

8/21/03
6125/05

Bear Cub Classic IV
Packet by Charlie S. , Devang P. and Nick M.
Round 10

TOSSUPS

1. In August 2000, the mice in this city, fattened by a bumper grain crop, became unable to make their customary jumps between rooftops; the citizenry was besieged by a rain of rodents. Founded as "Ziz" by the Phoenicians, it lies between the "Conca d'Oro" plain on the south and an eponymous gulf to the north. It was taken by the Romans, Arabs, Normans, Spanish, and by Patton's troops in their drive toward Messina. FTP, name this largest city of the largest island in the Mediterranean, Sicily.

Answer: Palermo

2. Among the additions in John Dryden's and William Davenant's 1667 adaptation of this play was Hippolito, a man who has never before seen a woman. The Restoration playwrights also added a second daughter for the magician, and added a she-changeling played by a man, Sycorax, who becomes a plaything to Stephano and Trinculo. FTP name this Shakespeare play for which the 1667 additions provided foils for Miranda and Caliban.

Answer: The Tempest

3. Jack Lupton is a Chattanooga who made millions bottling Coca-Cola. Roger Penske owns perhaps the best-known open-wheel auto racing team. These men belong to an organization led by William "Hootie" Johnson; strangely enough, Arnold Palmer is the only former pro golfer in its ranks. FTP name this organization, currently the target of women's groups for its all-male membership.

Answer: Augusta National Golf Club

4. After his death in 1778, his priceless botanical collection was moved to England. In his 1763 work, *Genera morborum*, he presented a classification of diseases. In his 1737 work, *Genera Plantarum* he used the number of stamens and pistils in a flower as the basis for classifying plants. For 10 pts. name this Swedish botanist whose *Systema naturae* outlined his taxonomic system for classifying plants and animals.

Answer: Carolus Linnaeus or Karl von Linnee

5. Their major cities included Cortona, Vulci, and Clusium, and their art shows traces of other Mediterranean cultures they may have passed through before settling west of the Apennines some time after the 10th century BCE. Their last king, Tarquin, was driven out of Rome in 509 BCE. Who are these non-Italic people, FTP, who greatly influenced Roman culture before being mostly absorbed by it?

Answer: Etruscans

6. Four main figures stand above numerous prone bodies, some dead, some dying. One man on the left wears a stovepipe hat and holds a rifle, while a boy on the right carries two pistols, holding one aloft. The title female holds the tricolor, her left breast exposed, urging her companions on. This describes, FTP, what 1830 painting by Eugene Delacroix?

Answer: Liberty Leading the People

7. He appears in Walter Scott's novel *Ivanhoe* as the "holy clerk of Copmanhurst." A traditional character in medieval English May-Day plays, his costume is the russet habit of the Franciscans, with a red-corded girdle, red stockings and wallet. Usually depicted as fat and jovial, FTP, who is this vagabond friar best known from the Robin Hood ballads?

Answer: Friar Tuck

9. This element is used in excimer lasers because it can be made to form weak bonds with some of the halogens (such as fluorine and chlorine) when in an excited state. Present in the Martian atmosphere to the extent of about 0.08 ppm, it was discovered by Sir William Ramsay and Morris Travers in 1898, who named it after the Greek for stranger. FTP, name this "noble" gas, with atomic number 54, symbol Xe.

Answer: xenon

10. This man joined the Richmond Grays in 1859 so he could see John Brown's execution; after doing so, he deserted. Very charismatic, he was betrothed to Lucy Hale, the daughter of an abolitionist senator. He was shot, probably by the self-castrated religious fanatic Boston Corbett, in a barn; his last words were "Useless, useless." FTP, name this actor who spoke his most famous line, "Sic Semper Tyrannis", while leaping to the stage of Ford's Theater.

Answer: John Wilkes Booth

11. This man was born in Kirriemuir, Scotland, which appears in his fiction as "Thrums." The rights to his most famous work will never expire(*); they are held in perpetuity by the Great Ormond Street Hospital for Sick Children. His first success came when he adapted his 1891 novel "The Little minister" for the stage; his masterpiece developed from the stories he told his five adopted sons. FTP, name this author of a play about "Lost Boys" led by "Peter Pan".

Answer: James Matthew Barrie

12. A secret society, it formed in the rural areas of China in protest of the Qing empire and the American and European influences in their country and culture. So named because Europeans and Americans didn't know what else to call this group of martial artists, they first wanted to kill all foreign Christians in China, but later settled for nearly taking over Peking in 1900. FTP, name this anti-foreigner separatist group, most famous for the rebellion which bears their name.

Answer: The Boxers

13. This quantity associated with a linear transformation is unaltered by a change of basis, and is either plus or minus the unit term in the transformation's characteristic polynomial. Equal to the product of the eigenvalues (with multiplicity) of a matrix, this quantity appears multiple times in Cramer's Rule for the solution of simultaneous equations. For an n-by-n matrix, one needs n-factorial terms to determine this quantity; for the 2-by-2 matrix with "a,b" on the first row and "c,d" on the second, it's simply ad minus bc. FTP, name this quantity.

Answer: determinant

14. It is usually the offshoot of a river or lake in a lowland area. It is a sluggish or stagnant creek, frequently flowing through swampy terrain. The term is used mainly on the U.S. Gulf of Mexico coast and especially in the delta region of the Mississippi River. It comes from the Choctaw word "bayuk," meaning small stream. FTP, what is this Cajun word, often misunderstood as meaning "swamp?"

Answer: bayou

15. This English poet was born on Halloween in 1795 to a stableman in Moorfields, England. He lost his father at the age of 8, and his mother at 14. At 15, he was apprenticed to an apothecary-surgeon, but soon left the field to pursue poetry. Some of his greatest works include "La Belle Dame Sans Merci (The Beautiful Woman Without Mercy)," "Hyperion," and "Ode on a Grecian Urn." Name this poet, who died of tuberculosis in Rome on February 23, 1821, at the age of 26.

Answer: John Keats

16. The 5th Brandenburg Concerto features a cadenza for this instrument. Because spring-loaded mechanisms pluck the strings, a note has the same volume regardless of how hard one presses a key. A leading instrument from 1600 to about 1790, famous players include William Byrd, Francois Couperin, J.S. Bach, and the Scarlattis. Also known as the cembalo, FTP, name this stringed instrument featured in Baroque music which was slowly replaced by the piano.

Answer: harpsichord (accept early buzz with cembalo)

17. Located in Southern Europe, it is only about 60% as big as the The Mall of America in Minneapolis with its area of .44 squared kilometers. In 1871, it was captured by Victor Emmanuel, and in 1929 it was given its independence. For 10 points, name this world's smallest nation located within Rome, Italy.

Answer: Vatican City

18. This object, a relic of the flight of Phrixus from Orchomenos, was consecrated to Ares by King Aeetes. The king of neighboring Iolcos, who had usurped the throne from his half-brother Aeson, sent Aeson's son, a tiger-skin-clad, one-sandaled youth, to retrieve it. FTP, name this object, hung from a tree guarded by an unsleeping dragon, whose retrieval from Colchis was the task that King Pelias assigned to his half-nephew Jason.

Answer: the Golden Fleece

19. In 1816 the U.S. government chartered the Second Bank of the United States to counter the unregulated issuance of currency by individual states. Some states continued not only to issue currency, however, but to tax national bank branches. When the Baltimore branch refused to pay, its manager sued the state. FTP this led to what landmark 1819 case in which Justice Marshall established the doctrine of "implied powers"?

Answer: McCulloch v. Maryland

20. Observations with the Hubble Space Telescope suggest that it may have two cores. The light arriving at earth from it is shifted toward the blue end of the spectrum, whereas the light from all other cosmic sources exhibits red shift. Cataloged as M31 and NGC 224, this spiral galaxy is the largest member of the Local Group, a group of about 30 galaxies that includes both our own Milky Way and M33. For 10 points, identify this galaxy which is generally regarded as the most distant object visible to the human eye.

Answer: Andromeda Galaxy

21. Thought that I was going crazy / Just having one those days yeah / Didn't know what to do / Then there was you / And everything went from wrong to right / And the stars came out and filled up the sky / The music you were playing really blew my mind. FTP, name what it was by Kylie Minogue.

Answer: Love at First Sight

22. With the exception of a few soldiers, this area was largely unoccupied until late afternoon on July 2. Sent by Meade to inspect the Union's left flank, General Kemble Warren soon realized how valuable a defense position it was. On that same day, Col. Joshua Lawrence's 20th Maine Regiment Volunteers held off a strong charge from Col. William Oates' 15th Alabama Infantry. FTP, name this small hill, a vital location on the Gettysburg battlefield, which also has a "Big" counterpart.

Answer: Little Round Top

BONUSES

1. Answer these questions about conic sections for the stated number of points.

a. (10) This is a plane curve consisting of all points equidistant from a given fixed point (focus) and a given fixed line (directrix) It is the conic section cut by a plane parallel to one of the elements of the cone.

Answer: parabola

b. (10) plane curve consisting of all points such that the difference between the distances from any point on the curve to two fixed points (foci) is the same for all points.

Answer: hyperbola

c. (10) These are lines, in the same plane, which the curve approaches as it approaches infinity. In an equilateral, or rectangular, hyperbola these are perpendicular.

Answer: asymptotes

2. Name these religious dissenters in North America before 1800, FTPE.

a. He believed that church and state should be separated, and this got him booted out of Puritan Massachusetts. So, he founded Rhode Island, originally called Rogue's Island.

Answer: Roger Williams

b. She followed Roger Williams to Rhode Island after she was kicked out of Massachusetts for teaching that compliance with religious duties was not the true sign of Godliness

Answer: Anne Hutchinson

c. The first Lord Baltimore, he fled anti-Catholic legislation in England, he was granted land in America by Charles I, where he hoped to found a Catholic refuge. He died before Maryland came to be, however.

Answer: George Calvert

3. Given clues to their identity, name each of these characters from Lewis Carroll's Alice in Wonderland FTPE.

a. he is harsh and unfriendly but does offer Alice some assistance – he smokes hookah and gives Alice the ability to change size at will

Answer: Caterpillar

b. he is always in a hurry and is best known for his quote "I'm late, I'm late, I'm late for a very important date" – this character is also the namesake of a Jefferson Airplane song

Answer: White Rabbit

c. he says he's mad but he's one of the most reasonable characters in the text – he is always grinning and he can disappear at will

Answer: Cheshire Cat

4. Identify the meiotic phase based on a brief description FTPE. Be specific

(10) The nuclear envelope disappears and the spindle develops. There are no chiasmata and no crossing over of genetic material.

Ans: Prophase II

(10) Homologous pairs of chromosomes are spread across the plate. Microtubules extending from each pole are attached to the kinetochores of the homologous pair member.

Ans: Metaphase I

(10) Each chromosome is pulled apart into two chromatids by the microtubules of the spindle apparatus. The chromatids migrate to their respective poles.

Ans: Anaphase II

5. 1. Given characters from a classic work of literature, name the work, for 10 points each:

(10) Yossarian, Snowden, Milo Mindbender, and Major Major.

Ans: Catch-22

(10) Ralph, Jack, Simon, Roger, and Piggy.

Ans: Lord of the Flies

(10) Arthur Radley, Mayella Ewell, Jean Louise Finch, and Tom Robinson.

Ans: To Kill a Mockingbird

6. Identify the following Polar Explorers:

A. First to the North Pole

- Answer: Robert E. Peary
- B. First to the South Pole
Answer: Roald Amundsen
- C. Second to the South Pole, but (alas) not second to return
Answer: Robert F. Scott

7. 30-20-10, name the year in which these events occurred.

30 – The Oneida community is founded, Thackeray's *Vanity Fair* is published, and Alfred Wallace and Henry Bates travel to the Amazon.

20 – Prince von Metternich resigns his post, the reign of Louis Philippe ends, Vienna puts down a revolution, and Lewis Cass nearly becomes president.

10 – Revolutions sweep Europe, the Seneca Falls conference is held, gold is discovered at Sutter's Mill, and Zachary Taylor wins election to the White House.

Answer: 1848

8. Let's talk gas: Identify the following about gas laws FTPE.

First, all or nothing, correctly state the ideal gas law.

Ans: $PV=nRT$

In terms of Avogadro's number, the ideal gas law can be written as $PV=nkT$. In this case, to what quantity does the lower-case 'k' refer?

Ans: Boltzmann's constant

What other gas law can be mathematically represented as $PV=\text{constant}$?

Ans: Boyle's Law

9. Answer these questions about everyone's favorite child wizard, Harry Potter

a. (5 pts each) Give the first names of the three members of the Dursley family.

A: Vernon, Dudley and Petunia

b. (5 pts each) Name Harry's Hogwarts nemesis and his two cronies.

A: Draco Malfoy (prompt on Draco), Crabbe and Goyle

10. Name the American from clues 30-20-10.

30. At first living in the Shenandoah Valley, she moved with her husband to Eagle Bridge, New York, in 1927, and in 1936 she moved in with her daughter.

20. In early 1939 Louis Caldor was visiting Hosick Falls, where he saw some of her handiwork; it was displayed at the Museum of Modern Art in October 1939 and at the Galerie St. Etienne in October 1940.

10. Titles of her American primitive paintings include Out for the Christmas Tree, the Old Oaken Bucket, Black Horses, and Catching the Thanksgiving Turkey.

A: Grandma Moses

11. FTPE, name these politicians from trouble they've caused..

(A) This man was a Republican Senator from Vermont, before becoming an Independent and allowing the Democrats to take control of the Senate.

ANSWER: James Jeffords

(B) This man was recently the second person to be expelled from the House of Representatives since the Civil War. He was sentenced to eight years in prison for bribery, tax evasion, and racketeering.

ANSWER: James A. Traficant

(C) This man is serving as a Democratic Representative from Modesto, California. Recently, he was implicated in the disappearance of Washington D.C. intern, Chandra Levy.

ANSWER: Gary Condit

12. 30-20-10 Name the thing

A. (30) They include Luddite, Rebecca, Tithe, Bread, Bristol, Chartism, Draft, Evil May Day, Glasgow, Gordon, and Hyde Park?

B. (20) It gives its name to an act passed in 1715 providing that any assembly of 12 or more persons which disturbs the peace, and which fails to disperse when called upon by a magistrate or sheriff shall be deemed guilty of a felony.

C. (10) Famous American ones include Watts, Stone Wall, and the Rodney King ones in Los Angeles.

Answer: Riot

13. Many Generals are often called that Old so and so, (for instance Jackson was Old Hickory) Who are these old generals for 10 points each:

a. old fuss and feathers

Answer: Winfield Scott

b. old rough and ready

Answer: Zachary Taylor

c. old blood and guts

Answer: George Patton

14. For 15 points each, name these physics concepts named after modern physicists.

a. This says that both position and momentum cannot both be known with perfect accuracy at the same time, making all of science, well, useless.

Answer: Heisenberg Uncertainty Principle

b. This is a thought experiment involving placing a small animal in a box and sealing the box. Since one doesn't know if it is alive or dead until one opens the box, it must be both alive *and* dead while in the box.

Answer: Schrödinger's Cat

15. Answer these questions about the twentieth century Middle East:

a. All or nothing, name the month and year in which the Six Day War occurred.

Answer: June 1967

b. The air force of what country was destroyed on the ground during that war.

Answer: Egypt

c. Israel took control of the Golan Heights from this country.

Answer: Syria

16. Given a description of an island city, name it for 10 points:

a. Built on 14 islands, this center of craft and design is a Scandinavian capital.

Answer: Stockholm, Sweden

b. An Adriatic lagoon, this city is noted for its gondolas and men in straw hats that push those boats along.

Answer: Venice, Italy

c. Sjaelland (Zea-land) and Amager are the two islands that make up this European capital.

Answer: Copenhagen, Denmark

17. 30-20-10 Name movie from quotes

30) "When I was little, my mother told me not to look at the sun. So, once when I was six, I did."

20) "12:45 Restate my assumptions"

10) "One, mathematics is the language of nature"

Answer: Pi

18. Answer these questions about the American women's suffrage movement, 5-10-15.

(5 pts.). She was active in the temperance and anti-slavery movements in addition to supporting suffrage, mostly due to her association with Elizabeth Cady Stanton. She was arrested in 1873 for trying to vote in Rochester. She also succeeded in getting the University of Rochester to accept female students in 1900.

A: Susan B. Anthony

(10 pts.). Elizabeth Cady Stanton and Lucretia Mott organized a convention in 1848 in this New York city. A declaration of the convention called for a vote for women.

A: Seneca Falls

(15 pts.). She wrote a sex column in 1912 for the *New York Call* called "What every woman should know." This got her in trouble with the law, along with her opening of America's first birth control clinic. She and "friend," anarchist Emma Goldman, supported radical feminism.

A: Margaret Sanger

19. FTPE, name these historical figures who annoyed the Pope.

a. He denied the authority of Rome in England and founded the Anglican church—all because the Pope wouldn't grant him a divorce.

Answer: Henry VIII

b. He annoyed the Pope by claiming that the Earth revolved around the sun, but was later forced to recant or die.

Answer: Galileo Galilei

c. He had Pope Boniface VIII kidnapped and beaten because Rome opposed his taxation of French clergy. This began the Great Schism.

Answer: Philip IV (also accept Phillip the Fair)

20. Answer the following concerning a Swiss psychologist FSNOP.

First, FTP, what Swiss thinker broke with Freud early in the 20th century and coined the term "archetype?"

Answer: Carl Jung

FTPE, the persona, the shadow, and what other two elements, referring to the male and female spirit, composed Jung's four archetypes?

Answer: animus and anima