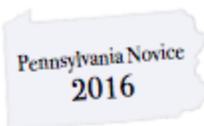


Pennsylvania Novice 2016

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Packet 3 Tossups

1. This country's *Verbunkos* style of music was originally used for military recruitment. A one-act opera by a composer from this country consists of Judith and her new husband opening seven doors in the titular *Duke Bluebeard's Castle*. The "Cat Concerto" cartoon featuring Tom and Jerry is set to the second namesake (*) "Rhapsody" by a composer from this country, Franz Liszt. For 10 points, name this Central European country where Bela Bartok used themes from traditional Magyar music.

ANSWER: **Hungary** (accept **Hungarian**)

2. The topmost section of the NFPA diamond has this color, indicating the compound's flashpoint. Solutions of lithium, rubidium and strontium all turn various shades of this color in a flame test. In molecular model kits, oxygen atoms are almost always this color, and it corresponds to visible light with the longest possible (*) wavelength. The pH indicator phenolphthalein turns a shade of this color in base. When exposed to acid, litmus paper turns this color. For 10 points, identify this color of iron (III) oxide, commonly known as rust.

ANSWER: **red** (or **pink**; or **crimson**)

3. At Serchina, a rebellion by this type of people was defeated by Crassus and Pompey. Olaudah Equiano discussed their life in his *Interesting Narrative*. A group of these people called Helots worked the fields of Sparta to allow citizens to spend their whole time focused on war. The American (*) Colonization Society settled a group of these people in Liberia. For 10 points, name this type of person, some of whom were led to freedom by Harriet Tubman on the Underground Railroad.

ANSWER: **slaves** (accept equivalents like **involuntary servants**)

4. One character in this play's dying lines are, "I took by the throat the circumcised dog and smote him thus." In Act One, Brabantio accuses the protagonist of seducing his daughter via witchcraft. The villain of this play is motivated by jealousy of Cassio, a younger soldier promoted above him. At the climax of this play, the ensign (*) Iago tricks the title character into killing his wife Desdemona in their bed. For 10 points, name this Shakespearean tragedy featuring a Moorish General.

ANSWER: **Othello**, *Moor of Venice*

5. Fionn MacCool's [FINN mc-COOL's] animals of this type were able to identify his future wife Sadhbh [SA-ba]. One of these animals, Laelaps, always caught what it hunted, causing a paradox when it chased another animal from Teumessia that could never be caught. One of these animals named Argos died of excitement upon the return home of Odysseus. For his 10th labor (*) Hercules dragged one of these animals to the surface away from its post guarding the underworld. For 10 points, name this type of animal, which included three-headed Cerberus.

ANSWER: **dog** (accept equivalents like **canines** or **hounds**)

6. This monarch sent Robert Dudley to help the Dutch armies defend themselves against the Duke of Parma. Under this monarch, the 39 Articles codified Anglicanism. This monarch ordered the execution of a treasonous former favorite, The Earl of (*) Essex, and also executed rival Catholic claimant Mary, Queen of Scots. Francis Drake defeated the Spanish Armada in 1588 for this daughter of Anne Boleyn. For 10 points, name this last English monarch of the Tudor Dynasty, known as the Virgin Queen..

ANSWER: **Elizabeth I** (prompt on **Elizabeth**)

7. Some molecules are transported by flippases and floppases through this structure. The fluid mosaic model describes this structure. A transport protein moves two potassium ions to one side of this structure for every three sodium ions transported the other way. This structure has a (*) hydrophobic interior since the lipid parts of phospholipids assemble together to form a bilayer. For 10 points, name this selectively permeable structure which encloses the cytoplasm of a cell.

ANSWER: **cell membrane** (or **phospholipid bilayer**; prompt on **membrane**)

8. This state contains deeply eroded ash deposits in the Valley of Ten Thousand Smokes within Katmai National Park. The North Slope oil fields are found in this state, where the Chilkoot Pass can be accessed through this state's port city of Skagway on the historic (*) Yukon Trail. The highest point in North America, Denali, is found in this state. For 10 points, name this "North Star" state whose most populous city is Anchorage and whose capital is Juneau.

ANSWER: **Alaska**

9. One example of these poems is Ezra Pound's "In a Station of the Metro." A more traditional example of them begins "the month and days are the travelers of eternity" and opens a travelogue entitled *The Narrow Road to the Deep North*. Examples of these types of poems often focus on (*) nature and the seasons, and an often-cited one describes a frog jumping into a pond. For 10 points, Matsuo Basho authored many of what type of seventeen-syllable poems, common in Japan?

ANSWER: **haiku**

10. On Chance the Rapper’s track “All We Got,” this artist delivers the hook: “Music is all we got.” In one song, this artist says “I asked her where she wanna be when she 25, she turned around and looked at me and said ‘alive.’” This man claims he’s “Detroit Red, cleaned up” in a music video that shows a (*) teddy bear wearing shutter shades graduating from college. That teddy bear is on the cover of the album *Graduation*, where he sampled Daft Punk in the track “Stronger.” This man collaborated with Jay-Z on *Watch the Throne*. For 10 points, name this artist whose latest albums include *Yeezus* and *The Life of Pablo*.

ANSWER: Kanye West (accept either)

11. A cathedral with two towers appears on the right side of this painting, while the rest of the background is obscured by smoke. Prominent figures in this painting include a man in a top hat brandishing a gun and a young boy waving two pistols, both of whom stand atop a pile of corpses. This painting’s title figure wears a (*) Phrygian cap and a yellow dress that has fallen down. For 10 points, an allegorical figure waves the French tricolor in which painting of the 1830 French Revolution by Eugene Delacroix?

ANSWER: Liberty Leading the People (or La Liberté guidant le peuple)

12. Fubini’s theorem details conditions under which two applications of this operation can be performed in either order. Trigonometric substitution can simplify this operation when square roots are involved. This operation may be performed “by parts” on products of two functions. Simpson’s rule and the (*) trapezoidal rule are both methods for approximating this operation. The fundamental theorem of calculus states this operation is the reverse of differentiation. For 10 points, name this operation that, in the xy plane, calculates the area under a function.

ANSWER: integration (or obvious equivalents like taking the integral; prompt on “antidifferentiation”)

13. In one work by this author, a character whose family motto is “Nemo me impune lacessit” does not recognize when his companion makes the sign of the Masons. In another story by this man, a guilt-wracked character “admits the deed” to police officers after murdering a man with a (*) “pale blue eye.” In a poem by this author, the title figure repeatedly cries “Lenore” while perched on a bust of Pallas. For 10 points, name this author of “The Tell-Tale Heart” and “The Raven.”

ANSWER: Edgar Allan Poe

14. While attempting a publicity stunt for a movement promoting this right, Emily Davison was fatally trampled by a horse. Two early organizations in favor of this right merged to form NAWSA, which was led at one point by Carrie Chapman Catt. Wyoming was the first state to grant this right. The *Declaration of Sentiments*, penned by Elizabeth (*) Cady Stanton, demanded this right at the Seneca Falls convention. For 10 points, name this right championed by Susan B. Anthony, which was granted by the 19th Amendment.

ANSWER: women’s suffrage (accept descriptions like women getting the right to vote, etc., accept universal suffrage; prompt on just suffrage)

15. In one appearance, this character discovers that a six story parking garage has been built on his old home at the Daisy Hill Farm. This character begins stories on his typewriter with the phrase “It was a dark and stormy night,” and he is occasionally visited by his brother Spike, who lives in the California desert. His many alter-egos include (*) beatnik college student Joe Cool. For 10 points, name this beagle, a friend of Woodstock, who is owned by Charlie Brown in the comic strip “Peanuts.”
ANSWER: Snoopy

16. An increasingly popular tradition during this holiday involves the inclusion of an orange commemorating women’s rights. During a meal on this holiday, raw horseradish root and an apple and nut mixture called Charoset [ha-ROH-set] are eaten as (*) Hillel’s sandwich. The youngest child at celebrations of this festival traditionally reads the four questions, and all children search for the afikomen, an example of this holiday’s unleavened bread. For 10 points, seders are held and matzah is eaten during what Jewish holiday commemorating the Exodus?
ANSWER: Passover (or Pesach [PAY-sak])

17. Dividing the magnitude of the Poynting vector by the speed of light yields one form of this quantity. The Young-Laplace equation can be used to describe how this quantity changes across a border between two fluids as in a meniscus; that is the “capillary” type of this. The (*) “gauge” type of this quantity is relative to an ambient baseline. This quantity can be determined using the height of column of mercury in millimeters. For 10 points, name this quantity often expressed in Pascals or torr, defined as force divided by area.
ANSWER: pressure

18. This dynasty’s first emperor rose to prominence during the Red Turban rebellion. This dynasty allowed the Portuguese to set up a colony at Macau. Under this dynasty’s Yongle emperor, seven voyages by the mariner Zheng He explored the Indian Ocean. This dynasty built the (*) Forbidden City in their capital, Beijing. For 10 points, name this Chinese Dynasty, overthrown by the Qing in 1644 and known for a type of fine vases.
ANSWER: Ming Dynasty (or Great Ming, accept Ming Chao)

19. This character’s search for the golden helmet of Mambrino ends with the theft of a barber’s basin. This man’s travels are ended by The Knight of the White Moon, who is actually a young man named Samson Carrasco. This protagonist quests for (*) Dulcinea’s love while roaming the countryside with his horse Rocinante and his sidekick Sancho Panza. For 10 points, name this Miguel Cervantes protagonist famous for tilting against windmills.
ANSWER: The Ingenious Gentleman Don Quixote of La Mancha (prompt on the Man of La Mancha)

20. This is the common nickname of Robert Schumann's first symphony. A suite with this period in its name includes the Shaker melody "Simple Gifts" and follows a couple building a farmhouse on the Pennsylvania frontier. Part of a set of concerti in *The Contest Between Harmony and Invention* has this name; those concerti are (*) Vivaldi's "The Four Seasons." For 10 points, name this season which follows "Appalachian" in an Aaron Copland suite, and follows winter in real life.

ANSWER: **spring**

TB. One of this man's poems claims "The armies of those I love engirth me and I engirth them." One of his elegies remarks "The ship has weather'd every crack, the prize we sought is won." This author wrote in one of his poems "I loafe and invite my soul, I lean and loafe at my ease observing a spear of summer grass." This man asked "what is the soul?" in (*) "I Sing the Body Electric." For 10 points, name this American poet of "O Captain my Captain" and "Song of Myself," which appeared in his collection *Leaves of Grass*.

ANSWER: Walter "Walt" **Whitman**

Pennsylvania Novice 2016

Packet 3 Bonuses

1. Young boys in occupied Christian territories were taken by this empire to be trained as the Sultan's personal army, the Janissaries. For 10 points each,

[10] Name this Turkish empire, which had its capital at Istanbul and was known late in its existence as "the sick man of Europe"

ANSWER: **Ottoman** Empire or **Ottoman** Turkey

[10] This "magnificent" Ottoman sultan led the Ottoman army during the 1529 siege of Vienna, and ruled during the Empire's high water mark.

ANSWER: **Suleiman** I the or **Suleiman** the Magnificent

[10] This earlier Ottoman Sultan captured Constantinople from the Byzantines in 1453. He reigned in two separate periods, after the first he gave the throne back to his aged father Murad II, who had abducted.

ANSWER: **Mehmed II** (or **Mehmet II**, or **Mehmed the Conqueror**)

2. This term, coined by Gustav Kirchoff, can be modeled as a perfectly insulated box with a small hole in one side. For 10 points each:

[10] Name this idealized concept from physics, which refers to an object which absorbs all incident radiation without transmitting any of it.

ANSWER: **black body**

[10] Black bodies still do emit some thermal radiation depending on its temperature, which is described by this man's namesake law. The energy of a photon equals its frequency times this man's constant, symbolized h.

ANSWER: Max **Planck** (or **Planck's** constant)

[10] Black body radiation begins to deviate from the Rayleigh-Jeans law when it reaches this region of the EM spectrum. This kind of light has a shorter wavelength than visible light and is responsible for sunburn.

ANSWER: **ultraviolet** (or **UV**)

3. Niccolo Paganini was a prominent performer of this four-stringed instrument and wrote 24 caprices for it. For 10 points each:

[10] Name this smallest string instrument, whose larger relative is a viola.

ANSWER: **violin**

[10] This Israeli violinist debuted as a child prodigy on the Ed Sullivan Show and made a particularly notable recording of the Kreutzer Sonata in 1973. He now teaches at Juilliard.

ANSWER: Itzak **Perlman**

[10] Perlman owns the Soil one of these kinds of violins made by a Cremonese instrument maker in the 18th century. They allegedly produce a superior sound.

ANSWER: **Stradivarius** (or **Strad** or **Stradivari**)

4. Adherents of this religion carry a dagger called a kirpan. For 10 points each.

[10] In the late 15th century, this religion began with the revelation that “There is no Hindu, there is no Muslim” by its founder. Its holiest temple is called the Golden Temple.

ANSWER: **Sikhism**

[10] Sikhism’s founder was this first Guru. At one point he was thought to have drowned during ablutions, but returned, and then began to preach the tenets of Sikhism.

ANSWER: Guru **Nanak**

[10] Most Sikh males wear this religious headpiece, made from cloth wrapped around the head. A common type of these for young boys is called a Patka.

ANSWER: **turban** (or **Dastar**)

5. This structure is the burial place for the Pharaoh Khufu. For 10 points each:

[10] Name this limestone structure, which is the only of the Seven Wonders of the Ancient World still standing.

ANSWER: The **Great Pyramid** of Giza (Or **Great Pyramid** of Khufu, or **Pyramid of Cheops**, prompt on pyramid or The Pyramids)

[10] Another one of the seven wonders in Egypt was the Lighthouse at Pharsalos in this City. This city also was home to ancient world’s greatest library, which was sadly destroyed in a fire.

ANSWER: **Alexandria**

[10] Another wonder was this structure at Halicarnassus in modern Turkey. Each side of the this building was decorated by a relief from a different Greek sculptor.

ANSWER: The **Mausoleum** of Halicarnassus or **Tomb of Mausolus**

6. The moment of inertia of this shape rotating about its center is mr^2 [m r squared]. For 10 points each:

[10] Name this shape, defined as the set of points in a plane which are all equidistant from a given point.

ANSWER: **circle** (prompt on “hoop” because of the lead-in)

[10] The unit circle, which is centered at the origin with radius one, is described by an equation in which this expression involving the x and y coordinates equals one.

ANSWER: **$x^2 + y^2$** [**x squared plus y squared**]

[10] This shape, which has moment of inertia $mr^2/2$ [m r squared over 2], is defined as the region within a plane enclosed by a circle. This shape can also be thought of as a cross section of a rod.

ANSWER: **disk**

7. One character in this book falls into a chocolate river, while another visits the title location with his Grandpa Joe. For 10 points each:

[10] Name this book by Roald Dahl, whose title character receives a Golden Ticket to tour the title facility with its owner, Willy Wonka.

ANSWER: **Charlie and the Chocolate Factory**

[10] One of the five Golden Ticket winners is this gum-chewing champion. She swells up into a blueberry after chewing Willy Wonka’s unperfected three-course meal gum.

ANSWER: **Violet Beauregarde** (accept either)

[10] Willy Wonka's Chocolate Factory employs many of these short workers, who are paid in cocoa beans. In the film *Willy Wonka & the Chocolate Factory*, these workers sing "I've got another puzzle for you."

ANSWER: **Oompa-Loompas**

8. This country shares the island of Tierra Del Fuego with its western neighbor, Chile. For ten points each, [10] Name this South American country known for its gaucho cowboy culture on the Pampas. Its capital is Buenos Aires.

ANSWER: **Argentina**

[10] This neighbor of Argentina's also borders on Brazil and has seen a long-running political battle between the Blanco and Colorado parties. Its capital is Montevideo.

ANSWER: **Uruguay**

[10] Buenos Aires and Montevideo are separated by this large body of water, which is formed by the intersection of the Uruguay and Parana rivers.

ANSWER: **Rio de la Plata** (or **River Plate**)

9. This character remarks "I have measured out my lives with coffee spoons" and wonders "do I dare to eat a peach?" in the work in which he appears. For 10 points each:

[10] Name this character, who declares "I am not Prince Hamlet" in a poem titled for his "Love Song."

ANSWER: J. Alfred **Prufrock**

[10] "The Love Song of J. Alfred Prufrock" is a poem by this modernist author. His other poems include "The Waste Land" and "The Hollow Men."

ANSWER: Thomas Stearns **Eliot**

[10] The conclusion of Eliot's "The Hollow Men" states that, "This is the way the world ends. Not with a bang, but with" one of these things.

ANSWER: a **whimper**

10. This man directed the Kulturkampf campaign against the Catholic Church in his country. For 10 points each:

[10] Name this Prussian Chancellor who united Germany by "Blood and Iron" in provoking several wars.

ANSWER: Otto von **Bismarck**

[10] Bismarck's unification efforts brought Prussia to war with this empire, which was left out of Modern Germany in the "Kleindeutsch" model. This empire elevated Hungary to dual monarchy status.

ANSWER: **Austria** or **Austria-Hungary**

[10] Bismarck was dismissed in 1890 by this Kaiser. He pursued an ill advised naval buildup as part of his "Weltpolitik," and was Kaiser during World War I.

ANSWER: **Wilhelm II** (or **William II**; prompt on a name without a number)

11. This novel ends with the protagonist watching his younger sister, Phoebe, ride a carousel. For 10 points each:

[10] Name this coming of age novel in which Holden Caulfield leaves Pencey Prep and wanders New York City, decrying "phonies."

ANSWER: **Catcher in the Rye**

[10] This reclusive American author wrote “An Ocean Full of Bowling Balls,” a short story about the death of Allie Caulfield, as a prequel to *Catcher in the Rye*.

ANSWER: Jerome David “J.D.” **Salinger**

[10] This Salinger short story follows the mentally unstable Seymour Glass on his vacation to Florida with his distant wife, Muriel.

ANSWER: “**A Perfect Day for Bananafish**”

12. Cuts of this type of meat include T-Bone and New York Strip. For 10 points each:

[10] Identify this red meat that comes from cows. The ground form of it is used to make hamburgers.

ANSWER: **beef**

[10] This tender cut of beef steak is generally the most expensive. Taken from the tenderloin, it is generally cooked using a quick sear on both sides with intense heat and served rare.

ANSWER: **filet mignon**

[10] Many people ethically object to this special type of beef, which is taken from baby calves kept in small coops. It is often served in the parmesan style.

ANSWER: **veal**

13. Deposition, the process by which gas turns into a solid, is one of these processes. For 10 points each.

[10] Name these processes whereby a substance changes between a solid, liquid or gaseous state.

ANSWER: **phase transitions** or **(phase changes)**

[10] Freezing point depression and vapor pressure lowering are examples of these properties of solutions, which can affect the lines on a phase diagram.

ANSWER: **colligative properties**

[10] This doubly-eponymous equation gives the slope of the coexistence curve between two phases on phase diagrams.

ANSWER: **Clausius-Clapeyron** equation

14. One photograph taken in this country shows a naked girl covered in napalm screaming and running towards the viewer. For 10 points each:

[10] Name this country, where the United States was engaged in a controversial war in the 1960s and 1970s. Another photograph taken here by Eddie Adams depicts a police chief shooting a plaid-shirted rebel.

ANSWER: **Vietnam**

[10] Another photograph of a shooting shows nightclub owner Jack Ruby fatally wounding this man, the alleged assassin of John F. Kennedy.

ANSWER: Lee Harvey **Oswald** (Do NOT accept “Ted Cruz’s Father”)

[10] A photograph taken in the aftermath of a shooting at this Ohio university shows Mary Ann Vecchio wailing over the body of Jeffrey Miller.

ANSWER: **Kent State** University

15. A mistranslation led to this artist creating a sculpture of a horned Moses for the tomb of Pope Julius II. For ten points each:

[10] Name this Renaissance artist and sculptor from Florence who created a famous freestanding nude marble statue of David.

ANSWER: **Michelangelo** di Lodovico Buonarroti Simoni

[10] Michelangelo spent four years painting various Biblical scenes, including the Creation of Adam, on the ceiling of this building located in the Vatican.

ANSWER: the **Sistine Chapel**

[10] Also in the Sistine Chapel is this fresco, which contains Michelangelo's self-portrait as the flayed skin of St. Bartholomew and depicts the Second Coming of Christ.

ANSWER: *The **Last Judgment***

16. The leader of a raid on this location was tried in nearby Berkeley Springs. For 10 points each:

[10] Name this now West Virginian town, where John Brown attempted to begin a slave uprising by staging an attack on a federal arsenal.

ANSWER: **Harpers Ferry**

[10] This other abolitionist used more peaceful methods and declined an invitation to join Brown's raid. Born a slave, he gained renown as an anti-slavery lecturer and for his *Narrative* of his life.

ANSWER: Frederick **Douglass**

[10] Douglass published this anti-slavery newspaper from 1847-1851. The newspaper is named after a celestial object that many slaves used as a guide while escaping to freedom.

ANSWER: *The **North Star***

17. This novel's protagonist has a fairly empty relationship with Marie, and his neighbor, Salamano, suffers from a skin condition.

[10] Name this existentialist novel about the apathetic Meursault [mer-SO], who shoots an Arab man on the beach.

ANSWER: *The **Stranger*** (or ***L'Étranger***)

[10] *The Stranger* begins by Meursault noting the death of this relative of his that day. His placing of her in a nursing home and his lack of tears at her funeral is used as evidence against him at his trial.

ANSWER: **mother** (accept **maman** or other equivalents indicating she is his **mother**)

[10] *The Stranger* is by this French-Algerian author, who wrote of a quarantine of the city of Oran in *The Plague* and about living in spite of the futility of life in the philosophical treatise *The Myth of Sisyphus*.

ANSWER: Albert **Camus**

18. Several measures of this statistic include U6, which includes discouraged workers and workers who settled for part-time jobs. For 10 points each:

[10] Name this term given to workers who do not currently have a job, but are actively looking for work.

ANSWER: **unemployment**

[10] This specific type of unemployment is not due to the regular business cycles and is instead caused by the mismatch between skills of workers and availabilities in the job market.

ANSWER: **structural** unemployment

[10] Economists use changes in this value by cities and states to estimate the effect of a change of it on unemployment. This value is currently \$7.25 an hour for the US as a whole, but higher in some cities and states.

ANSWER: **minimum wage**

19. In *Arabidopsis thaliana*, this process occurs in response to stimuli with wavelengths between 510 and 550 nanometers. For 10 points each:

[10] Identify this process controlled by auxin that plants use to bend towards sunlight, maximizing potential photosynthesis.

ANSWER: **phototropism**

[10] Photosynthesis occurs in the leaves of most plants, while sexual reproduction is handled by this other plant structure that contains the carpel, stamen, and sepals.

ANSWER: **flower**

[10] Sexual reproduction in plants is possible because the sperm of the plants is carried through the air by these small particles that can also cause allergic reactions in humans.

ANSWER: **pollen**

20. Two answers required. In one sketch, one of this pair pretended not to hear the other because he had a banana in his ear. For 10 points each:

[10] Identify these roommates who live in the 123 Building on Sesame Street. One is skinny, orderly, and yellow; the other portly, playful, and orange.

ANSWER: **Bert** and **Ernie** (accept in either order)

[10] Ernie's most treasured possession is this bath toy which he's "awfully fond of." In the 80s Sesame Street did a calypso number called "Do De" this item.

ANSWER: **rubber duckie**

[10] Bert's pet, Bernice, is one of these birds. He dances a quirky dance called "Doin' the" this bird.

ANSWER: **pigeon**

TB. This hero's mother, Danae, was impregnated by Zeus in the form of a shower of gold. For 10 points each:

[10] Name this Greek hero, who defeated the Kraken.

ANSWER: **Perseus**

[10] Perseus killed the Kraken using the head of this monster, whom he had killed earlier. This Gorgon had snakes for hair, and anyone who looked into her eyes was turned to stone.

ANSWER: **Medusa**

[10] Defeating the Kraken allowed Perseus to free this princess from the rocks and marry her. She was to be sacrificed to the monster as a result of her mother, Cassiopeia, boasting that she was more beautiful than the Nereids.

ANSWER: **Andromeda**