

TOSSUPS – SEMIFINALS TREVOR'S TRIVIA: BOB SELCER MEMORIAL 2002 -- UT-CHATTANOOGA

1. The retort courteous, The quip modest, The reply churlish, The reproof valiant, The countercheck quarrelsome, The lie circumstantial, The lie direct. In a famous speech, this individual lists those "Seven Degrees of Affront." FTP who is the court jester in Shakespeare's *As You Like It*, who accompanies Rosalind to the Forest of Arden?

Answer: **Touchstone**

2. His doctoral thesis was on the absorption of light by crystals, and his early work was concerned with terrestrial magnetism and the plane of polarization of light. His studies of phosphorescence led to his investigations of uranium salts in 1896, which he found spontaneously emitted radiation consisting of charged particles. FTP, name this 1903 co-winner of the Physics Nobel and namesake of a unit of radioactivity.

Answer: Antoine Henri **Becquerel**.

3. They won almost 600,000 popular votes, and 39 electoral votes from three states. Their platform, adopted at their convention in Baltimore, appealed to adherence to the Union, and though they won barely thirteen percent of the vote, they were the only party to run fairly well throughout the nation. They didn't carry Massachusetts, home state of VP nominee Edward Everett, but they did carry their presidential nominee's home state of Tennessee, as well as Virginia and Kentucky, partly because of their finessing of the slavery issue. FTP name this 1860 political party, whose ticket was headed by John Bell, which sought compromise by supporting the two principles enshrined in its title.

Answer: **Constitutional Union Party**

4. His hobbies include baseball, chess, and beer, and he has been published in both *Fantasy Book* and *Playboy*. He left Caltech under academic duress but eventually got a degree in Byzantine history, though he is best known for alternative histories of the Civil War and World War II. FTP, name this author of "The Misplaced Legion", "Guns of the South", and "How Few Remain".

Answer: Harry **Turtledove**

5. The creator of a more elaborate form of chess with double the number of pieces, he was born to a lesser chief near Kesh eventually becoming a great leader, winning victories at the battle of Kanduzcha and over the Ottomans at Ankara in 1401. His great ambition was to defeat the Golden Horde and the Ming Chinese to gain a monopoly over the Silk Road. FTP name this bloodthirsty nomadic conqueror, a descendent of Ghengis Khan, who established his capital at Samarkand.

Answer: **Tamerlane** or **Timur the Lame**.

6. With a surface area of 730 square miles it has a bed of limestone and nutrient rich water which has made the land south of it some of the best in the world. Its tributaries include Taylor Creek, Nubbin Slough, and Fisheating Creek and it boasts 38 recreational areas which draw 6 million people a year to what is often regarded as "The Bass Capital of the World". Connected to the Gulf of Mexico by the Catoosahatchee River and the Atlantic by the St. Lucie River and regulated by the Hoover Dam it is the second largest freshwater lake contained within the U.S. FTP name this "liquid heart" of Florida, whose name is Seminole for "Big Water."

Answer: Lake **Okeechobee**.

7. He was the third librarian of Alexandria, and was known as "Beta" among his colleagues for being the second best in every area of knowledge. He measured the circumference of the Earth to a highly accurate degree by comparing the length of shadows in different parts of Egypt. For ten points, name this early mathematician from Cyrene who also invented a namesake sieve which is used to find prime numbers by canceling the multiples of previous primes.

Answer: **Eratosthenes** (be lenient on pronunciation)

8. Its passage was a direct result of the case of *Pollock V. Farmers' Loan and Trust*, which held that under Article I, sections 2 and 9, certain requisitions could be made according only to populationsaying that the actions of the US congress were unconstitutional under the terms of Article I, Sec. two and nine because such a requisition could only be imposed by the rule of apportionment according to population. Until its 1913 ratification, Congress put large duties on official forms required for deeds and wills and for commodity exchanges, to make up for the lack of revenues this allowed. FTP, name the constitutional amendment that permitted a federal income tax.

Answer: **16th Amendment**

9. After nearly being cancelled during its first season, it has spent most of its existence in a ratings battle with ABC's *Spin City* but is now part of NBC's "Must See TV" Thursday lineup. It was created by Steve Levitan and its guest actors include Brian Dennehy, Ana Gasteyer, and Rebecca Romijn-Stamos. Wendy Malick is up for an Emmy for supporting actress for her portrayal of ex-model Nina Van Horn. The show also stars Enrico Colantini, George Segal, and Laura San Giacomo. FTP name this sitcom, set at the office of *Blush Magazine*, featuring David Spade.

Answer: **Just Shoot Me.**

10. AZT causes DNA chain termination during this process due to the 3' azido group replacing a 3' hydroxyl group. This process begins in the capsid, where a transfer-RNA primer begins synthesis by binding to the genome at a 3' long terminal repeat and partially unfolding to create a DNA-RNA hybrid from the primer. Then the ribonuclease H subdomain of the p66 subunit digests the original strand of RNA, making room for another DNA strand to be added to the newly formed one, creating a DNA double helix. FTP, name this process that viruses use to create DNA templates from their RNA.

Answer: **Reverse Transcription**

11. Born in Shillington Pennsylvania, early in his career he edited Harvard's *Lampoon* and worked for *The New Yorker*. His first book was the poetry collection *The Carpentered Hen and Other Tame Creatures* and he published his first novel, *The Poorhouse*, in 1959. His other works include *The Centaur*, *The Coup*, and *Witches of Eastwick* as well as a recent prequel to *Hamlet*. He is most famous for a character who last appeared in a novella in the collection *Licks of Love* in which he was "Remembered." FTP name this author who created Harry Angstrom, the hero of *Rabbit, Run*.

Answer: **John Updike.**

12. QUOTE: "It is a picture that even strong men find difficult to look at long if they look at it at all," is the way one critic described it. Many contemporaries agreed, as it was rejected for a Philadelphia exhibition, celebrating the first centennial, because it was too brutally realistic. It now hangs in Philadelphia's Jefferson Medical College where its subject once worked. All the onlookers have been identified including an anesthiast and the mother of the patient who cannot look at the operation being performed on her son's leg. FTP name this Thomas Eakins painting depicting the appropriately named title doctor and his place of work.

Answer: **Gross Clinic.**

13. They were once used as radio transmitters, but such use was outlawed in 1934. They were also used in early diathermy machines, but were replaced by regular transformers. They're also used in neon sign manufacture to check for leaks, but their only major use is ornamental. They are resonant air core transformers whose pulse-driven oscillations drive a resonant circuit and create very high voltages that generate lightning bolts. For ten points, what is this device exhibited by a Croation inventor at the 1893 Chicago World's Fair?

Answer: **Tesla Coil**

14. Adam Heyer, James Clark, Al Weinshank, Johnny May, Frank and Pete Gusenberg, and Reinhardt Schwinner were waiting for a truck of alcohol from Detroit inside the warehouse of the S-M-C Cartage Company on 2122 North Clark Street. A police car pulled up and four men, two in uniform, went into the building. Willie Marks, Ted Newberry and their boss "Bugs" Moran had arrived late to the meeting and had held back thinking a bust was in progress, thereby saving their lives. Both of the chief suspects had alibis; Machine Gun McGurn was with his fiancée and Al Capone was in Florida. FTP identify this gang-land shooting that occurred in Chicago on February 14th, 1929.

Answer: **St. Valentine's Day Massacre.**

15. His enemies included Tobiah the Ammonite, Sanballat, and the Arab Geshen. Eusebius of Caesaria suggests he was a member of the old Israelite royal family because he served as cupbearer to Artaxerxes I. While in that position, he was visited by his brother Hanani, who told him of the poor state of Jerusalem. Artaxerxes pitied him and let him go home to better their position. While in Jerusalem, he forbade Jewish men to marry heathen women, and beat and pulled the hair of Jews who could not speak Hebrew. Trying to make the Sabbath holy, he locked the gates of Jerusalem so Phoenician traders could not get in. FTP, name this Jewish reformer who rebuilt Jerusalem and who is often paired with Ezra.

Answer: **Nehemiah**

16. Fetiukov, a former office big shot who tries to shirk work. Gopchik, virtually a child. Senka, who is nearly deaf. Buinovsky, a newly arrived ex-submarine captain. Tsezar, a former filmmaker with a cushy office job and lots of care packages. Alyosha, an optimistic Baptist who relies on faith to get him through a 25 year term, and Tiurin, the grizzled commander of the 104th squad. These, along with Shukhov wrongly accused of treason in WWII and better known for his first two names, are the main characters in, FTP, what Alexander Solzhenitsyn work about a Soviet prison camp.

Answer: **One (or A) Day in the Life of Ivan Denisovich.**

17. It presaged the leitmotifs commonly used by Wagner and Strauss with its innovative use of idee fixe, "a single melody that reappears throughout the work." Running sixty minutes, it has five movements entitled "Reveries-Passions," "A Ball," "Scene in the Country," "March to the Scaffold," and "Dream of a Witches Sabbath." Ostensibly it was about its creators love for English actress Harriet Smithson and told of a love affair that ended with the execution of a man for killing his lover. FTP, identify this symphony, subtitled "Episodes in the Life of an Artist," by Hector Berlioz.

Answer: **Symphonie Fantastique or Fantastic.**

18. Winner of the 1944 Spingarn Medal, he was honored on a U.S. postage stamp in 1981. He was killed in an auto accident in 1950; the inaccurate legend persists that he died because the hospital wouldn't give him any blood since he was black. But he did receive a transfusion, made possible by his own methods of long-term storage. FTP who was this doctor, developer of the plasma transfusion and founder of the Red Cross blood program?

Answer: **Dr. Charles Drew**

19. In Liege and Verona, he discovered lost writings of Cicero, and held a post under cardinal Giovanni Colonna in Avignon. His writings include *Trionfi*, concerning the progress of the human soul towards god, and *Africa*, an epic poem about the Second Punic War. Also in Avignon, at the Church of St. Clare, he first saw the most famous subject of his work in April 1327. FTP name this Italian poet of the *Canzoniere*, best known for his poems to Laura. in the sonnet form that bears his name.

Answer: **Francesco Petrarcha or Petrarch**

20. He helped found the South Russia Workers Union and the Russian Social Democratic Labour Party. After spending time in Siberia and England, in 1905 he was back, publishing the journal *Pravda*, and becoming president of the St. Petersburg Soviet. In 1918 he was appointed People's Commissar for Military and Naval Affairs and made peace with Germany before organizing the Red Army during the subsequent Civil War. However, in 1927, he was expelled from the Executive Committee of Comintern and sent into exile. FTP name this Russian leader, who was killed by an ice-axe in Mexico City, the chief opponent of Stalin after Lenin's death.

Answer: **Leon Trotsky.**

21. It saw the return of civil service examinations as well as a great reform of the tax system. It was also a time of increasing despotism and increasing influence of eunuchs in the court, best exemplified by Cheng Ho, the leader of many large naval expeditions of discovery. It was established in 1368 by Zhu Yuanzhang who overthrew the Mongol Yuan dynasty. Mongol invasions continued to be a problem and it was during this dynasty that the Great Wall was completed. This, however, didn't stop a Manchu invasion which would, in 1644, form the new Qing dynasty. FTP name this dynasty which also names prized Chinese vases.

Answer: **Ming.**

22. She was given the realm of Folkvang and the hall of Sessrymnir by the Aesir. She owned a suit of falcon wings which allowed her to fly and a golden necklace given to her by dwarves which Loki tried to steal before he was caught by Heimdall. Thor had to dress up as her to fool the giant Thrym and get his hammer Mjolnir back, and the Giant builder of Asgard demanded her as his price. Although she was the goddess of love, she often led the Valkyrs onto the battlefield. FTP name this Vana, the daughter of Skadi and Niord to whom Friday was sacred.

Answer: **Freya.**

23. This Roman general, plebian, and uncle of Julius Caesar, won a reputation in the wars against Jugurtha, first under Metellus, and then as sole commander, and later against the Germans. When Sulla got the command against Mithradates VI, he fled to Africa. FTP, who ultimately lost the civil war?

Answer: **Marius**

1. Identify the authors of historical fiction FTPE.

1. This openly homosexual American writer and self-titled “gentleman bitch of American letters” has authored *Lincoln: A novel*, *Julian*, *1876*, *Empire*, *Creation*, and *Myra Breckinridge*.

Answer: Gore **Vidal**.

2. He pioneered a new age of naval adventure stories with his Horatio Hornblower series. He also wrote the novels *The Gun* and *The African Queen*.

Answer: C.S. **Forester**.

3. This Australian was a Japanese captive for three and half years during WWII, an experience which led to the screenplay for *The Great Escape* and his first novel *King Rat*. His take on Japanese history continued with *Tai-pan* and *Shogun*.

Answer: James **Clavell**.

2. Name the particle, FTPE.

1. This fundamental particle gives every massive particle its mass; unfortunately, it hasn't actually been detected yet, so it's still considered theoretical.

Answer: **Higgs** boson.

2. Consisting of a charm quark and a charm antiquark, it has more than three times the mass of a proton. This meson, discovered in the 1970s, actually proved the existence of the charm quark.

Answer: **J/psi** particle.

3. If this particle exists, it is the magnetic analog of the elementary electric charge on a particle.

Answer: **magnetic monopole**.

3. Name the U.S. Vice-President from the year elected FTP; if you need the President's name, you will get 5:

a) 10 pts 1836

5 pts Martin Van Buren

Answer: **Richard Johnson** (prompt on Johnson)

b) 10 pts 1880

5 pts James Garfield

Answer: Chester Alan **Arthur**

c) 10 pts 1932

5 pts Franklin D. Roosevelt

Answer: John Nance **Garner**

4. Here's another Choose Your Own Bonus. What'll it be – cooking or videogames?

COOKING: Given ingredients, name the sauce, FTPE.

A. egg yolks, lemon juice, butter, salt and pepper

Answer: **Hollandaise** Sauce

B. butter, cream, salt, nutmeg, parmesan cheese, Romano cheese, egg yolk

Answer: **Alfredo** Sauce

C. tarragon, minced shallots, champagne vinegar, dry white wine, egg yolks, butter, salt and pepper

Answer: **Bearnaise** Sauce

VIDEOGAMES: Answer the following questions about a new video game FTSNP.

1. (10) This video game boasts three new characters as well as many returning characters from each of the previous four games. The main goal of the game is to win The King of Iron Fist Tournament Four as well to pound the crap out of the other fighters. Name this video game released in fall of 2002 for the PS2.

Answer: **Tekken Four**

2. (10) Name the company that created Tekken Four.

Answer: **Namco**

3. (10) For a final 10, name any one of the 3 new fighters to appear in the game before any secret characters are unlocked.

Answer: **Christie Monteiro**, **Steve Fox**, Craig **Marduk**

5. Identify these Beethoven piano sonatas FTPE.

His piano sonata number eight in C minor, its grave and melancholy opening earned it this nickname, which it shares with a Tchaikovsky symphony.

Answer: **Pathetique**

One of the most recognizable classical music pieces, sonata number 14 in C sharp minor got its nickname from a critic who thought it evoked this shining on ocean waves.

Answer: **Moonlight**

Sonata number 29 in B flat major takes its name from the percussive dynamic range and epical structure.

Answer: **Hammerklavier**

6. Identify the Thomas Hardy novels from clues FTPE.

1. It concerns an ambitious freemason who applies to Christminster but whose life becomes a wreck after long love affairs with Arbellia Donn and Sue Bridehead.

Answer: **Jude the Obscure.**

2. The protagonist, Gabriel Oak competes with Farmer Boldwood and Sergeant Troy for the hand of Bathseba Everdene who has recently inherited her uncle's fortune.

Answer: **Far From the Madding Crowd.**

3. A very drunk Michael Henchard sells his wife to a sailor and then vows to not drink for twenty years. He soon prospers but eighteen years later after his wife returns with their daughter and he squabbles with his former assistant Donald Farfrae his fortunes change quickly.

Answer: **The Mayor of Casterbridge.**

7. Identify the American Naval Commanders from clues FTPE.

1. He built a ten-boat fleet on Lake Erie which defeated the British at Put-in-Bay in September 1813. Afterward he sent a message to the army commander William Henry Harrison, reading "We have met the enemy and they are ours."

Answer: **Oliver Hazard Perry.**

2. He was the adopted brother of David Farragut whom he served under in the New Orleans campaign. However, he is best known as the commander of the Mississippi squadron which helped Grant capture Vicksburg.

Answer: **David Dixon Porter.**

3. The Commander in Chief of the Pacific Fleet in WWII he won a huge victory at Midway in 1942. Later he would combine with MacArthur in the island-hopping campaign on his way to becoming a five-star Fleet Commander in 1944.

Answer: **Chester Nimitz.**

8. Identify the element fitting the following description, FTP each.

A. A component of Freon and Teflon, it has an electronegativity of 4.0.

Answer: **Fluorine**

B. A transition element, its isotope with mass 60 is used in cancer treatment. Found in Vitamin B-12, it is also used in the coloring of blue ceramics.

Answer: **Cobalt**

C. This alkali metal has the largest atomic radius of any element, and it was the first element discovered by spectroscopy. Its oscillation period has also been used to define the second.

Answer: **Cesium**

9. Answer questions about the world's eighth most populous country, Bangladesh, FTSNOP.

1.(10) This fast growing city of 10 million people, located in the middle of the country, is the capital of Bangladesh.

Answer: **Dhaka.**

2.(10) This southeastern city is the busiest port in Bangladesh, and with a population of nearly two million, rivals Khulna City for the status of second largest city in the country. Its major attractions include the Shrine of Bayazid Bostami and Chandanpura Mosque.

Answer: **Chittagong.**

3. (5/5) For five points each, Bangladesh's agricultural economy is largely based on the delta formed by what two major Indian rivers that flow into the Bay of Bengal.

Answer: **Ganges and Brahmaputra.**

10. Name these geometric and trigonometric formulas FTPE:

a) This law states that $a^2 + b^2 - 2ab \cos C = c^2$ [a squared plus b squared minus 2 a b cosine C equals c squared]

Answer: law of cosines

b) This law states that $\sin A / a = \sin B / b = \sin C / c$ [sine A divided by a equals sine B divided by b equals sine C divided by c]

Answer: law of sines

c) This formula can be used to compute the area of any triangle knowing only the lengths of the three sides.

Answer: Hero's formula

11. Answer questions about a German playwright from clues FTPE.

1. His works include *The Life of Galileo*, *The Good Woman of Setzuan*, and the *Caucasian Chalk Circle*. A devoted Marxist, this advocate of "epic theatre" spent his later life in East Berlin.

Answer: Bertolt **Brecht**.

2. The setting of this Brecht play is the Thirty Years War. After twelve episodes, the protagonist, a camp follower who sells trinkets, finds herself alone in the world.

Answer: **Mother Courage and her Children**.

3. Brecht collaborated with composer Kurt Weill on this musical drama based on Gray's Beggar's Opera and intended as an indictment of capitalist society.

Answer: **Three Penny Opera**, or *Der Dreigroschenoper* if they're showing off.

12. Answer questions about the Chinese Civil War FTPE.

1. He led the Kaomintang government or the Nationalists against the Communists during the Civil War. After he was defeated by Mao he fled to Taiwan and set up an independent government there.

Answer: **Chiang Kai-shek**.

2. This movement was precipitated when Chiang destroyed Mao's Jiangxi Soviet. The latter fled and re-established himself in Yanan Province in Northern China.

Answer: **Long March**.

3. He was the leader of Mao's victorious Red Army and was acknowledged as his successor. However, he was mysteriously killed in a plane crash after an unsuccessful coup attempt in 1971.

Answer: **Lim (or Lin) Piao** or **Lim (or Lin) Biao**.

13. Given a description, name the figure skater, FTPE:

A. In 1994, this Ukrainian was the youngest Olympic women's champ since Henie in 1928. Asked by a reporter what she wanted now that she had Olympic gold, this woman replied, "A Snickers;" a witty reply that had Mars, Inc sign her to a multi-year contract to promote it.

Answer: Oksana **Bayul**

B. Silver medalist in the 1994 Olympics, this Canadian had placed 7th in 1992. He is most notable for being the first person to land a quadruple jump combination in competition -- a quadruple toe loop/double toe loop at the 1991 Worlds event.

Answer: Elvis **Stojko**

C. This woman, originally Russian, emigrated to the US to become famous as a two-time Olympic Champion and four-time World Champion in pairs figure skating with her late husband, Sergei Grinkov.

Answer: Ekaterina **Gordeeva**

14. Name the following types of Stars FTPE:

Our own sun is part of this broad class of stars running from the top left to the bottom right of the Hertzsprung-Russell diagram.

Answer: **Main Sequence**

Larger and brighter than oursun, members of this class are positioned above the main sequence stars on the H-R diagram. Subclasses include Red, Blue, and Super types.

Answer: **Giant**

The last stage of stellar evolution, they occur when a star collapses on itself, and are located below the main sequence stars in the H-R Diagram. Pup, the companion star to Sirius, is an example.

Answer: **White Dwarf**

15. Identify the following about Aristotle FTSNOP:

(5 pts.) This was the school he established in the Grove of Apollo northeast of Athens.

Answer: **Lyceum**

(10pts.) Divided into two sections, tragedy and comedy, of which only the first is extant, this work defines terms like hamartia and catharsis.

Answer: **Poetics**

(15 pts.) Named because of the tradition that claims that his son arranged his notes after his death, in this work Aristotle discusses numerous topics, including justice, voluntary action, and intellectual virtues.

Answer: **Nicomachean Ethics**

16. Given a novel's title, name the literary work from which that title comes FTPE. For example, if you were given *East of Eden*, you'd answer *The Bible*. We hope.

Far from the Madding Crowd

Answer: **Elegy Written in a Country Churchyard**

The Sound and the Fury

Answer: **Macbeth**

The Winter of Our Discontent

Answer: **Richard III**

17. Identify these cultures important to Anthropology from descriptions FTPE.

1. Natives of this group were studied by Bronislaw Malinowski and the subjects of *Argonauts of the Western Pacific*. The most notable thing about them is the Kula Ring Exchange, a ceremonial trading of expensive shells.

Answer: **Trobriand Island(ers).**

2. This tribe of Brazil and Venezuela, studied by Napoleon Chagnon, is now having trouble with oil companies and miners encroaching on their land. In anthropology the men are known for their fierceness, seen in constant ritual warfare.

Answer: **Yanomami.**

3. Despite the exploitive 1840 Treaty of Waitangi made with British settlers this aboriginal people of New Zealand has kept its identity to a large extent, as one quarter of them still speak their original language rather than the language of their colonizers.

Answer: **Maori.**

18. Choose your own bonus! No Greek or Norse myths here – you want Roman or Egyptian? Choose now.

IF ROMAN: Identify these Roman deities from clues FTPE.

1. This two-faced god of beginnings and doorways was a major god in Rome. When his temple was open it signified that Rome was at peace.

Answer: **Janus.**

2. These household Gods are often associated with the Penates. They were agricultural in origin and were celebrated every year in the Crossroads festival of the Compitalia.

Answer: **Lares.**

3. This woodland deity whose name means “forester” is often confused with Faunus. He has to be appeased whenever a forest is cleared and it was he who declared that Rome had lost one less soldier in a battle with the Etruscans causing the Etruscans to flee.

Answer: **Silvanus.**

IF EGYPTIAN: Identify the female Egyptian goddesses from clues FTPE.

1. This old goddess fulfilled many duties including that of Love Goddess, Moon Goddess, and “Mistress of the Underworld.” Quizbowlers best know her as the goddess either worshipped as a cow or possessing a human body with the head of a cow.

Answer: **Hathor.**

2. She was a Primeval mother goddess and husband of Geb. Her offspring include Osiris, Isis, Set, and Nephthys.

Answer: **Nut.**

3. This Cat goddess probably symbolized the growth inducing rays of the sun. Her son, Khnemu was in turn a god of the Moon.

Answer: **Bast.**

19. Answer the following about techniques used in DNA analysis FTPE

1. It separates mixtures of molecules by their charge-to-mass ratios. Charged molecules move through an inert medium such as an agarose or acrylamide towards the appropriate electrode.

Answer: **gel electrophoresis**

2. Fragments formed as a result of DNA cleavage undergo gel electrophoresis and are then denatured to form single-strands. Transferred to nitrocellulose filter and labeled with a radioisotope, the strands then hybridize with complementary strands. It is named for its American originator.

Answer: **Southern blotting** or **Southern hybridization**

3. Southern blotting detects and analyzes genetic markers these provide. This term describes the occurrence of different cleavage sites for restriction enzymes in the DNA of different individuals resulting from random base changes in the noncoding stretches of DNA.

Answer: **RFLP** [RIF-lips] or **restriction fragment length polymorphisms**

20. Answer the following certain a European Treaty FTPE:

1. It was, or more accurately they were, signed in July 1807 in Poland following victories by Napoleon over Russia at Friedland and the Prussians at Jena and Auerstädt.

Answer: Treaties of **Tilsit**

2. Under the terms of the Treaties of Tilsit, France and Russia became allies and divided Europe between them. Napoleon carved this entity from eastern Prussia, to be ruled by the King of Saxony.

Answer: Grand **Duchy of Warsaw**

3. Napoleon created this kingdom from Western Prussia for his brother Jerome. Also called the Grand Duchy of Berg, the region gave its name to a famous 1648 peace.

Answer: **Westphalia**

21. Name these Puccini operas from descriptions FTPE.

1. Cio-Cio-San is a geisha living in Nagasaki who commits suicide after the return of her husband Pinkerton with Kate his new American wife. It was based on a work by David Belasco.

Answer: **Madame Butterfly.**

2. The title character is the princess at Peking who agrees to marry anyone who can answer her three riddle, however, if they fail they are beheaded. Calaf, the son of the deposed King of Tartary succeeds but says that the title character may kill him if she discovers his name before morning. It ends with Calaf confessing his love to the title character who then accepts it.

Answer: **Turandot.**

3. Based on a Sarah Bernhardt play, the title character loves painter Mario Cavaradossi who is suspected and then tortured by reactionary policeman Scarpia. The title character kills Scarpia, witnesses the death of Cavaradossi, and then throws herself off the Castel de Sant' Angelo.

Answer: **Tosca.**

22. Identify the structure of a plant's root, FTPE.

1. Cellular division in this part of the root leads to linear growth of the root downwards.

Answer: **Apical meristem.**

2. This segment of the root is beneath the apical meristem, and it protects the meristem from damage from rocks and soil.

Answer: **Root cap.**

3. The procambium produces this vascular bundle where the xylem and phloem develop.

Answer: **Stele.**