

8/28/03
8/25/05

Bear Cub Classic IV
Packet from Delta Burke '00 + '01
(plus Seth T. and Eok N.)
Round 4

TOSSUPS

1. The name's the same: one led the "patriotic" Whigs and became Secretary of State in 1756, but was compelled to resign in 1761 when his cabinet refused to declare war on Spain. His son was Prime Minister from 1783 to 1801 and again from 1804 to 1806, negotiating two coalitions against France. FTP name these British statesmen known as the "Elder" and "Younger", namesakes of a western Pennsylvania steel city.

ANS: William Pitt

2. It is the real analog of reactance, and is measured in the same units. It adds algebraically in series, and harmonically in parallel. For a section of a conductor, its value is given by the length divided by the conductivity times the cross-sectional areans: Rheostats, also known as potentiometers, have an adjustable value of this quantity. Circuits where this quantity is zero are short circuits. FTP name this quantity measured in ohms.

Ans: resistance

3. A historic figure of this name ruled Wallachia from his capital at Tirgoviste, inspiring a more famous literary character, whose servants include the insane zoophagist Renfield. The historic figure scared away the invading sultan Mehmed II with a "Forest of the Impaled"; the literary character attacks Lucy Westenra and Mina Harker. FTP give the shared alternate name of Vlad the Impaler and Bram Stoker's most famous creation, a vampiric count.

Ans: Dracula (accept Prince Vlad III Dracula or Vlad Tepes or Vlad the Impaler before "more famous literary character")

4. He was envious of the skill of his nephew, Perdix, and tried to push him off a tower. This inventive Athenian, the son of Metion and grandson of Erechtheus, is the patron of artists' and craftsmen's guilds. He landed safely in Sicily after escaping his own construction, the labyrinth of King Minos, and his name was later used by James Joyce for the surname of an artist. FTP, name this mythical architect who fashioned wax wings for himself and for his son, Icarus.

Ans: Daedalus (do not accept Stephen Dedalus)

5. When an infamous Florentine murderer was caught and hung, this artist's sketches for a painting commemorating the grisly act were judged superior to Leonardo da Vinci's. Trained by Fra Fillipo Lippi, this favorite of the Medici circle, whose two best-known works share a room in the Uffizi, was a moody and indolent man who may have been a homosexual. FTP, whose delicate and fresh style has made *Primavera* and *The Birth of Venus* classics?

Ans: Sandro Botticelli

6. A copy of it, engraved on a block of black basalt that is 2.25m in height, was unearthed by a team of French archaeologists at Susa, Iraq, during the winter of 1901 and 1902. It makes no mention of religion but offers protection to all classes of Babylonian society. FTP name this code for which the basis of criminal law is that of equal retaliation, comparable to the Semitic law of "an eye for an eye."

Ans: The Code of Hammurabi

7. A modern discussion of this concept appears in John Rawls's *Theory of Justice*, while classical discussions are found in Plato and Lucretius. Hobbes argued for a version that gives rulers absolute power, in return for protecting people from their natural state of warfare. Locke argued that moral principles and obligations existed before the creation of the state, so men could change the state if it failed to uphold these principles. Rousseau argued that government must rest on the general will of the governed, which influenced the American and French revolutions. FTP, name this term for an actual or hypothetical compact between the ruled and their rulers.

Ans: Social Contract

8. The pH of these solutions can be determined by using the Henderson-Hasselbalch equation, assuming the proportions of weak acid and conjugate base are roughly equal. Common examples include baking soda, commercial antacids, the bicarbonate system in human blood, and an aqueous mixture of acetic acid and sodium acetate. FTP, name this type of solution which resists a change in pH.

Ans: buffer solution

9. His literary career began when his wife challenged him to write a better book than the one he was reading. Though *Precaution* did not sell well, his second novel, *The Spy*, allowed him to quit farming. At age 34 he published the first American sea tale, *The Pilot*, and the first of his most famous series of novels about the American wilderness and pioneer life. FTP, name this author of *The Pioneers*, *The Prairie*, *The Pathfinder*, and *The Last of the Mohicans*.

Ans: James Fenimore Cooper

10. His foster father claims to have invented the question mark while his foster mother was a French prostitute named Chloe. His true brother is actually an agent for the British Ministry of Defense like his father. His outrageous plans have include the Alan Parsons Project and Preparation H. FTP, what owner of Virtucon is "always surrounded by frickin' idiots" and tormented by Austin Powers?

Ans: Dr. Evil

11. Despite his successful claims of land for Spain, this man was beheaded by a jealous governor with the helpful conniving of Francisco Pizarro. Earlier he and 190 men, guarded by dogs trained to attack natives, had hacked their way west through 100 miles of underbrush, at the end of which trip he waded fully armed into the Pacific. FTP who is this first European to see the Pacific from the Americas.

ANS: Vasco Nunez de Balboa

12. Based on the real-life story of the Lost Woman of San Nicolas, this novel has a lesser-known sequel, *Zia*, in which the protagonist's niece tries to rescue her. The natives of the title place board ships to escape Aleutian seal hunters, but Karana goes back to the island to find her brother, only to find he's been eaten by dogs, so she has to fend for herself. This describes, FTP, what Newberry-medal winning novel by Scott O'Dell?

Ans: Island of the Blue Dolphins

13. Born in Brooklyn in 1898, his first published song was "When You Want 'em, You Can't Get 'em." He really hit it big, however, when his song "Swanee" was sung by Al Jolson in the Broadway play *Sinbad*. FTP name this Tin Pan Alley product best known for the larger pieces "An American in Paris" and "Rhapsody in Blue."

ANS: George Gershwin

14. It functions as both an exocrine and endocrine gland, and its alpha cells produce glucagon to help blood sugar levels stay normal. It consists of a head, body, and tail, and is a flattened organ located behind and below the stomach. Its endocrine tissue is called the islets of Langerhans. FTP what is this organ which is responsible for producing insulin?

ANS: pancreas

15. By 2050, UN projections predict that it will be the fourth most populous country in the world though it is currently 7th behind Russians: The Karakoram Range lies along its northwest borders just east of the Hindu Kush. Its largest port city happens to be Karachi which is more populous than its capital, Islamabad. FTP, what is this country that lies just west of Kashmir that has been in tense situations disputes with its neighbor India?

Ans: Pakistan

16. William Blake wrote an 1804 poem titled with the name of this 17th century poet, imagining the poet coming back to Earth to correct misinterpretations of his work. The poet was Latin secretary to Cromwell, and besides his poetry he wrote a pamphlet advocating divorce and a defense of freedom of the press, the *Areopagiticans*: FTP name this author of *Lycidas*, *Samson Agonistes*, and *Paradise Lost*.

ANS: John Milton

17. This actor's first semi-starring role was in 1936's *The Petrified Forest*. He played bad guys in *Angels with Dirty Faces* and *The Roaring Twenties*, and an Irish horse trainer in *Dark Victory* with Bette Davis. Bigger roles came in *High Sierra*, *Key Largo*, and *The Big Sleep*. He played a romantic lead to Audrey Hepburn at age 55 in *Sabrina*: FTP who is this Hollywood icon best known for his work in *The Maltese Falcon* and *Casablanca*?

ANS: Humphrey Bogart

18. The number's the same. The smallest side of a right triangle with hypotenuse 145 and a leg of length 144. The number of sides in a regular polygon which Gauss proved could be constructed with straight edge and compass. In octal, it is written 21, in binary it is 10001, and in hexadecimal it is 11. It's also the length of the hypotenuse of a right triangle with legs of lengths 8 and 15. FTP name this next prime number after 13.

Ans: 17

19. The second one began after the boarding of the British ship *Arrow*. The first resulted from the British desire to offset a negative currency flow to a nation which accepted only currency in most trades. In 1840, in response to the actions of Lin Zexu, 16 British warships sailed to the Pei Ho river and attacked Canton. The second ended with the Treaty of Tianjin, while the first ended with the Treaty of Nanking, which gave Hong Kong to the British. FTP, identify these wars, named for the material the British exported into China to offset the currency flow.

Ans: Opium War(s)

20. The U.S. branch was established in 1880 by Commissioner George Railton, though later the English founder's daughter, Evangeline, took over. Soldiers sign the "Articles of War" and are not required to wear the uniform, while Adherents do not sign and cannot wear the uniform. Officers have the status of ordained ministers and work for it full time. FTP what is this philanthropic religious group founded by General William Booth?

Ans: The Salvation Army

21. After taking his new position on September 21, 2001, he was replaced in his former elected office by Mark Schweiker. President Bush strongly considered this moderate Republican for his running mate in 2000, but turned him down due to this then-governor's support of reproductive freedom. The newest member of the president's cabinet, FTP name this former governor of Pennsylvania who is now in charge of "homeland security."

ANS: Tom Ridge

22. Porro prisms take advantage of this effect, making better mirrors than metallic surfaces. It only occurs in a medium where the index of refraction is higher than that of the surroundings, when Snell's law breaks down because the sine of an angle can't be more than one. It occurs at angles of incidence greater than the critical angle, and is exploited in fiber optics to keep any light from leaking out the fiber. FTP name this effect where light incident on a boundary shows no refraction and 100% reflection takes place.

Ans: total internal reflection

BONUSES

1. Identify the baseball player from clues on a 30-20-10 point basis.

30- When Joe Carter socked his dramatic World Series homer in 1993, this man scored ahead of him with the winning run.

20- He beat out Cecil Fielder for his lone MVP award in 1990 despite having only 61 runs batted in.

10- He is baseball's all-time leader in runs scored, walks, and stolen bases.

Ans: Rickey Henderson

2. Name these parts of the flower, FTP each.

The male reproductive part, it produces pollen in the anther and includes the filament.

ANS: Stamen

The counterpart of the stamen, this is female reproductive part, which includes the ovary, the style, and the stigmas:

ANS: Pistil

This is the collective term for the whorl of sepals which form the bud.

ANS: Calyx

3. Answer these questions about a shameful forced relocation FTPE.

(10) Members of what tribe native to Georgia, South Carolina, and North Carolina were relocated beginning in 1838?

Ans: Cherokee

(10) The Cherokee were relocated to reservation lands in what current U.S. state?

Ans: Oklahoma

(10) What name designates this relocation, during which tens of thousands of Cherokee died from malnourishment and disease?

Ans: "Trail of Tears"

4. Name the following characters from Kipling's Jungle Books FTSNOP.

5 pts. The man-cub lost in the jungle.

ANS: Mowgli

5 pts. Mowgli's bear companion

ANS: Baloo

10 pts. The black panther

ANS: Bagheera

10 pts. The tiger

ANS: Shere Khan

5. Pencil and paper ready. A 5 kilogram mass moving at 2 meters per second to the north hits a 2 kilogram mass moving at 2 meters per second to the south. FTPE:

10) What is the kinetic energy in joules of the 5 kilogram mass before the collision?

Ans: 10 joules

10) The two masses stick together, making a completely inelastic collision. What is the momentum in kilogram meters per second of the two masses after the collision?

Ans: 6 kilogram meters per second to the north

10) What is the speed in meters per second of the two masses after the collision?

Ans: 6/7 meters per second

6. Name the directors of the following foreign films, FTPE.

(10) *La Dolce Vita*:

Ans: Federico Fellini

(10) *The 400 Blows* and *Jules and Jim*

Ans: Francois Truffaut

(10) *Rashomon* and *The Seven Samurai*

Ans: Akira Kurosawa

7. Name these guardians of the underworld.

(10) This three-headed dog is the guardian to the gates of Hell in Greek mythology.

Ans: Cerberos

(10) This female ruler of the Norse underworld is the daughter of Loki and Angerbodans:

Ans: Hel

(10) This Egyptian god of the underworld is married to Isis. Father to Horus, he is the protector of the dead though he is killed by his brother Seth.

Ans: Osiris

8. Name the Robert Frost poems which include these lines, FTP each.

ANS: "He only says, Good fences make good neighbors."

Ans: Mending Wall

B. "Across the lines of straighter darker trees, I like to think some boy's been swinging them."

Ans: Birches

C. "Oh, I keep the first for another day! / Yet knowing how way leads on to way, / I doubted if I should ever come back."

Ans: The Road Not Taken

9. Identify the largest lakes on the following continent FTPE.

(10) North America

Ans: Lake Superior

(10) Africa

Ans: Lake Victoria

(10) South America

Ans: Lake Maracaibo

10. Name these young WB actresses from roles FTPE.

(10) She plays Winnie Foster in Tuck Everlasting but is best note for her role as Rory Gilmore on Gilmore Girls.

Ans: Alexis Bledel

(10) She's had roles in Wonder Boys, The Gift and The Ice Storm, however she had her breakout role as Joey Potter on Dawson's Creek.

Ans: Katie Holmes

(10) Lately she's been in Neutrogena commercials, this actress plays Lana Lang on Smallville.

Ans: Kristin Kreuk

11. Identify these characters from Melville's Moby Dick FTPE.

Who is the character named for the Biblical king whose wife was Jezebel?

Ans: Captain Ahab

Name Ishmael's best friend, a harpooner from the South Seas.

Ans: Queequeg

Name the Quaker chief mate of the *Pequod*.

Ans: Starbuck

12. Answer these questions about significant ships from 1807.

(5,5) First, for 5 points each, name the man who launched the first commercially successful steamboat in August 1807, and name that steamboat.

ANS: Robert Fulton; the Clermont

(10,10) On June 22, 1807, a British ship fired on a U.S. frigate and removed four alleged British deserters. FTP each, name, in order, the British ship and the American frigate.

ANS: The Leopard; The Chesapeake

13. Name these Nobel Prize winners in Physiology and Medicine FTPE.

(10) He won the Nobel in 1904 for his discovery of the physiology of digestion but he is better known for his work with dogs and their responses through conditioning.

Ans: Ivan Pavlov

(10) Along with Ernst Chain and Howard Florey, he discovered the bacterial effect of penicillin and made it possible to develop it as an antibiotic.

Ans: Alexander Fleming

(10) Along with Maurice Wilkins and James Watson, they won the 1962 Nobel for their discovery of the structure of DNA and its significance in replication.

Ans: Francis Crick

14. Answer the following about a 1956 international crisis FTPE.

Britain and France conspired with Israel to take this man-made body of water by force after the new Egyptian president nationalized it.

ANS: Suez Canal

This Egyptian president, who had seized power from Farouk, nationalized the Suez Canal.

ANS: Gamel Abdel Nasser

After the Suez Crisis, the Soviet Union became Nasser's major financial backer on what major dam he wished to build on the Nile?

ANS: Aswan High Dam

15. Identify these grandchildren of Zeus on a 10-5 basis.

(10) These two sons of Ares, with names meaning "fear" and "terror," accompanied him in battle.

(5) Their names now grace the two moons of Mars.

ANS: Phobos and Deimos

(10) This son of Aphrodite lends his name to the first asteroid found whose orbit didn't fall between Mars and Jupiter.

(5) Known as Cupid or Amor in Rome, he is personification of romantic love.

ANS: Eros

(10) This son of Apollo was the Greek god of medicine.

(5) Socrates' last words were ironic instructions to sacrifice a cock to this god.

ANS: Asclepius

16. It opens, "On Friday, June 12th, I woke up at six o'clock and no wonder; it was my birthday." Answer the following questions FTSNOP.

5pts What is this literary work written by a teenager in the 1940s?

ANS: The Diary of Anne Frank

10pts What did Anne Frank call her diary?

ANS: Kitty

5pts In what city did Anne and her family hide from the Nazis?

ANS: Amsterdam

10pts Her April 16, 1944 entry says, "Remember yesterday's date, for it is a very important day in my life." What major teenage first did she experience that day?

ANS: first kiss (acc. equivalents)

17. Give the pH of the following FTPE.

When hydrochloric acid is titrated with sodium hydroxide, this is the pH of the equivalence point.

ANS: 7.0

This is the pH of a solution with a pOH of 12.4

ANS: 1.6

Within 0.2, this is the average pH of human blood.

ANS: 7.4 (acc. 7.2 to 7.6)

18. Identify who currently holds these offices FTPE.

(10) President of Russia

Ans: Vladimir Putin

(10) Secretary-General of the United Nations

Ans: Kofi Annan

(10) President of France

Ans: Jacques Chirac

19. For ten points each, identify the American city that is directly across the border from these cities in Mexico.

Ciudad Juarez

Ans: El Paso, TX

Matamoros

Ans: Brownsville, TX

Tijuana

Ans: San Diego, CA (also accept San Ysidro)

20. Answer the following about pentagons FTPE.

10) A pentagon has 4 interior angles of 100 degrees each. What is the measure of the fifth interior angle?

Ans: 140 degrees or $7\pi/9$ radians

10) What is the measure of a single interior angle in a regular pentagon?

Ans: 108 degrees or $3\pi/5$ radians

10) Which Platonic solid has regular pentagons as its faces? The dual of this polyhedron is the icosahedron.

Ans: dodecahedron