

ROUND 11

T1. Separate confinement in the United States was pioneered at this city's Eastern State Penitentiary. A mob of settlers who attacked Native Americans in response to Pontiac's Rebellion, known as the Paxton Boys, marched to this city in 1763. In response to rumors asserting that a certain religious group wanted to take the Bible out of (*) schools, this city erupted in the so-called "Bible Riots" against Catholics. Congress only accepted Alexander Hamilton's plan to assume the states' debt after also agreeing to move the national capital from this city to Washington, DC. For 10 points, name this "city of brotherly love", the largest in Pennsylvania.

ANSWER: Philadelphia

B1. Bobby Keys plays two saxophone solos in this song, which includes the lyrics "Mister President, mister immigration man/Let me in, sweetie, to your fair land." For 10 points each:

[10] Name this song that begins "Mama says yes, papa says no/Make up your mind 'cause I got to go," after which the singer promises to perform the title action, "save your soul/round and round and round we go."

ANSWER: "Rip This Joint"

[10] "Rip this Joint" appears on this album, along with the songs "Casino Boogie" and "Sweet Virginia." Its cover consists of a photograph taken by Robert Frank of a collage of circus freaks on the wall of a tattoo parlor.

ANSWER: Exile on Main St.

[10] *Exile on Main St.* was an album by this band fronted by Mick Jagger on vocals and Keith Richards on guitar. Other notable songs by this band include "Sympathy for the Devil" and "Gimme Shelter."

ANSWER: The Rolling Stones [or The Stones]

T2. In one novel by this man, Tashtego is denied a golden doubloon and taps the case of spermaceti. The title character of one work by this man had previously worked in the Dead Letter Office. Turkey, Nippers and Ginger Nut work on Wall Street with that character, who "would (*) prefer not to" in this man's "Bartleby the Scrivener". Claggart accuses Billy Budd of mutiny in another novella by him. In one of this man's novels, Fedallah prophesies the destruction of the *Pequod*, and Ishmael narrates Captain Ahab's pursuit of the titular white whale. For 10 points, name this author of *Moby Dick*.

ANSWER: Herman Melville

B2. Type II variants of this material most commonly exist in "vortex state". For 10 points each,

[10] YBCO is a high-temperature example of this type of substance which exhibits zero electrical resistance.

ANSWER: superconductor

[10] These entities are expelled when an object transitions to the superconductivity in the Meissner effect. These fields are caused by moving electric charges and are measured in Teslas.

ANSWER: magnetic field

[10] The mechanism that causes the Meissner effect is explained by this theory, which claims that electrons near the Fermi level form Cooper pairs which behave like bosons and have a band gap that prevents resistive collisions.

ANSWER: BCS theory

T3. It's not baptism, but in Sikhism, this event is celebrated on the day that Guru Gobind Singh founded the Khalsa and is called Vaisakhi. In the Hijrah calendar, the start of Muharram marks this

event. In Baha'i, this event is preceded by a 19-day fast, and its celebration, Naw-Ruz, concurs with the spring equinox and the Zoroastrian celebration of it. The (*) Chinese or Lunar celebration of this event includes lion dances and gifts of money in red envelopes; while in Judaism, it is celebrated during Rosh Hashanah. For 10 points, name this event which on the Gregorian calendar falls on January 1st.

ANSWER: **New Year** [accept clear knowledge-equivalents]

B3. He was told by the Oracle at Delphi to forget about finding his sister Europa. For 10 points each, [10] Name this Phoenician mortal who sowed dragon teeth and tricked the soldiers that sprouted up into killing each other, leading to the establishment of the city of Thebes.

ANSWER: **Cadmus**

[10] Cadmus was told by the Oracle to settle where a cow with a moon-shaped mark rested, which he later decided to sacrifice to this goddess. She is a daughter of Zeus and the patron of knowledge of learning.

ANSWER: **Athena**

[10] One of Cadmus' daughters by his wife Harmonia was this mortal, who became the mother of Dionysus. She was incinerated after Zeus revealed to her his divine form.

ANSWER: **Semele**

T4. The Hoopes process is used to purify this element to 99.99%. The only two metals in Tebbe's reagent are titanium and this metal, which are also used in a group of catalysts for alkene polymerization named for Ziegler and Natta. Electrolysis is used to smelt this element after its oxide is dissolved in molten cryolite in the Hall-(*)-Heroult process. Corundum is the naturally occurring form of this element's oxide, which is extracted via the Bayer process from this metal's most common ore, bauxite. This is the most abundant metal in Earth's crust. For 10 points, give this chemical element with symbol Al.

ANSWER: **aluminum** [accept **Al** until mention]

B4. Answer the following about the largest state in the US, Alaska. For 10 points each:

[10] Alaska was bought by this Secretary of State, a decision dubbed his namesake "folly". He was beat out by Lincoln for the Republican nomination in 1860.

ANSWER: William Henry **Seward**

[10] Alaska experienced a population boom during this nearby gold rush event in northern Canada along its namesake river. A US State Park named for this gold rush includes Chilkoot Pass, which gold-panners had to cross.

ANSWER: **Klondike** Gold Rush or **Yukon** Gold Rush

[10] The first gold found in Alaska itself was found in 1899 near this north-eastern city, which is also the endpoint of the Iditarod dog race.

ANSWER: **Nome**

T5. **Jean-Martin Charcot used this phenomenon to study and alleviate hysteria in women, while Sabrin formulated the “role theory” of it, in which the patient is merely faking. A majority of patients in this state indicated feeling pain when their arm was submerged in ice-water, which supports Ernest Hilgard’s dissociation theory of it. James Braid introduced (*) “eye-fixing”, which is a popular way to put patients in this state. A patient is vulnerable to “suggestion” in, for 10 points, what altered state of consciousness, sometimes induced by having that patient track a bright object with his eyes while telling him, “You are getting sleepy...”**

ANSWER: **hypnosis** [accept word forms like “being hypnotized”, or “hypnotic suggestion” until mention; prompt on “suggestion” until mention; do not accept or prompt on “to mesmerize” or word forms]

B5. Tom Sawyer convinces Jim to help him white-wash one of these. For 10 points each, [10] Troy Maxson finally builds one of these, as per his wife Rose’s request, in a play titled after them. “Good [these] makes good neighbors”, according to the poem “Mending Wall”.

ANSWER: **fences**

[10] The aforementioned play *Fences* is by this author of the Pittsburgh cycle, who wrote about Berniece’s reluctance to allow Boy Willie to sell the titular instrument in *The Piano Lesson*.

ANSWER: August **Wilson**

[10] In the aforementioned poem “Mending Wall”, the neighbor is “all pine” while the speaker has orchards of this fruit. In Dylan Thomas’ “Fern Hill”, the speaker reminisces on being “young and easy under [this fruit’s] boughs”.

ANSWER: **apples**

T6. **This man’s version of *Death of Marat* depicts a nude woman standing next to a dead body lying on blood-stained sheets, while in another of his works a nude girl sits on a bed with her arms crossed and casts a dark shadow on the wall behind her. This artist of *Puberty* showed a woman with (*) red hair kissing a man on the neck in his piece *Vampire*. A woman bends over and clasps her hands over a bed-ridden girl in his *The Sick Child*, which is part of the *Frieze of Life* series. This artist’s most famous work features a reddish sky as a backdrop to a man clutching his face and performing the title action. For 10 points, name this artist of *The Scream*.**

ANSWER: Edvard **Munch** <GG>

B6. This neurotransmitter is stored in platelets, which use it for vasoconstriction. For 10 points each, [10] Name this neurotransmitter associated with feeling happy. Depression medication often inhibits the reuptake of this neurotransmitter, because depressed people “lack” it.

ANSWER: **serotonin**

[10] Serotonin is biochemically synthesized from this amino acid. *E. coli* possess a repressible operon which prevents the transcription of genes needed to synthesize this amino acid if it is available from the environment.

ANSWER: **tryptophan** [or **trp**]

[10] Via a different pathway, tryptophan can be converted into this B vitamin, which is a precursor to NAD or NADP and helps convert LDLs into HDLs. A deficiency of this B vitamin can cause pellagra.

ANSWER: **niacin** [accept vitamin **B3**]

T7. One incident recorded on a phone in this city involved an officer saying “the door is over here” but directing people to another door; that incident was the arrest of Welsey Lowery. Governor Jay Nixon announced an “operational shift” in this city in order to (*) demilitarize police. Protesters in this city marched with their hands in the air shouting “Don’t Shoot” after an event perpetrated by Darren Wilson. The police force of this city has been widely criticized for its use tear gas against protesters. For 10 points, name this city in which Michael Brown was shot in August 2014.

ANSWER: **Ferguson, Missouri**

B7. Answer the following about ancient writing systems. For 10 points each:

[10] This Sinitic macrolanguage, whose dialects include Cantonese and Mandarin, was written on oracle bones during the Shang period.

ANSWER: **Chinese**

[10] The Ogham script was used to write the Old variant of this language, whose current speakers live primarily in the Gaeltacht regions of Munster, Ulster, and Connacht.

ANSWER: **Irish**

[10] This Egyptian script was featured on the Rosetta stone along with with Ancient Greek and Hieroglyphics. Chronologically, it was used after Hieroglyphics and Hieratic script, but was gradually replaced itself by the Coptic alphabet.

ANSWER: **Demotic**

T8. The cogging type of this phenomenon is caused by rotor and stator magnets interacting and results in jerky motion at low speeds. An electric field induces one of these on a dipole which is given by the equation “E times q times d sine theta”. In an analogue to Newton’s Second Law, this quantity equals the moment of inertia times (*) angular acceleration. Power can be defined as the dot product of angular velocity times this quantity, and it is the time derivative of angular momentum. For 10 points, give this quantity, defined as the cross product of the lever arm distance and force, also known as the rotational analogue of force.

ANSWER: **torque**

B8. Caravaggio depicted this action being performed as a man to the left runs away with outstretched arms and soldiers close in on the right in his *The Taking of Christ*. For 10 points each:

[10] Name this action also performed by a man draped in yellow as a crowd bearing spears and brooms advance in a fresco by Giotto. Its namesake apostle does it to identify Christ so he may be arrested by the Romans.

ANSWER: **Kiss of Judas** [prompt on “kiss”]

[10] Many of Giotto’s frescoes are contained in this chapel in Padua, where his depictions of the life of Jesus and Mary include *The Kiss of Judas* and *Joachim Among the Shepherds*.

ANSWER: **Arena** Chapel [or **Scrovegni** Chapel]

[10] Giotto was born in this Italian city and capital of Tuscany, which contains architectural works such as the Uffizi Gallery and the Basilica di Santa Maria del Fiore.

ANSWER: **Florence** [or **Firenze**, **Fiorenza**, **Florentia**]

T9. In a novel by this man, a doctor mistakenly yells at a woman to take her shoes off before entering the mosque. In another novel by him, Miss Lavish writes about a kiss in a violet field after gossiping with Miss Bartlett. One of this man's characters decides to resume her engagement to Ronny after a car accident, while another breaks off her engagement to Cecil Vyse. After leaving the (*) Marabar Caves, Adela Quested falsely accuses Dr. Aziz of raping her in one novel by him, while in another George Emerson ultimately marries Lucy Honeychurch. For 10 points, give this author of *A Passage to India* and *A Room with a View*.

ANSWER: Edward Morgan **Forster**

B9. It was dubbed the "queen of all roads." For 10 points each:

[10] Name this road that spanned from Rome to southern Italy, created by its namesake censor to aid with wars on the southern tip of the peninsula.

ANSWER: **Appian Way** or **Via Appia**

[10] The Appian Way was the site where Crassus crucified the followers of this Spartacus, who had this profession. They often fought in arenas with nets and tridents against each other.

ANSWER: **Gladiators**

[10] While initially extending only to Capua, the Via Appia eventually extended to this southern Italian port city. Its modern name also describes a type of drinking song, although the two terms are etymologically unrelated.

ANSWER: **Brundisium** or **Brindisi**

T10. The Ténéré is a region within one of these regions, which is the major concern of the Great Green Wall project. The two regions between the Murghab river, the Amu Darya, and the Syr Darya correspond to two of these geographical entities, the Kyzylkum and the Karakum. The (*) Rub' al-Khali is one of these entities. Meerkats are endemic to these regions in southern Africa, and the saguaro is found in the Sonoran one of these geographical regions. For ten points, name this geographical feature exemplified by the Kalahari and the Sahara.

ANSWER: **Desert** [accept specific answers such as "Sahara Desert", "Kalahari Desert", etc.]

B10. Ozone is an allotrope of this element. For 10 points each,

[10] Joseph Priestley used a pneumatic trough to isolate many gases, including this second-most abundant gas in the world with atomic number 8 and mass number 16?

ANSWER: **oxygen**

[10] Priestley was a staunch defender of this theory proposed by J. J. Becher, which claimed that the namesake substance was consumed when a material was burned.

ANSWER: **phlogiston** theory

[10] This French scientist and "Father of Modern Chemistry" coined the term "oxygen" to describe Priestley's "dephlogisticated air" and claimed it was responsible for the added mass of combusted compounds in his *Elementary Treatises on Chemistry*.

ANSWER: Antoine **Lavoisier**

T11. The capture of the stronghold of Eryx on this island led to Pyrrhus of Epirus being crowned "King" of it. Damocles was given a sword over his neck by Dionysus II on this island, which was also ruled by Hiero I. Alcibiades promoted a disastrous military expedition to this island during the (*) Peloponnesian war, and a revolt on this island against Charles of Anjou is called its namesake Vespers. Life on this island has been disrupted due to the eruptions of Mt. Etna, and this island was the origin of "La Cosa Nostra," or the Italian Mafia. For 10 points, name this island south of Italy.

ANSWER: **Sicily**

B11. Farah Aden is the chief of servants and the narrator's closest confidante. For 10 points each, [10] Name this novel set on a coffee plantation in the foothills of the Ngong Valley. The narrator leaves the plantation after her business starts to sink and her lover Denys Finch-Hatton dies in an airplane crash.

ANSWER: **Out of Africa**

[10] *Out of Africa* is by this Danish woman who also wrote the *Seven Gothic Tales* and the short-story collection *Anecdotes of Destiny*, which includes the story "Babette's Feast".

ANSWER: Isak **Dinesen** [accept Karen von **Blixen-Finecke**]

[10] Most of the servants in *Out of Africa* are from the Kikuyu tribe of this country, whose most famous author, Ngugi wa Thiong'o, wrote *Petals of Blood*.

ANSWER: **Kenya**

T12. **Egon Schiele's *The Embrace* features a couple lying on a white sheet on a bed of this color, and the bed and chairs in Vincent van Gogh's *Bedroom in Arles* are this color. A man climbs over a brick fence as three Breton women pray under the title figure in a Paul Gauguin work titled for a (*) Christ of this color. This color is worn by a woman carrying a chicken and the man accompanying Frans Banning Cocq at the front of Rembrandt's *The Night Watch*, and this is the color most often used for halos in icons of Eastern Christianity. For 10 points, name this color common to most of the *Sunflowers* painted by van Gogh.**

ANSWER: **yellow** [or **gold**] <GG>

B12. "*Sunnah*" is often paired with this in Islam. For 10 points each,

[10] Name these texts, compiled from oral transmission, which are the recorded sayings of the prophet Muhammad. According to one Muslim sect, Sahih al-Bukhari is the most trusted and authentic collection of these.

ANSWER: **hadith**

[10] This sect of Islam invalidates all *hadith* transmitted by Aisha, since she challenged Ali in the Battle of the Camel. This sect of Muslims believe that Ali was the rightful successor to the prophet as caliph.

ANSWER: **Shi'a** [accept **Shi'ite**]

[10] In Islamic jurisprudence, the authority of the *Sunnah* and *Hadith* can never be higher than the authority of this primary religious text of Islam, which consists of 114 *surat* broken into 30 *juz*.

ANSWER: **Qur'an**

T13. **The Sunzi algorithm uses rod arithmetic to perform this operation. A mathematical fallacy related to this operation is often used to falsely prove that 2 equals 1. In L'Hopital's rule, after taking the limits of both functions, one must perform this operation, while the "synthetic" method of performing this operation can be used with a (*) binomial and polynomial. In order perform this operation on matrices, one must raise the second matrix to the negative first power. Slope is calculated by performing this operation with the "rise" and "run"; although if the "run" were zero, this operation would be undefined. For 10 points, name this operation, the inverse of multiplication.**

ANSWER: **division**

B13. For 10 points each, name some paintings that have a lot going on.

[10] A woman in the upper left of this painting is milking a cow, while another woman is playing the violin underneath two upside down houses. A goat and a green man look at each other in this Marc Chagall work.

ANSWER: **I and the Village**

[10] Two bedposts are golden elephants in front of which a slave is cutting a horse's leg off in a painting by this artist. In that painting, *Death of Sardanapalus*, the title figure casually watches the slaughter of his concubines.

ANSWER: Eugène **Delacroix**

[10] One section of a roof in this painting is "tiled with tarts" while three cards lie face-up slightly in front. One man bites a pillar while another poops out a window in this painting by Brueghel the Elder.

ANSWER: **Netherlandish Proverbs** <FK>

T14. A character sings "Sheep May Safely Graze" in this composer's "Hunting Cantata". The characters Schlendrian and Lieschen are introduced with the recitative "Be Still, Stop Chattering" in another work by him about Lieschen's addiction to the title substance. This composer of the (*) "Coffee Cantata" used a theme written by the King of Prussia in his *Musical Offering*. He created a set of six concertos to present to Margrave of Brandenburg, as well as a set of 24 keyboard preludes in every key. For 10 points, name this Baroque composer of *The Well-Tempered Clavier* and the *Goldberg Variations*.

ANSWER: **Johann Sebastian Bach** (prompt on "Bach")

B14. Fritz Zwicky postulated the existence of this substance. For 10 points each,

[10] Name this substance that may constitute up to 85% of the universe but is not directly observable because it does not emit radiation. Weakly interacting massive particles are candidates for it.

ANSWER: **dark matter**

[10] MACHOs are another candidate for dark matter that are composed of this general class of subatomic particle, which is made of three quarks.

ANSWER: **baryon**

[10] Although most dark matter is non-baryonic, this class of objects is another example of baryonic dark matter. These objects are known as "failed stars", as they have too little mass to sustain hydrogen fusion.

ANSWER: **brown dwarf** [accept *pl.* **brown dwarves**]

T15. In one story by this author, Janine weeps to her husband Marcel after sneaking out at night to visit a fort. This author uses the myth of Sisyphus as an analogy for the philosophy of the absurd. He wrote the short-story collection *Exile* (*) and *the Kingdom*. Dr. Bernard Rieux tries to contain the rats infesting his hometown, Oran, in this man's *The Plague*. His most famous novel begins "Maman died today", and sees the protagonist court Marie and write love letters for his neighbor Raymond Sintes. For 10 points, Meursault shoots an Arab on the beach in what man's novel *The Stranger*?

ANSWER: Albert **Camus**

B15. He tried to reconcile Islam with the Greeks, although not by separating faith and reason. For 10 points:

[10] This Almoravid Islamic scholar criticized al-Ghazali in *The Incoherence of the Incoherence* and translated the ancient Greeks. He is featured in the lower left of Raphael's *School of Athens*.

ANSWER: Ahmad **ibn Rushd** [aka **Averroës**]

[10] Averroes was "the Commentator" in the seminal work of this man. That work by this man posits 5 arguments for the existence of God and is titled *Summa Theologica*.

ANSWER: Thomas **Aquinas**

[10] This man is “The Philosopher” in Aquinas’ *Summa Theologica*. He proposed the concept of an Unmoved Mover in his *Metaphysics*. His namesake “appeals” are ethos, pathos, logos and kairos.

ANSWER: **Aristotle**

T16. **In this country, Muhammadu Buhari was overthrown in a coup by Ibrahim Babangida. Independence for this country was achieved under Nnamdi [en-NAHM-dee] Azikiwe who led the Christian-dominated NCNC. Olusegun Obasanjo served as both a military ruler and as an (*) elected head of state at different times in this country, which saw ethnic tensions erupt when the Republic of Biafra declared independence. The ensuing civil war pitted the Igbo against the Hausa. For 10 points, name this multiethnic and most populous nation in Africa, with capital Abuja.**

ANSWER: **Nigeria**

B16. This opera includes a famous brindisi, or drinking song, and is set in Paris. For 10 points each, [10] Name this opera in which Alfredo’s father Giorgio tries to break up his son’s relationship, but makes amends before the end of the opera. It is based on *La Dame aux Camélias* by Alexandre Dumas.

ANSWER: *La **Traviata***

[10] This main character of *La Traviata* originally rejected love, but dies of consumption in Alfredo’s arms in the third act. She is sickly and pale throughout the opera.

ANSWER: **Violetta**

[10] *La Traviata* was composed by this Italian, who also created such major operatic works as *Aida* and *Il Trovatore*.

ANSWER: Giuseppe **Verdi**

T17. **This man declared his country united with Syria to create a United Republic. Along with Abd Al-Hakim Amir, he started the Free Officers movement. This leader suppressed the Muslim Brotherhood in his country after an assassination attempt. A coup that this man led against King (*) Farouk I did not place him in power immediately, but rather placed Mohammed Naguib as the head of state. A proponent of Pan-Arabism, this man oversaw the opening of the Aswan Dam and the Suez Crisis. For 10 points, name this President of Egypt later succeeded by Anwar Sadat.**

ANSWER: Gamal Abdel **Nasser**

B17. J.M. Coetzee’s novel *Foe*, about the castaway Susan Barton, is woven around this novel’s plot. For 10 points each,

[10] Name this novel inspired by the life of Alexander Selkirk, in which the titular sailor is shipwrecked on an island with cannibals. The title character rescues and educates his companion Friday in this novel by Daniel Defoe.

ANSWER: **Robinson Crusoe**

[10] This author wrote about how Morris and Zachariah’s skin tones drove them apart in *Blood Knot*. Sam and Willie practice ballroom dancing for an upcoming competition in this man’s play *Master Harold...and the Boys*.

ANSWER: Athol **Fugard**

[10] This nation’s apartheid system prevented Sam from sharing a bench while flying a kite with Hally in *Master Harold...and the Boys*. Coetzee and Fugard both hail from this nation.

ANSWER: **South Africa**

T18. **One man with this first name owns the titular estate in Aldous Huxley's *Crome Yellow*. After a horseback-riding accident, de Nollie's uncle believes he is a king of this name. Hal, a future king of this name, kills Hotspur, although his drunk friend (*) Falstaff later takes the credit, in a Shakespearian play titled after a king of this name. Col. Pickering makes a bet with a character who has this first name. That professor, with surname Higgins, tutors Eliza Doolittle in George Bernard Shaw's *Pygmalion*. For 10 points, give this name, also the surname of the pseudonym of the author of "The Gift of the Magi"**

ANSWER: **Henry** [accept **Henry Wimbush**, **Enrico IV**, **Henry IV**, **Henry Higgins**, or **O. Henry**]

18. **You are a church-loving agricultural worker in Spain in 1936. For 10 points each:**

[10] **You decide to fight the Republicans under this leader of the Nationalists in the Spanish Civil War. He eventually wins, to your delight, and becomes the dictator of Spain until 1975.**

ANSWER: **Francisco Franco** Bahamonde

[10] During the war, one of the major factions fighting for Franco becomes this political fascist party, founded by Primo de Rivera. It was later combined with the Carlists.

ANSWER: **Falange** Española de las Juntas de Ofensiva Nacional Sindicalista (accept Spanish **Phalanx**)

[10] **You eventually end up fighting this group of American troops, one of the International Brigades which, often illegally, joined the fight against Franco.**

ANSWER: **Abraham Lincoln** Brigade

T19. **This hero sent a prostitute to shave a future friend, and dreamt of a heavy copper axe that he would give to his goddess mother Ninsun. This hero tried to pick a prickly plant that would give immortality, but it was later stolen by a shedding serpent. He met Siduri at Mount Mashu and ventured to the (*) Cedar forest to kill the demon Humbaba, resulting in the death of his friend. In addition to asking the advice of Utnapishtim to bring back that friend from the dead, this hero slayed the Bull of Heaven sent by Ishtar. For 10 points, name this hero whose friend Enkidu was killed, the namesake of a Mesopotamian epic?**

ANSWER: **Gilgamesh**

B19. Answer the following about the geography of F. Scott Fitzgerald's life and writings. For 10 points each,

[10] In *The Great Gatsby*, Gatsby lives on the fictitious West Egg of this island off the coast of New York City, which includes Nassau and Suffolk counties. It is separated from the mainland by its namesake sound.

ANSWER: **Long Island**

[10] The titular character of the short story *The Curious Case of Benjamin Button* was born in this major East Coast city, where Edgar Allen Poe died. It is the location of Johns Hopkins Hospital, where Zelda Fitzgerald was often a patient.

ANSWER: **Baltimore**

[10] Fitzgerald's short story "Winter Dreams" begins in this state, where Fitzgerald was born. Major bodies of water in this state include the Upper and Lower Red Lakes.

ANSWER: **Minnesota**

T20. In prokaryotes, these structures respond to Shine-Dalgarno sequences. Their namesake recycling factor may split them into their two subunits and works with EF-G. Ricin works by inhibiting these structures whose size is measured in Svedberg units. In eukaryotes, EF-1 facilitates the binding of (*) aminoacyl-tRNA to this organelle's A-site. Kozak sequences contain AUG which starts this organelle's main process with the steps initiation and elongation. This organelle can be "free" or "membrane bound" as on the rough endoplasmic reticulum. For 10 points, name this organelle, the site of mRNA translation and polypeptide synthesis.

ANSWER: **ribosomes**

B20. This poet's "I Wandered Lonely as a Cloud" is also sometimes called "Daffodils". For 10 points each, [10] Name this British poet who wrote "Five years have past" since he last visited the titular locale near the River Wye where he reflects fondly on nature and his sister Dorothy, in his poem "Tintern Abbey".

ANSWER: William **Wordsworth**

[10] Wordsworth and Samuel Taylor Coleridge jointly published this collection, which contains Wordsworth's "Tintern Abbey" as well as Coleridge's "The Rime of the Ancient Mariner".

ANSWER: **Lyrical Ballads**

[10] *Description acceptable.* In "The Rime of the Ancient Mariner", the Mariner is telling his story to this other character who "listens like a three years' child" and leaves "a sadder and wiser man".

ANSWER: the **Wedding-Guest** [accept clear knowledge equivalents, anything implying "a guy who was on his way to a **wedding**"]

TB. Faraday's constant is equal to the charge of this many electrons. In order to calculate the partial pressure of a gas, one needs to multiply the total pressure exerted by the mixture times this unit's namesake fraction, which is also used to solve stoichiometry problems. In the definition of molarity, solutes are measured in (*) this unit and are divided by liters of solution, and this amount of water weighs approximately 18 grams. An analogy commonly used to explain this unit is: just as one dozen donuts is 12 donuts, one of this unit is 6.02×10^{23} particles. For 10 points, give this unit defined as the number of atoms in 12 grams of pure carbon-12.

ANSWER: **moles** [accept **Avogadro's number** in the first clue]