofluorescence pattern is characteristic of a disease in which autoantibodies are produced against proteins in this structure, like (+) BP180 or dystonin, called bullous pemphigoid. By definition, (*) carcinoma in situ is a malignancy that has not breached this structure. Laminins are found in this structure, which is attached to its overlying epithelium via hemidesmosomes. For 10 points, name this basal structure that separates an epithelium from underlying connective tissue.

ANSWER: basement membrane [accept basal lamina, accept specific types of basement membranes such as alveolar basement membrane or glomerular basement membrane" accept dermal-epidermal junction, prompt on "epithelium", "membrane", or "extracellular matrix"]

- 29. Note: two answers required. A mutant of one of these two proteins, used to study their interaction, is known as EL398, and forms a complex called the "ATP bullet." The presence of one of these non-hCG proteins in serum can serve as an indicator for pregnancy in the (+) rosette inhibition test, leading to its name of early pregnancy factor. Substrates usually interact with trigger factor before interacting either with a complex made up of these two proteins or a DnaK, DnaJ, GrpE complex. These proteins form an "infinitely dilute" tetradecameric cage around their substrates known as the (*) Anfinsen cage. H·s·p·60 and H·s·p·10 are the eukaryotic homologs of these two proteins. For 10 points, name these two proteins that form a tetradecameric barrel-shaped chaperone complex. ANSWER: GroEL and GroES [accept GroEL-ES; accept hsp60] and hsp10 before mention]
- 30. Note to players: I'm looking for a three letter abbreviation, like "RNA" or "PCR" that is shared by all of these things. "The synthetic form of an anticoagulant known by this three letter abbreviation was marketed by Eli-Lilly to treat sepsis but ultimately found to worsen outcomes and withdrawn, and is known as Drotrecogin-alfa. Ionized Argon gas is used in an endoscopic technique known by this three letter abbreviation used to stop GI tract bleeds. A protein known by this three letter abbreviation is found with G·S·K, casein kinase, and axin in the beta-catenin destruction complex and is mutated in (+) familial adenomatous polyposis. A complex abbreviated as these three letters is an E3 ligase that causes degradation of securin to trigger a certain (*) phase of the cell cycle. M·H·C class II is only expressed by cells known by this three letter abbreviation like dendritic cells and macrophages. For 10 points, give this three-letter abbreviation shared by a class of cells that present antigens and the anaphase-promoting complex.

ANSWER: <u>APC</u> [accept <u>activated protein C</u>, <u>argon photocoagulation</u>, <u>adenomatous polyposis coli</u>, anaphase promoting complex , antigen-presenting cell]