## ROUND 8

Tossup 1. The second narrator of this novel breaks the glass on his father's watch against the corner of his dresser, but the watch keeps ticking. In addition to time, that character is haunted by streetlamps and Dalton Ames, and he gives Deacon a note to deliver to his roommate at Harvard after he commits suicide. The first narrator of this novel has (\*) no sense of time and appreciates that "Caddy smelled like trees". The third narrator of this novel regrets giving the motherly servant Dilsey permission to go to Easter service. For 10 points, Quentin's, Benjy's and Jason's lives are all affected by Caddy's promiscuity in what novel by William Faulkner?

ANSWER: The **Sound and the Fury** 

Bonus 1. This text refers to Jesus as "the Alpha and the Omega". For 10 points each,

[10] Name this final book of the New Testament written by John of Patmos. In this book, the damned, the Beast, the False Prophet, and Satan will all be thrown into the "lake of fire".

ANSWER: Book of <u>Revelation</u> [accept but do NOT reveal <u>Apocalypse of John</u>, prompt on partial; do not accept "Revelations"]

[10] The second chapter of Revelation contains seven letters to these specific places, which are symbolized by seven lampstands. These places' guardian angels each receive a promise and an admonition.

ANSWER: seven churches in Asia [accept clear knowledge-equivalents; prompt on partial] [10] According to the 5th chapter of Revelation, a trumpet will sound 7 times to signal the stages of this event. After the seventh blow, "bowls" or plagues will be released in order to complete this event. ANSWER: the end of the world [accept clear knowledge equivalents such as "the apocalypse" or "the destruction of Earth"]

T2. A cross between IR56 and the *Oryza coarctata* species of this plant may lead to a salt-resistant variety, which can survive in salt-ravaged fields in Bangladesh. The drought-resistant IR64 type contains a gene from an "upland" type of this. China has imposed a limit of 150 parts per billion of arsenic in this food. A gene from corn allows the (\*) Golden type of this plant to produce beta-carotene, which should help rectify global vitamin A deficiency. Swarna-Sub1 is a flood-resistant type of this crop, which is typically grown in semi-flooded fields called paddies. For 10 points, name this most widely-consumed grain in the world, a staple in Asian diets.

ANSWER: genetically-modified rice [accept other modifiers such as "white rice"]

- B2. Name some works by a Romanian sculptor, for 10 points each.
- [10] American customs officials refused to recognize this sculpture as anything more than "industrial parts", although this sculpture is in fact a modernist interpretation of the titular avian animal.

ANSWER: **Bird in Space** 

[10] This Romanian modernist sculpted Bird in Space along with Sleeping Muse and The Kiss.

ANSWER: Constantin Brancusi

[10] This other Brancusi work has 12 seats around the titular structure. It is a memorial to the Romanians who fought in World War I and is located in Targu Jiu [Tar-joo Gee-ooh].

ANSWER: **Table of Silence** <TB>

T3. Another offensive that began before this battle pressed its leaders into instigating it on July 1<sup>st</sup> instead of August 1<sup>st</sup>. The fortified town of Beaumont-Hamel [boh-mah-ah-mehl] was a major center of this battle. At Hawthorne Ridge, Geoffrey Malins filmed footage of the first mine to go off at this battle. Preceded by a (\*) week of heavy bombardment of the German lines, it was the first battle to make a serious use of tanks, and resulted in almost 60,000 British casualties on the first day alone. For 10 points, name this 1916 World War I battle fought concurrently with Verdun on its namesake river.

ANSWER: Battle of the **Somme** or **Somme** Offensive

B3. The protagonist's father dies after swallowing a Nasty party pin. For 10 points each,

[10] Give this novel in which the protagonist, Oscar Matzerath, has a voice that can shatter glass and stopped growing at three.

ANSWER: The **Tin Drum** [accept Die **Blechtrommel**]

[10] The Tin Drum was followed by Cat and Mouse and Dog Years, which make up this author's Danzig Trilogy.

ANSWER: Gunter Grass

[10] This other German author wrote about three generations of the Faehmel family coming together to celebrate Heinrich's 80th birthday in *Billiards at Half-Past Nine*.

ANSWER: Heinrich Böll

T4. At a wedding, this deity had sex with the demigod lasion in a newly-ploughed furrow, which led to the latter's death and the birth of Philomelus and Ploutus. This deity tried to give immortality to Demophon by anointing him with ambrosia and burning him as a baby in the hearth. That event took place at the palace of Celeus, who ruled over (\*) Eleusis, the namesake of the Euleusinian Mysteries that center around this figure and her daughter. In another myth, that daughter is abducted and unfortunately eats a few pomegranate seeds. For 10 points, name this Greek goddess of the harvest whose daughter was Persephone.

ANSWER: **Demeter** 

B4. Supersymmetry relates fermions and bosons in this framework. For 10 points each,

[10] Name this theory in which particles are made up of the namesake one-dimensional objects. M-theory unifies multiple versions of this theory, which works only if the universe has 11 dimensions.

ANSWER: superstring theory

[10] String theorists model these objects as one very long string. These objects can be completely characterized by charge, mass and angular momentum, and are so massive that even light cannot escape them.

ANSWER: black hole

[10] Within the framework of string theory, this statement solves the black-hole information paradox. This statement claims that the information in a given volume can be completely encoded on the volume's surface.

ANSWER: **holographic** principle

T5. In one section of this work, Pertolete burns herself after her husband is snatched away by a fox. One character in this work threatens to make a relic out of another character's genitalia. The latter character tells of three men who unwittingly kill one another over 8 bags of gold coins. Absolon brands one character's (\*) butt with a blacksmith's tool, but that character, Nicholas, outwits the carpenter John and sleeps with Alisoun. This work is narrated by Harry Bailey, who gives the General Prologue as the pilgrims start from Tabard Inn. The Wife of Bath's Tale in this work is about "what women want". For 10 points, name this work by Geoffrey Chaucer.

ANSWER: The Canterbury Tales

B5. This man's *First Report on the Public Credit* argued for the federal assumption of states' debts. For 10 points each:

[10] Name this Founding Father, the first Secretary of the Treasury and the establisher of the First Bank of the United States.

ANSWER: Alexander **Hamilton** 

[10] Hamilton co-wrote the Federalist Papers with John Jay and James Madison under this pen name, adapted from the name of an aristocrat who helped establish the Roman Republic.

ANSWER: Publius

[10] Hamilton was killed by this crazy man, who was Jefferson's first vice-president. He was later charged for treason for attempting to create his own country around Texas.

ANSWER: Aaron Burr, Jr.

T6. In this painting, the artist's signature and the year are visible on broken planks of wood beneath the depiction of the Notre-Dame de Paris shrouded in smoke. On the left of this painting, a man clings to cobblestones while gripping a sword, and a boy in this painting carries an overlarge cartridge pouch and (\*) brandishes two pistols next to the title woman. The title figure of this painting wears a yellow dress exposing her bare breasts and carries a bayonet and the French tricolor in either hand while leading Parisian revolutionaries. For 10 points, name this painting depicting the 1830 uprising against Charles X, a work by Eugene Delacroix.

ANSWER: Liberty Leading the People [or La Liberté guidant le peuple]

B6. Hallelujah! For 10 points each,

[10] Name this oratorio which includes the famous "Hallelujah Chorus" and which was powerful enough to make King George II stand. It includes the "Annunciation of the Shepherds" and focuses on Jesus.

ANSWER: Messiah

[10] This man composed Music for the Royal Fireworks to celebrate the end of the War of the Austrian Succession, as well as Messiah.

ANSWER: George Frideric Handel

[10] This coronation anthem my Handel was composed for the coronation of George II, and has been played at every coronation of a British monarch since.

ANSWER: Zadok the Priest

T7. The painting *Progress (The Advance of Civilization)* supposedly depicts one river in this state that begins at Lake Tear of the Clouds on Mount Marcy. Two figures, a painter and a poet, stand on an outcropping which overlooks a geographically incorrectly-placed clove and waterfall in this state in the painting (\*) *Kindred Spirits* by Asher Durand. The valley in this state created by the Mohawk river and the river it flows into were common subjects in early American art, but the Adirondack Mountains in this state were not painted as often. For 10 points, name this state whose Catskill Mountains were painted extensively by the Hudson River School founded in it.

ANSWER: New York

B7. Petey cannot attend the title event because it is his "chess night". For 10 points each,

[10] Meg proposes a game of Blindman's Bluff at the title event during which Stanley tries to strangle her and rape Lulu but is ultimately taken away by Goldberg and McCann.

ANSWER: The Birthday Party

[10] *The Birthday Party* is by this English playwright and winner of the 2005 Nobel Prize in Literature who also wrote *The Caretaker* and a play about the hitmen, Ben and Gus, *The Dumbwaiter*.

ANSWER: Harold **Pinter** 

[10] Harold Pinter is a part of this literary movement that holds that life has no inherent meaning and features nonsense dialogue. Other playwrights in this movement are Eugene Ionesco and Samuel Beckett.

ANSWER: <u>Theather</u> of the <u>Absurd</u> [accept equivalents like "<u>Absurd</u> <u>Theater</u>"; grudgingly accept just "<u>absurd</u>" or "<u>absurd</u>ism" but do tell them the correct answer]

- T8. Lawrence Kohlberg extended this man's most famous theory to morality. That theory was partially inspired by patterns he observed while grading Binet intelligence tests. This man coined the terms "assimilation" and "accommodation" to explain how people incorporate information into (\*) schemata, or clusters of concepts. According to him, babies develop "object permanence" during the sensorimotor stage. A self-proclaimed "genetic epistemologist", for 10 points, name this Swiss psychologist who developed a four-stage model of cognitive development and mostly studied children. ANSWER: Jean <u>Piaget</u>
- B8. The "Digital Crown" helps you navigate this device without covering the display, while the "Activity" and "Workout" apps were designed especially for it. For 10 points each,
- [10] Name this product which will come in standard, sport, and 18-karat gold options when it is released in 2015. This was the last device revealed by Tim Cook during the September 2014 release event at the Flint Center. ANSWER: Apple Watch [accept Apple iWatch or anything indicating a smart-watch manufactured by Apple; prompt on partial]
- [10] A viral video of Lewis Hilsenteger from Unbox Therapy performing this action resulted in teens everywhere to going into Apple stores and do *this* to another of Apple's new releases. This also results after keeping the device in one's back pocket.

ANSWER: <u>bending</u> an <u>iPhone 6</u> [accept <u>iPhone 6+</u> in place of "iPhone 6"; accept <u>#BendGate</u>; prompt on partial]

[10] This other cellphone company plans to release its Gear Smartwatch on November 7th. Android phones by this company that rival the iPhone include the Galaxy series.

ANSWER: Samsung

T9. This city used to be overshadowed by the city of Rey, but came to prominence when Agha Muhammad Khan proclaimed it the capital of the Qajar dynasty. Currently the location of Golestan Palace, this city once served as the headquarters of the SAVAK police. A namesake (\*) conference held in this city established the goal of a second front against Nazi Germany. The "Canadian Caper" largely took place in this city to rescue six Americans who were not held hostage at the American Embassy. Reza Shah Pahlavi ruled from, for 10 points, what current seat of government of Ayatollah Khomeini and the site of the Iranian Hostage Crisis?

ANSWER: **Tehran** 

B9. For 10 points each, the beta form of this molecule has a rhombohedral lattice.

[10] Name this molecule that is composed of "sheets" of carbon layered on top of one another, which is the "lead" found in pencils. Graphene is a one-atom-thick layer of this molecule.

ANSWER: graphite

[10] Graphite and graphene are two examples of this type of molecule. This type of molecule is a structural modification of a pure element in the same state.

ANSWER: <u>allotrope</u> [accept word forms]

[10] This other allotrope of carbon with chemical formula C60 is used to make buckyballs. This molecule names a class of carbon allotropes that are hollow and spherical or cylindrical.

ANSWER: buckminsterfullerene

T10. The protagonist of this novel is charmed by the Chief Accountant's immaculate appearance and expresses the belief that woman are "out of touch with reality" after his aunt gets him a position as captain of the late Fresleven's ship. That character awaits rivets and meets The Manager at the (\*) Central Station. Later, the protagonist finds a sign that warns, "Hurry up. Approach cautiously" on a pile of firewood near a Russian trader's hut. The protagonist prevents the Company's best ivory trader from escaping to the natives. For 10 points, Marlow travels down the Congo River to meet Kurtz in what novel by Joseph Conrad?

ANSWER: **Heart of Darkness** 

B10. It was centered at the city of Lubeck. For 10 points each:

[10] Name this confederation of Baltic cities that fought Denmark under an alliance named the Confederation of Cologne and began to decline after the formation of the Kalmar Union.

ANSWER: Hanseatic League [or Hansa]

[10] This band of pirates, which occupied Gotland, both harassed and allied with the Hanseatic League at various times until the formation of the Kalmar Union. Their most famous leader was Klaus Störtebeker, who led the *Likedeelers* offshoot of this league.

**ANSWER: Victual Brothers** 

[10] The Steelyard was the Hanseatic League's main kontor, or trading post, in this British city, until Elizabeth I disbanded it.

ANSWER: London

T11. This culture created such works of art as the Sarcophagus of the Spouses and the Chimera of Arezzo. This culture's religion was supposedly revealed to the grandson of Tinia, the man-child Tages. Theories state that this culture grew out of the Villanovans, and their cities included Clusium and Veii, part of the (\*) Dodecapoli. These people allied with the Carthaginians at the Battle of Alaila, and their downfall was precipitated by their defeat at the Battle of Cumae. Lars Porsena tried to reinstate a king of this origin to the throne, Tarquinius Superbus. For 10 points, name this civilization that gave way to the Roman Kingdom and later Republic.

ANSWER: Etruscan Civilization

B11. Answer the following about Japanese islands. For 10 points each,

[10] The most populous city on the island of Honshu is this Japanese capital city.

ANSWER: Tokyo

[10] This smallest of Japan's four main islands is located south of Honshu, and includes the cities of Tokushima and Imabari. It lies north-east of Kyushu.

ANSWER: Shikoku

[10] Okinawa is the largest of these islands, which form a chain extending southwest from Kyushu towards Taiwan. They were governed by a namesake kingdom until they were incorporated into Japan proper.

ANSWER: Ryukyu Islands

- T12. A "fringing" one of these structures is directly attached to the shore. According to a hypothesis by Charles Darwin, when a volcano sinks into earth's crust, an "atoll" one of these structures forms around a lagoon. These structures attain their color by hosting the algae zooxanthellae, which are evicted during periods of environmental stress, a phenomenon known as (\*) "bleaching". They are primarily made of calcium carbonate secreted by their namesake Cnidaria. For 10 points, name this biome, dubbed the "rainforest of the sea", an example of which is the Great Barrier one off the coast of Australia. ANSWER: coral reefs
- B12, Theseus marries Hippolyta after a performance of *Pyramus and Thisbe* in this play. For 10 points each.
- [10] Titania temporarily falls in love with a donkey-headed Bottom in this Shakespearian play, in which Demetrius ultimately marries Helena and Lysander ultimately marries Hermia.

ANSWER: <u>A Midsummer Night's Dream</u> [do not accept "A MidsummerS Night Dream" or any other mispronunciation of the actual title]

[10] This poignant book narrates the author's loss of his father Shlomo -- as well as God -- after his Jewish community failed to heed the warnings of Moshe the Beadle or Madame Schachter.

ANSWER: Night

[10] Sinbad the Sailor is repeatedly shipwrecked, once after his crew eats the unhatched chick of a roc. Aladdin has unlimited wishes in this collection of short stories translated by Richard Burton.

ANSWER: <u>1001 Arabian Nights</u> [accept The <u>Arabian Nights' Entertainment</u>; accept Kitab <u>alf layla</u> <u>wa-layla</u>]

T13. The missionary Giuseppe Castiglione painted *One Hundred Horses* during his time as court painter for an emperor of this country. A contemporary artist from this country was famously detained by this country's government for 81 days in 2011, and took photographs of himself (\*) flipping off the White House and the Forbidden City. That artist from this country also collaborated with Herzog & De Meuron to design the "Bird's Nest" stadium for the 2008 Summer Olympics. Home to contemporary artist and political dissident Ai Weiwei, for 10 points, give this nation whose Qin Dynasty Emperor Shi Huangdi was buried with the Terracotta Army.

ANSWER: People's Republic of China <FK>

B13. French Monarchs often had funny names. For 10 points each:

[10] The 11th king of this name was known as the "Universal Spider" because he often spun palace intrigue, while the 14th king of this name was known as the "Sun King".

**ANSWER: Louis** 

[10] John the Posthumous, Louis the Fat and Phillip the Amorous were all part of this French dynasty. It followed the Carolingian Dynasty, and included the house of its namesake founder, the house of Valois, and the house of Bourbon.

ANSWER: Capetian Dynasty

[10] Clovis the Lazy and Chlothar the Old were both from this dynasty, founded by Clovis I. They were the first to hold the title "King of the Franks".

ANSWER: Merovingian Dynasty

T14. The Star of the West failed to resupply a garrison in this state during the Civil War. One senator from this state called a certain speech a "libel on [this state] and [Andrew] Butler". An attempted slave rebellion in this state was masterminded by Denmark (\*) Vesey. The "forty bales of hay" theory was used to explain this state's economic troubles. One leader from this state wrote its Exposition and Protest against the so-called Tariff of Abominations in this state resulting in the Nullification Crisis. Preston Brooks and John Calhoun are both from, for 10 points, what state which was the first to secede from the Union during the Civil War?

ANSWER: South Carolina (do not prompt "Carolina")

B14. Death is the inevitable end for all living things. For 10 points each:

[10] First name the process of programmed cell death that occurs at checkpoints in defective cells and contrasts with necrosis.

**ANSWER: apoptosis** 

[10] This mitochondrial-membrane protein is released in small quantities to induce apoptosis. This protein interacts with IP3 receptors on the endoplasmic reticulum inducing cytotoxic levels of calcium.

ANSWER: cytochrome c

[10] Cytochrome c is also responsible for activating these enzymes named after the amino acids at which the function, which regulate the mechanism for cleaving DNA in cells undergoing apoptosis.

ANSWER: <u>caspase</u>s [the amino acids are Cysteine and ASPartate + the standard "ase" suffix for enzymes]

T15. In one work of this type, the poet compares the addressee to "distance", "sea" and "time" because "In [her] everything sank!" The protagonist of another work of this type slays the evil magician Pearl-Feather. A poem titled for one of these "of Despair" accompanies twenty (\*) love poems in a collection by Pablo Neruda. The line "I am large, I contain multitudes" is found in a work of this type. The title character marries Minnehaha in a Longfellow poem titled "[this] of Hiawatha". For 10 points, the longest poem in Walt Whitman's *Leaves of Grass* is what type of work "Of Myself"? ANSWER: songs [accept "A Song of Despair", "Song of Hiawatha", "Song of Myself"]

B15. Answer the following about a city in North Africa. For 10 points each:

[10] Name this city, whose namesake won the battle of Issus and Gaugamela and whose lighthouse was one of the Wonders of the Ancient World. It was also home to a famous library.

ANSWER: Alexandria

[10] Pompey's pillar, a triumphal column located in Alexandria, was actually built by this ruler, whose other policies included the creation of a four-emperor system of two senior Augusti and two junior Caesars.

ANSWER: Gaius Aurelius Valerius **Diocletian**us Augustus

[10] Alexandria is home to a notable one of these sites, located at the Catacombs of Kom al-Shoqafa. They were meant to be "cities of the dead", where multiple generations of wealthy families are buried.

ANSWER: Necropolis

T16. After losing in his fourth match with one rival, this man rebounded in a 2013 fight against Brandon Rios held in China. A potential fight between this man and Floyd Mayweather did not occur because this man would not submit to random US drug-testing. The aforementioned rival, Juan Manuel Marquez, supposedly said he had (\*) "Unfinished Business" with this man. This man won in his 6<sup>th</sup> weight division by defeating Ricky Hatton in "The Battle of East and West". Prior to that match, this man TKO'd Oscar de la Hoya in 8 rounds in "The Dream Match". For 10 points, name this first champion in 8 separate weight classes, a 5' 7" Filipino boxer.

ANSWER: Emmanuel "Manny" Pacquiao [or Pacman!!!]

B16. Cutting things up and then craftily gluing them back together is an art form. For 10 points each, [10] Give the name of that art form derived from the French word "coller" formally described as an assemblage of old forms, including paper clippings, ribbons, photos, and such to create a "new whole". ANSWER: **collage** 

[10] In his later years, this artist took to making collages including his *The Snail* and *La Négresse*, although he is perhaps better known as a founder of Fauvism and painter of *La Danse*.

ANSWER: Henri Matisse

[10] The most famous collection of collages by this Harlem Renaissance artist is *A Prevalence of Ritual*. His *The Block* is housed in the Metropolitan Museum of Art while his *The Calabash* is in the Library of Congress.

ANSWER: Romare Bearden <FK>

T17. This process occurs spontaneously if atomic number squared divided by mass number is greater than 47. If the effective multiplication factor, k, is less than one, then a reaction of this type is not sustainable according to Fermi's four factor formula. As visualized by a binding energy curve, if the mass of the resultant particles is greater than that of (\*) iron-59, then this process will release energy. This process takes place in breeder reactors and commonly uses neutrons from beryllium. When hit with a "slow" neutron, uranium-235 undergoes, for 10 points, what type of reaction in which the nucleus of a large atom is split apart?

ANSWER: nuclear <u>fission</u> [do not accept "fusion"]

B17. Answer the following about John Locke. For 10 points each.

[10] This theory of Locke's asserts that everyone is born with the mind as a blank slate, and is then shaped by the circumstances and experiences around them.

ANSWER: Tabula Rasa

[10] Tabula Rasa is expounded in this work of Locke's, which is one of the seminal works of empiricism and which makes a distinction between primary and secondary qualities.

ANSWER: An <u>Essay Concerning Human Understanding</u> [do NOT accept "An ENQUIRY Concerning Human Understanding"]

[10] This other work of Locke's was published unknowingly by one of his friends and advocated that people not be afraid of the Catholics that appeared to be menacing England.

ANSWER: A Letter Concerning Toleration

T18. One song collection by this composer includes the story of a man hearing the posthorn and ends with "The Hurdy-Gurdy Man". That collection, Winterreise, is often paired with Die (\*) Schone Mullerin. This composer of the Wanderer Fantasy wrote a work for a small ensemble that includes a double bass, a piano, and only one violin. He wrote hundreds of Lieder such as "The Erlking" and "Gretchen at the Spinning Wheel". He is known for his incidental music to Rosamunde. For 10 points, name this Romantic composer of the "Trout Quintet" and the "Unfinished Symphony".

ANSWER: Franz Schubert

B18. Answer the following about animals that pull divine chariots. For 10 points each,

[10] Chariots pulled by white horses are often associated with these deities, who ride across the sky and are exemplified by the Greek Helios and the Hindu Surya.

ANSWER: Solar Deities [accept clear-knowledge equivalents]

[10] This Norse goddess has a chariot pulled by cats. She is the head goddess of the Vanir and the brother of Freyr.

ANSWER: Freya or Freyja

[10] Poseidon's sea-chariot is pulled by these creatures, which have the front-part of a horse—and hence two hooves—and the back-part of a fish.

ANSWER: Hippocampus

T19. In this work, the invisible demon Tataka hurls stones at the main characters. Characters from this work include the king of the vultures, Jatayu, and the king of the bears, Jambhuvan. In this work, a pot of sweet milk is split between Dasharatha's three wives, including the nefarious (\*) Kaikeyi. The hero Lakshman is the brother of this epic's titular protagonist, who fights Ravana to regain his wife, Sita. For 10 points, name this Hindu epic which is shorter than the Mahabharata and which tells the story of the 7<sup>th</sup> avatar of Vishnu.

ANSWER: Ramayana

B19. The end result of this process is often a hypoxic ecosystem. For 10 points each,

[10] Name this process by which a body of water becomes rich in dissolved nutrients such as nitrates and phosphates due to fertilizer and sewage runoff.

ANSWER: eutrophication [accept word forms]

[10] These organisms' namesake blooms cause hypoxia when they die in large numbers because their decomposition sucks up dissolved oxygen from the water. These organisms usually come in "green" and "red" varieties.

ANSWER: algae [accept algal blooms]

[10] This specific kind of algae causes harmful blooms known as "red tide". These single-celled microorganisms appear as though they are armored, but they are named for their two "whipping" flagella. ANSWER: dinoflagellates

T20. One derivation of this quantity uses the term m N v-squared over L divided by A, which shows that for a gas of constant quantity and volume, this value is proportional to two-thirds the kinetic energy. The "real-life" version of this quantity is fugacity, and in (\*) Bernoulli's equation, this value is divided by density. This quantity, which is conserved in isobaric processes, is multiplied by volume to give work for gasses. Gay-Lussac's law relates it to temperature for an ideal gas, and this quantity is measured in Pascals. For 10 points, name this quantity that is equal to force over area.

ANSWER: pressure

B20. The titular flower is "like a buttercup/ upon its branching stem." For 10 points each,

[10] Name this poet who wrote "Asphodel, That Greeny Flower" and confesses, "I have eaten/ the plums/ that were in/ the icebox" in "This is Just to Say".

ANSWER: William Carlos Williams [accept WCW if anyone still says that]

[10] Perhaps Williams' best known poem is this one from his collection *Spring and All*. In this poem, "so much depends/ upon" the title tool, which is "glazed with/ water/ beside the white/ chickens."

ANSWER: "The Red Wheelbarrow"

[10] Williams also wrote this 5-book epic about the titular New Jersey city that "lies in the valley under the Passaic Falls". This work repeats the line, "No ideas but in things".

ANSWER: Paterson

TB. Early in this process, an enzyme undergoes abortive initiation until the "DNA scrunching" mechanism allows it to begin elongation. Termination of this process can be rho-dependent or rho-independent, and generally involves a (\*) G-C rich hairpin loop. Zinc-fingers are examples of this process' namesake "factors", which bind to the promoter region to recruit RNA polymerase. This process is initiated at the Pribnow box in prokaryotes and at the TATA box in eukaryotes. For 10 points, give this cellular process of writing mRNA from DNA.

ANSWER: transcription