

**Cardinal Classic XIII: The Legend of Zwarte Piet**  
**Round 7**

Pomona A (Andrew Lytle)

Tossups

1. This satellite is composed primarily of rock, with very little iron. At times it has material stripped from it at a rate of 1 ton per second by the nearby planet's powerful magnetic field. It is also the victim of gravitational perturbations from Jupiter and its other large moons, which stretch and squeeze the body in its orbit and cause it to bulge. This pizza-faced moon is also the most volcanic body in the solar system. For ten points, the Voyager satellites observed 9 volcanic eruptions on what innermost Galilean moon?

Answer: Io

2. This author's *Dr. Sax* tells of his boyhood as a French Canadian in a Massachusetts town, and is a mix of fantasy and reality revolving around the chimerical titular character. He depicts Leo Percepied's affair with Mardou Fox, a mulatto woman, in a vivid exploration of underground life in New York, the 1958 novel *The Subterraneans*. However, his most famous work is undoubtedly a tale of cross-country adventures centering on the character of Dean Moriarty. FTP, name this Beat author of the novel *On The Road*.

Answer: Jack Kerouac

3. It contains 3,182 lines, and is written in unrhymed four-beat alliterative verse. The manuscript itself glorifies the feats of the central hero, but a 1971 novel by John Gardner tells the tale from the perspective of the villain. He terrorizes his victims out of a nihilistic spite, and cries "Mama, Mama, I'm dying" after the hero wrestles him to the ground and tears off his arm. FTP, what epic poem tells of a prince of the Geats coming to Hrothgar's kingdom to slay the beast Grendel, and is the oldest surviving poem in Old English?

Answer: Beowulf

4. Invented by Edward Craven Walker in the 1950s, this device functions based primarily on Archimedes' principle. Two immiscible liquids are placed together and heated from a single point. The liquids are so close in density that when heated, the normally denser liquid becomes less dense than the other and rises, but when it cools, it once again becomes more dense and falls. The result is a continually moving mixture, intriguing when the liquids are different colors. FTP, this describes what kind of lamp associated with bean-bag chairs and love beads?

Answer: Lava lamp

5. A conservative in every respect, he was a devout admirer of Metternich, who once talked him out of a plan to send an army across Europe to quell an 1830 rebellion in Belgium. His domestic policy followed the slogan "Orthodoxy, Autocracy, Nationality", representing his belief that he should work to preserve the status quo. Assuming the throne in 1825 and ruling until the Crimean War in 1855, FTP, which Tsar of Russia was the namesake of the last Tsar?

Answer: Nicholas I

6. Some of this composer's popular solo and suites include: *In White and Black*, *Syrinx*, *Homage to Haydn*, *Estampes*, and *The Happy Island*, all of which are for piano. *Children's Corner*, which includes "Golliwog's Cakewalk," and the *Suite Bergamasque* are perennial favorites. He was not only a fan but also a friend of the poet Stephane Mallarme (mal-armay), and even based several of his works around his poems. FTP, which composer of *La Mer* based his arguably most famous work on a poem of Mallarme's entitled, "The Afternoon of a Faun"?

Answer: Claude Debussy

7. A favorite expression of this author was "Il faut d'abord durer", which, roughly translated means "first, one must endure." His first novel was a parody of Sherwood Anderson entitled *The Torrents of Spring*, but he remained prolific for nearly a century. That includes the decades after his death, as his posthumously published works include *The Garden of Eden*, *Islands in the Stream*, and *A Moveable Feast*. His 1932 non-fiction treatise *Death in the Afternoon* concerns one of his favorite recurring topics, bullfighting. FTP, who is the author of works such as *A Farewell to Arms*, and *The Sun Also Rises*?

Answer: Ernest Hemingway

8. One of the more unusual attractions of this area is the St. John River, which twice a day changes direction and flows upstream, going up a waterfall. You could also visit St. Martin's or the Hopewell Rocks to see rock caves and pillars carved out by seawater, or cross this body of water on a high-speed catamaran complete with casinos. FTP, Chignecto Bay and Minas Basin in Nova Scotia form the northernmost arms of which body of water, responsible for the world's largest tides?

Answer: Bay of Fundy

9. Today's form of this scientific law is perhaps misnamed, as it is actually Descartes' version which is used and taught most often. It may be derived through manipulation of Fermat's Principle, and in its purely mathematical form is known as the Law of Sines. However, it is most useful in physics, where in optics it relates angles of incidence to indexes of refraction in a single equation. For ten points, name this law which explains why a spoon seems to bend when partially immersed in a glass of water.

Answer: Snell's Law

10. The Boeing 707 flies for the first time. Roger Bannister becomes the first man to break the 4-minute mile. West Germany is admitted to NATO. The United States explodes its first hydrogen bomb. The Nautilus, the first atomic submarine, is launched. Gamal Abdel Nasser displaces General Naguib in Egypt. French soldiers retreat as Dien Bien Phu falls to the Communists. These events all occurred in, FTP, what year, Eisenhower's second in office?

Answer: 1954

11. He was worshipped by the Hyksos, who gave him a similar name and built a temple to him at Avaris. Horus fought him, and he tore out Horus's eye, losing his own foreleg and testicles in the process. The other gods forced him to return the eye to Horus, but he himself was not restored. Called Typhon by the Greeks, for ten points, who was this evil Egyptian god who cut his brother Osiris into fourteen pieces?

Answer: Set or Seth

12. This work premiered on December 5<sup>th</sup> 1830, and contains five sections: "Reveries, Passions", "A Ball", "A Scene in the Country", "March to the Scaffold", and "Dream of a Witches' Sabbath." Its detailed notes, written by the composer himself, tell of the music's story of a young man who troubles with his unrequited love for an unattainable woman, takes opium, and embarks on a bad trip in which he has his head cut off. FTP, name this musical work, progenitor of the concept of an *idée fixe*, composed by Hector Berlioz.

Answer: Symphonie Fantastique or Fantastic Symphony

13. The peace conference which would produce this treaty opened 4 years before its completion, and involved no fewer than 194 states, represented by 179 plenipotentiaries. By the terms of this treaty, Sweden acquired western Pomerania and much of the German coastal area along the Baltic. The Dutch Republic and Switzerland were also recognized as independent states. Beginning of the idea of sovereignty of nations, FTP, name this 1648 treaty which brought an end to the Thirty Years' War.

Answer: Treaty of Westphalia

14. These laminated, symmetrical structures account for the spiny appearance of the stratum spinosum layer of the epidermis, and are formed from adjacent plasma membranes. Since they are linked to interior keratin filaments, they can distribute mechanical shear force throughout the tissue and the underlying matrix, creating an epithelial sheet. FTP, identify this type of intercellular connection that, along with the gap and tight varieties, is one of the three functional categories of cell junctions.

Answer: desmosomes

15. The novel is written in a heavily journalistic style, each of its six sections taking a different slant on a murder. The victim wakes up with a hangover after a long wedding party at 5:30 A.M., to await the arrival of the Bishop's boat in his town. Little does he know that the Vicario twins, Pablo and Pedro, are out to kill him after their sister Angela, who was discovered not to be a virgin on her wedding night, names him as the offender. FTP, name this novel centering on the murder of Santiago Nasar, written by Gabriel Garcia Marquez.

Answer: Chronicle of a Death Foretold or Crónica de una muerte anunciada

16. Known to Plains Indians as Mateo Tepee, or Grizzly Bears' Lodge, it is a sacred site of worship for many tribes. It is indeed an imposing site, rising more than 1200 feet over the Belle Fourche River. Teddy Roosevelt made it the United States' first national monument in 1906, and today it is surrounded by a 1300-acre park. This wonder was once hidden below the surface, but as softer rock eroded away the vertical monolith was revealed. FTP, name this gigantic column of rock, situated in one of the bleaker areas of Wyoming.

Answer: Devils Tower

17. He extended his empire's rule to the Deccan Plateau, but lost Kandahar to the Persians. His reign was renowned for its literary arts, calligraphy and painting, and he reportedly had the finest collection of jewels in the 1600s. He assumed the throne from his father in 1628 with the kingdom largely in rebellion, but in 1658 he fell ill and was imprisoned by his third son, Aurangzeb. FTP, name this Mughal ruler, who built for his wife the world's most famous mausoleum, the Taj Mahal.

Answer: Shah Jahan

18. In 1728, at age 16, he returned to his native Geneva after the night locking of the gates, and to escape his father's wrath, fled from the city. Settling in Paris, he wrote musical works such as *The Village Soothsayer*, as well as philosophical texts such as *Discourse on Science and the Arts*. A common theme through many of his works, in his own words, is that "Nature has created man to be happy and good, but society depraves him", taken from his 1762 work *Émile*. FTP, name this philosopher, author of *Confessions* and *On Social Contract*.

Answer: Jean-Jacques Rousseau

19. The Soviet Litvinov Protocol was ratified by 5 states total compared to this treaty, its Western equivalent, which was ratified by 65. In the 1920s, such a concept of competing peace pacts almost made sense. Frustrated by the League of Nations' efforts to enact disarmament, an American and French diplomat launched this treaty which "condemns recourse to war", but lacks ability to enforce this doctrine. FTP, name this 1928 peace pact.

Answer: Kellogg-Briand Pact

20. His later period saw him becoming more introspective in his art, concentrating more on the inherent drama rather than excitement of narrative in works such as *Potiphar's Wife Accusing Joseph* and *Return of the Prodigal Son*. He became famous even in his own lifetime also for his etchings, some 300 of which survive today, including *Christ Healing the Sick* and *Three Crosses*. Also a famous portraitist, he mastered the use of light in his numerous self-portraits. FTP, name this Dutch painter of *The Anatomy Lesson of Dr. Tulp* and *The Night Watch*.

Answer: Rembrandt van Rijn

21. Born in Belleville, Ontario in 1964, his NHL career began when he came up from the minor leagues to help the Calgary Flames for two games during the playoffs. After being traded to Saint Louis, in 1990 he won the Lady Byng Trophy for skill and sportsmanship and the Hart Memorial Trophy for the 1990-1991 season- both honors his father, Bobby, had also received. That year he set a record for right wings with 86 goals and 45 assists. In 1998 he went to Dallas three seasons, before joining the Red Wings to help them with the 2002 Stanley Cup. FTP, name this reliable clutch goalscorer.

Answer: Brett Hull

22. Found only in eukaryotic cells, these structures are located in the centrosome near the nucleus. They are found primarily in animal cells, though may also be found in some plant cells. Microtubules arranged in 9 groups of 3 at right angles to one another give them their characteristic short cylindrical shape. For ten points identify these cellular structures which help to organize microtubules during cell division.

Answer: Centrioles

23. The tattoo across his back is a gigantic, fiery sun, with the words "Search and Destroy" written across his shoulders. A picture of him with his fist to a broken mirror graces the cover of the 1981 album *Damaged*, the first full-length release from the Los Angeles hardcore group Black Flag. They broke up in 1986, and he went on to form his namesake band, releasing albums such as *Weight*, *Think Tank*, and *Get Some Go Again*. FTP, name this heavily muscled hard rocker, who also moonlights as a stand up comic.

Answer: Henry Rollins

## Pomona A Bonuses

1) Identify the following figures from the unification of Italy.

1. Prime minister of Piedmont-Sardinia, in 1859 he provoked Austria into declaring war on Piedmont.

Answer: Count Camillo di Cavour

2. A former seaman, he led The Thousand who invaded Sicily in 1860.

Answer: Giuseppe Garibaldi

3. This Genoan was exiled to London but nevertheless retained control of Young Italy in the 1830s.

Answer: Giuseppe Mazzini

2) Identify the Shakespeare play from characters, FTP each.

1. Bianca, Gremio, Hortensio.

Answer: Taming of the Shrew

2. Oswald, Edmund, Edgar.

Answer: King Lear

3. Jessica, Nerissa, Portia.

Answer: Merchant of Venice

3) FTPE, identify the following ghost ships.

1. This ship sunk off Whitefish Point in 1976, but is sometimes still seen sailing on Lake Superior.

Answer: Edmund Fitzgerald

2. Reports of sightings on this cruise ship now docked in Long Beach include seeing wet footprints forming on the pool deck with no one in sight.

Answer: The Queen Mary

3. Captain van der Decker is still often seen captaining this ghost ship, the sight of which is considered bad luck.

Answer: The Flying Dutchman

4) Identify the following about the labors of Heracles, FTPE.

1. Heracles was sent to capture girdle of this queen of the Amazons, and did so by killing her in battle.

Answer: Hippolyta

2. After killing this animal with a club he made himself, Hercules brought its skin back to Eurystheus.

Answer: The Nemean Lion

3. Heracles himself said in the Odyssey that this last of the 12 labors was the hardest.

Answer: capturing Cerberus from the underworld (or equivalent)

5) FTPE, identify the following about a certain class of subatomic particles.

1. Consisting of a bound state of a quark and an antiquark, these particles include the pi, B, D, and J/Psi flavors.

Answer: mesons

2. Mesons have integer spin, meaning they belong to this group of particles which do not obey the Pauli exclusion principle.

Answer: bosons

3. This meson contained the first observed instance of strange quarks, and the neutral versions of it gave the first evidence of CP violation.

Answer: kaons or K mesons

6) Identify the country from its lakes, FTPE.

1. Lake Victoria, Lake Albert, Lake Kyoga

Answer: Uganda

2. Lake Onega, Lake Ladoga

Answer: Russia

3. Lake Frome, Lake Torrens, Lake Eyre

Answer: Australia

7) Identify the constellation from description FTPE.

1. The second largest constellation in the sky, an outstanding feature is its namesake supercluster of galaxies 65 million light years away.

Answer: Virgo

2. This W shaped constellation lies at the edge of the Milky Way.

Answer: Cassiopeia

3. It appears as if this long, meandering constellation is attempting to engulf Ursa Minor. Four stars form a boxlike asterism known as the Lozenge.

Answer: Draco

8) Name the metric foot from description, FTPE.

1. An unstressed syllable followed by a stressed syllable, is the most common foot.

Answer: Iamb

2. Two unstressed syllables, followed by one stressed.

Answer: Anapest

3. Three stressed syllables.

Answer: Molossus

9) Identify the following major plant hormones from description of their functions FTPE.

1. Stimulates cell division and morphogenesis.

Answer: Cytokinins (accept kinetin or zeatin)

2. Stimulates stomatal closure.

Answer: Abscisic acid

3. Stimulates fruit ripening and flower decay.

Answer: Ethylene

10) Identify the following having to do with European colonial movements in Africa.

1. Bismarck called this 1884 conference in order to avoid the European powers going to war over colonial interests.

Answer: Berlin Conference

2. King Menelik II of Ethiopia met and routed the Italian army in this 1896 battle.

Answer: Battle of Adowa

3. Henry Stanley obtained the Congo as this man's private possession, but scandals concerning slavery eventually forced government administration of the area.

Answer: Leopold II

11) Identify the following works of Nikolai Gogol FTPE.

1. This fanciful story concerns the travails of Major Kovalev, who wakes up one morning to find that a certain one of his body parts has disappeared. Later he encounters it in the post office, where it outranks him on the civil service scale and refuses to speak to him.

Answer: The Nose or Nos

2. The title character of this novella is a Cossack who kills his own son Andri after the latter deserts to the Polish side in order to be with a woman he loves.

Answer: Taras Bulba

3. This short story heavily influenced a generation of later writers including Dostoyevsky. In it, the poor copy clerk Akaky Akakievich wastes away to nothing after losing the title object, then returns as a ghost to haunt the nobleman who stole it from him.

Answer: The Overcoat or Shinel

12) Identify the modern artistic movement, FTPE.

1. This movement aimed to achieve a synthesis of art, craftsmanship, and industry to create mass-market products of aesthetic quality. It is most noted for producing a generation of outrageously talented European architects.

Answer: The Bauhaus

2. This movement, whose name is shared by a 6<sup>th</sup>-century BC Greek mystic cult, is a specific variant of Cubism focused on the dynamism of color and its spiritual implications.

Answer: Orphism

3. Said to be inspired by the scientific discoveries of ultraviolet and gamma radiation, Mikhail Larionov published this movement's manifesto in 1912.

Answer: Rayonism

13) Given lines from a poem, name the poem and its author FTPE.

1. "Shoot, if you must, this old gray head,  
But spare your country's flag," she said.

Answer: Barbara Frietchie by John Greenleaf Whittier

2. Yet this inconstancy is such

As you too shall adore;

I could not love thee, Dear, so much,

Loved I not Honor more.

Answer: To Lucasta, Going to the Wars by Richard Lovelace

3. The curfew tolls the knell of parting day,  
The lowing herd wind slowly o'er the lea,  
The plowman homeward plots his weary way,  
And leaves the world to darkness and to me.

Answer: Elegy Written in a Country Churchyard by Thomas Gray

14) Identify the WWII conference FTPE.

1. The Soviets made it known at this conference that they wished to have their new governments in Poland and Romania formally recognized, but the allies refused to do this.

Answer: Potsdam

2. Stalin and Roosevelt agreed to wait until the end of the war to discuss territorial resettlements, but Churchill disagreed with this measure.

Answer: Yalta

3. The powers at this conference came upon an agreement for the boundaries of temporary occupation zones in Germany, but could not agree on a permanent settlement.

Answer: Potsdam

15) Identify the type of map projection from details FTPE.

1. A straight cylindrical projection, this kind of map gives the best compass direction between any two points.

Answer: Mercator Projection

2. This elliptical map accurately represents the size of the world's land masses, but distorts their shapes.

Answer: Mollweide Projection

3. This map was adopted in 1988 as the official map of the National Geographic Society; it makes a compromise over representing shapes and sizes.

Answer: Robinson Projection

16) Answer the following questions about the Tour de France for 10 points each.

1. The 2003 Tour de France will feature a route similar to that of the very first Tour to celebrate what anniversary of the sporting event?

Answer: 100<sup>th</sup>

2. Which cyclist became the first American to win the Tour in 1986, with repeat victories in 1989 and 1990?

Answer: Greg LeMond

3. In 1967, amphetamine usage caused British cyclist Tom Simpson to die from heart failure while climbing this famous mountain of the Tour.

Answer: Mont Ventoux

17) Identify the author from works, 30-20-10.

1. For 30: *Fiorenza, The Holy Sinner, Reflections of an Unpolitical Man*

2. For 20: *Buddenbrooks, Joseph and His Brothers*

3. For 10: *Death in Venice, The Magic Mountain*

Answer: Thomas Mann

18) Identify the following from Norse mythology FTPE.

1. Her abode was called Fensalir and she weaved the clouds. She was the mother of Baldur.

Answer: Frigg or Frigga

2. This great worm guards the treasure of the light and is slain by Sigurd.

Answer: Fafnir

3. He is the son of the giant Farabuti and the giantess Laufey, and is connected with fire and magic.

Answer: Loki

19) Identify the American conflict from description, FTPE.

1. This undeclared war was settled before it started with the 1842 Webster-Ashburton Treaty.

Answer: Aroostook War

2. The Indians in this conflict wore shirts emblazoned with eagles and buffaloes which they believed made them invincible to bullets. Alas, this theory was proved incorrect.

Answer: Wounded Knee

3. A revolution led by Emilio Aguinaldo precipitated this conflict in 1899, which turned into a no-holds-barred guerrilla war.

Answer: Philippine War

20) FTPE, answer the following about transition metal complex chemistry.

1. This is the term for any ligand molecule which can form two bonds with the complex ion.

Answer: bidentate

2. This is the term for ligands which result in less splitting between the HOMO and LUMO energies in the complex, often resulting in high paramagnetism.

Answer: weak field

3. Where two possible electron configurations exist between the HOMO and LUMO orbitals, this is the term for the configuration which results in lower paramagnetism.

Answer: low spin

21) Identify the following from the Sophocles' three Theban Plays FTPE.

1. Antigone's sister, she bids her against her decision to bury Polynices against Creon's wishes.

Answer: Ismene

2. Wife of Creon, she commits suicide after the death of Haemon and Antigone.

Answer: Eurydice

3. The Corinthian king, he is the adopted father of Oedipus, and news of his death triggers the unraveling of Oedipus' prophesied fate.

Answer: Polybus

22) If you've ever watched late-night PBS, it's about time you were rewarded for it. Identify the following British comedy shows, FTP.

1. The cast features a chicken soup machine repairman, a hologram, a highly evolved cat, and an android.

Answer: Red Dwarf

2. Mr. Lucas inexplicably disappeared from this show, replaced by Mr. Spooner as assistant to the ambiguously gay Mr. Humphries.

Answer: Are You Being Served?

3. A very pissed off Lenny Henry stars in this series, abusing and firing people in his French restaurant.

Answer: Chef!

23) Given works, name the Impressionist artist FTPE.

1. *Nana, Bar at the Folies-Bergere.*

Answer: Edouard Manet

2. *Singer With a Black Glove, L'Absinthe, Race Horses*

Answer: Edgar Degas

3. *Foggy Morning, Snow at Louveciennes.*

Answer: Alfred Sisley

24) Identify the composer from works, 30-20-10.

1. For 30: *Foliage of the Heart, Expectation.*

2. For 20: *6 Little Piano Pieces, Pierrot Lunaire.*

3. For 10: *Transfigured Night.*

Answer: Arnold Schoenberg