1. His real name is Arthur, and, according to town legend, he stabbed his father with scissors one evening while pasting newspaper articles into his scrapbook. He is rarely seen after that, but leaves gifts for two neighbor children: twine, soap sculptures, chewing gum, a pocket watch, and a spelling bee medal. For 10 points name the man who eventually knifes Bob Ewell, the Finches' reclusive next-door neighbor in Harper Lee's To Kill a Mockingbird.
    Answer: Boo Radley

2. On the gallows, he sang a poem he had composed that very morning: "Glory hallelujah, I am going to the Lordy!" After his plagiarized theological manual, "The Truth," failed to sell in 1870, he wrote a bizarre rambling speech for a presidential candidate which he somehow expected to get him appointed Ambassador to France. For 10 points name the man who, on July 2, 1881, appeared at a Washington train station just in time to shoot President James Garfield twice in the back.
    Answer: Charles J. Guiteau

3. In various traditions, it represents the seven days of creation or the seven archangels, and it is an imitation of the golden one that Exodus 31 says rested in the tabernacle. It also typically includes the shammash, or servant light, used to kindle all the other lights. For 10 points name this multi-branched candelabrum, a symbol of Judaism used during the feast of Hanukkah.
    Answer: the Menorah

4. The three major types are: electrical, which measure the change in resistance of a thin layer of lithium chloride; mechanical, which measure the contraction and expansion of human hair or ox-gut; and dew-point, which cool a metal mirror until condensation forms. For 10 points, name these meteorological devices, which are used to measure the relative humidity of air.
    Answer: Hygrometers

5. Annie gives him all the money she was saving up for her divorce. Martini empties his jukebox, and Mr. Gower goes door to door collecting old accounts. Violet Bick gives him back what he loaned her earlier in the day, and Sam Wainwright instructs his office to advance him up to $25,000; hee haw and Merry Christmas. For 10 points, all this generosity from the citizens of Bedford Falls is directed at what man, played by Jimmy Stewart in the 1945 film It's a Wonderful Life?
    Answer: George Bailey (prompt if any Brainiac says Jimmy STEWART on an early buzz)

6. Every time a new one was elected with the famous green and white ballots, a new signet ring was struck with the new man's coat of arms below the lion of St. Mark. Paulicio Anafesto was named the first one in 697 AD and the last one, Ludovico Manin, gave up his crown when Napoleon invaded in 1797. Between them some 50 men lived in the famous Gothic palace across the Bridge of Sighs. For 10 points name the office held by the highest official of the republic of Venice.
    Answer: the Doge of Venice

7. Herodotus described it as an Egyptian custom in 500 BCE, and it is still performed 4-5 million times annually in Africa. Methods range from the Moslem "sunna," essentially a pinprick, to the more severe "excision" or "pharaonic infibulation." Tribal chiefs argue that it facilitates childbirth and promotes religious devotion; UNICEF claims that the opposite is true. For 10 points give the common name for the genital mutilations currently received by over 100 million African women.
    Answer: Female Circumcision (accept Clitoridectomy)

8. Writing a sonnet about a Scottish bridge, analyzing why Dickens' Mr. Pickwick is like Christmas, solving a chess endgame, and doing five-digit addition. For 10 points, these challenges from an interrogator to an interrogatee are from the sample dialogue in 1950's "Computing Machinery and Intelligence," demonstrating what test for artificial intelligence which the author called the "imitation game"?
    Answer: the Turing Test

9. It stretches from the Bristol Channel in the north down to Deadman's Bay in the south, and includes Exon Moor, the Mendip Hills, and Marlbury Downs. In theory, it should contain cities like Portsmouth and Southampton, but they are rarely mentioned, and Exeter and Dorchester are renamed Exonbury and Casterbridge, respectively. For 10 points name this region, based largely on Dorset, in which are set most of the works of Thomas Hardy.
    Answer: Wessex

10. In the 1960's, after serving her prison term, Ivo D'Aquino claimed that her wartime activities had actually been part of a resistance movement led by American and Australian POW's. Gerald Ford was convinced, and he pardoned her in 1977. During World War II, D'Aquino had been, for 10 points, one of 13 women who voiced what notorious Japanese radio propagandist?
    Answer: Tokyo Rose

11. His first wife, Harriet Fay, helped him to graduate summa cum laude from the Lawrence Scientific School, but he cheated on her and they were divorced in 1883. A fellow member of the "Metaphysical Club," William James said that this man's loose living kept

him from receiving a professorship. For 10 points, name this philosopher whose papers were sold to Harvard by his second wife for a mere $500, the author of "How To Make Our Ideas Clear," the founder of pragmatism.

Answer: Charles Sanders <u>Peirce</u> (pronounced "purse". Grimace and accept other pronunciations very reluctantly)

12. Kelvin-Helmholtz instabilities cause the familiar swirling phenomenon at the outer edges. The familiar shape is caused by super-heated air expanding and rising, but then hitting the temperature gradient at the tropopause, where it cools and starts expanding outward, just like a summer thunderhead would. For 10 points, this explains the unique "stem-and-bulge" shape of what most visible sign of an atomic detonation?

Answer: <u>Mushroom Cloud</u> (prompt on nuclear detonation or equivalents)

13. The family arrived in Bruges in 1420, where Giovanni became a powerful patron of the arts and was knighted by Duke Philip. They are best remembered, however, for a 1434 depiction of them, in which Giovanni wears a fur-lined cloak and large black hat; his wife Giovanna Cenami wears a bright green dress and is accompanied by her Bolognese terrier. For 10 points name the Italian couple whose marriage was celebrated in Jan van Eyck's most famous portrait.

Answer: the <u>Arnolfini</u>

14. It is traditionally dated from the reign of Chephren, around 2500 BCE, because that era saw the building of the adjacent Khafra Valley Temple, but new evidence, like unexplainable horizontal erosion lines, may make it thousands of years older. For 10 points name this limestone "yardang," or outcropping, of the Giza Plateau, carved into the shape of a recumbent lion.

Answer: the <u>Sphinx</u>

15. Start with a log-normal random walk. Add in the risk free interest rate and call it R, and asset volatility, call it sigma. Assume among other things that there are no transaction costs, that no dividends will be paid, short selling is permitted and the assets are divisible and you can derive For 10 points, what equation used for pricing options, whose living namesake won the Nobel prize in economics in 1997 along with Robert Merton.

Answer: <u>Black-Scholes</u> equation

16. Joseph Loschmidt came remarkably close in 1865 using diffusion rates and a lot of rough guesswork. Jean Perrin determined it in 1908 using Brownian motion: he counted particles of gum mastic in water, inferred the mass of those items, and divided that into the molar weight. Today, it is defined as the number of atoms in 12 grams of carbon-12. For 10 points, name the physical constant named for a physicist from Turin.

Answer: <u>Avogadro's Number</u> or the Avogadro Constant (Prompt On Avogadro)

17. In his "Nordic English," "louden hugely" might replace sforzando and "louden bit by bit" might replace crescendo in his attempt to rewrite the English language removing all words of Latin/Greek derivation and replacing them with "purer" Anglo-Saxon alternatives. For 10 points, name this virtuoso pianist and composer, whose music was featured in Howards End, and who "dished up" the works In Dahomey, Shepherds Hey's and Country Gardens.

Answer: Percy Aldridge <u>Grainger</u>

18. A backup radio circuit is routed through Tangier, Morocco, but the main system is a 4,883-mile duplex cable that goes via London, Copenhagen, Stockholm, and Helsinki. It was installed on September 1, 1963 after negotiations in Geneva, largely in response to the Cuban missile crisis. For 10 points give the common name for the emergency teletype system that famously links two red telephones in the White House and the Kremlin.

Answer: the "<u>Hot Line</u>"

19. It is located in the heart of the old town, between Tiergens Street and the Town Hall Square, and was designed in 1843 by Georg Carstensen, who named it after an architectural landmark east of Rome. Its most popular points today are the boat pond, actually a remnant of an ancient castle moat, and its famous pantomime theater. For 10 points name this pleasure garden, the most popular tourist attraction in Copenhagen.

Answer: <u>Tivoli</u> Gardens

20. He begin his career as the Red Mask, but his friends abandoned him during a heist at the Acme Playing Card Company. Deranged by exposure to toxic waste, in the decade that followed he put Barbara Gordon in a wheelchair and even killed Jason Todd. For 10 points, Mark Hamill, Cesar Romero, and Jack Nicholson have all portrayed what Clown Prince of Crime, the arch-enemy of Batman?

Answer: the <u>Joker</u>

21. Its scientific name is leontopodium alpinum, and its famous star-shaped petals are actually white leaves that grow just below its yellow head. It is prevalent in the Andes and Himalayas, but the European varieties are better known, especially after Oscar Hammerstein named the last song he ever wrote after them. For 10 points name these Alpine "blossoms of snow," from the German words for "noble" and "white."

Answer: <u>Edelweiss</u>

22. "All the Names" is a metaphysical tale of an obsessive census taker. "Blindness" describes an epidemic of people being able to see only a milky white field in front of their vision. "The Stone Raft" describes Iberia detaching itself from Europe and floating into the Atlantic. For 10 points, these are the most recent works of what visionary Portuguese novelist, the 1998 Nobel Prize-winner for literature?

Answer: Jose <u>Saramago</u>

23. His political career was saved in 1838 when a French cannonball took off his left leg, so when he took power in 1841, he had it embalmed and paraded it through the streets to a special shrine. It didn't help; he was exiled to Cuba and returned home in 1846 only to lose key battles at Cerro Gordo, Chapultapec, and Buena Vista. For 10 points name this opportunistic president of Mexico, most famous for his siege on the Alamo.

Answer: Antonio Lopez de <u>Santa Anna</u>

24. This term was coined in 1956 by social psychologist Leon Festinger, who used the example of a milennialist sect that is relieved when their leader tells them new prophecy has been received and the end of the world is not coming after all. For 10 points give the psychological term for an unpleasant internal state caused by perceived inconsistency between actions and thoughts, which people will try to reduce whenever possible.

Answer: <u>Cognitive Dissonance</u>

25. In 964 AD, Arab astronomer as-Sufi mentioned it in his Book of Fixed Stars, but it wasn't rediscovered in 1612, when Simon Marius recorded an object resembling "the light of a candle seen through a horn." In 1920, Edwin Hubble conclusively determined that it was not merely a spiral nebula. For 10 points name this astronomical object, catalog number M31, the spiral galaxy that is the Milky Way's nearest neighbor.

Answer: the <u>Andromeda</u> Galaxy or Nebula (accept M31 on early buzz)

1. Identify these American literary works from their original titles for 10 points each. All three works share the same author. (MODERATOR: give answers after each part)
1. (10) The Bride and Her Brother   Answer: The <u>Member Of The Wedding</u>
2. (10) Army Post   Answer: <u>Reflections In A Golden Eye</u>
3. (10) The Mute   Answer: The <u>Heart Is A Lonely Hunter</u>

2. Name these world leaders who each left a beautiful corpse, for ten points each.
1. (10) When this man's body was returned to Yangon in 1974, it became part of a bizarre tug of war between college students, who constructed a makeshift mausoleum on their campus, and police, who eventually declared martial law, killed the students, seized the body and buried it in concrete.
    Answer: <u>U Thant</u>
2. (10) Coated with plastic after her 1952 death, no one knew what to do with her, so she was sent on a tour of Europe in a packing crate, which was briefly buried in both Milan and Madrid before being dug up again.
    Answer: <u>Eva Peron</u>
3. (10) After he died in Hawaii in 1989, his widow refused to bury him outside his home country, so she kept him on ice and still wheels him out for parties every year on his birthday.
    Answer: Ferdinand <u>Marcos</u>

3. Identify these very cold places which have been given seldom-used new names.
1. The Geographic Names Board lists "Denali," an Athabascan Indian word meaning "The Great One," as its official name.
    Answer: Mount <u>Mckinley</u>
2. In 1979, it achieved home rule and renamed itself Kalaalit Nunaat, with its capital renamed Nuuk.
    Answer: <u>Greenland</u>
3. In 1999, it will divide into two regions, the easternmost of which will be called "Nunavut," an Inuit word for "Our Land."
    Answer: <u>Northwest Territories</u>

4. Name the scientist, 30-20-10.
1. To help his concentration at noisy parties, he would hold imaginary conversations with his dog Toby in which he would describe recent experiments.
2. He was an accomplished poet, a mathematician, and the first physiologist to measure the sensitivity of the human eye's color perception, but is better remembered for his work in physics.
3. He was the first to use statistical methods to describe the movement of molecules in a gas, and his equations today form the basis of all electromagnetic theory.
    Answer: James Clerk <u>Maxwell</u>

5. For ten points each identify these American paintings with the names of animals in their titles.
1. (10) This 1836 Thomas Cole landscape depicts a spectacular bend in the Connecticut River.
    Answer: The <u>Oxbow</u>
2. (10) This 1778 John Singleton Copley work was based on a dramatic real-life rescue that took place in Havana harbor.
    Answer: <u>Watson And The Shark</u>
3. (10) This celebrated 1942 painting, which Sinclair Lewis applauded as "dullness made God," is topped off by an advertisement for 5-cent Phillies cigars.
    Answer: <u>Nighthawks</u>

6. Identify these powerful medieval Japanese types for ten points each.
1. (10) This title for a military dictator was originally used for the commanders who banished the Ainu tribes from Hokkaido in the 8th century.
    Answer: <u>Shogun</u>
2. (10) In the Tokugawa period, you could use this title meaning "large private land" only if you grew over 50,000 bushels of rice a year.
    Answer: <u>Daimyo</u>
3. (10) These predecessors to the daimyo were warriors loyal to the Kamakura family who were rewarded by being appointed as hereditary military constables.
    Answer: <u>Shugo</u>

7. For ten points each, identify the following mortals from Greek mythology punished for falling in love with a god.
1. (10) This princess was tormented by Aphrodite after falling in love with Eros in the dark castle where he kept her.
    Answer: <u>Psyche</u>

2. (10) Tennyson's line "after many a summer dies the swan" was spoken by this king of Troy who fell in love with Eos and was granted eternal life but not eternal youth.

    Answer: <u>Tithonus</u>

3. (10) Hera tricked this daughter of Cadmus into insisting that Zeus appear to her in his full splendor, which immediately vaporized her.

    Answer: <u>Semele</u>

8. Identify these scientists, none of whom are Dmitri Mendeleev, who contributed to the development of the periodic table.

1. (10) In 1868, this German chemist gave a copy of a periodic table to a colleague to study, but Mendeleev's later model actually reached publication first.

    Answer: Lothar <u>Meyer</u>

2. (10) The question of why periodic law exists was answered by the work of this American, who discovered bonding electron pairs (and also first prepared heavy water).

    Answer: Gilbert <u>Lewis</u>

3. (10) The last major changes in the periodic table came in the 1940s when this scientist, current holder of the longest entry in "Who's Who in America," reconfigured the table by placing the actinides below the lanthanides.

    Answer: Glenn <u>Seaborg</u>

9. For ten points each, name the following literary works, all of which are subtitled "A Romance." You will receive 5 points if you need an author's name.

1st 10 pts: The title locale of this 1851 novel is the decaying family seat of the greedy and arrogant Pyncheon clan.

1st 5 pts: Nathaniel Hawthorne

    Answer: The <u>House Of The Seven Gables</u>

2nd 10 pts: This 1884 work is fully subtitled "A Romance of Many Dimensions."

2nd 5 pts: Edwin Abbott

    Answer: <u>Flatland</u>

34d 10 pts: This Booker Prize-winner tells the story of two modern scholars tracking down a love affair of the fictional Romantic poet Randolph Henry Ashe.

3rd 5 pts: A. S. Byatt

    Answer: <u>Possession</u>

10. Name the woman, 30-20-10.

1. (30) Born Maria Grosholtz in Strasbourg, France, in 1761, her early sculpture training led to a cushy post at Versailles as Louis XVI's sister's art tutor.

2. (20) What really made an "impression" on her at Versailles was an assignment to make death masks of guillotine victims during the Revolution.

3. (10) She moved this grisly assortment of wax sculpture to London in 1835, and in 1884 it found its current home on Marylebone Road.

    Answer: Madame Maria <u>Tussaud</u>

11. Given the reason a noted psychologist broke with Sigmund Freud, identify the psychologist for the stated number of points.

1. (5) His took off in 1913, because Freud disagreed with his ideas on a personal and collective unconscious.

    Answer: Carl <u>Jung</u>

2. (10) He broke with Freud in 1911, believing that childhood inferiority, not libido, was the earliest cause of neurosis.

    Answer: Alfred <u>Adler</u>

3. (15) In 1924, he broke from Freud after deciding that the birth trauma was the primary cause of neurosis.

    Answer: Otto <u>Rank</u>

12. Name the following from mathematics given a real world description 5-10-15.

1. (5) If you get in an elevator on the first floor and travel to the twelfth floor, at some time you passed the fifth floor.

    Answer: <u>Intermediate Value</u> theorem

2. (10) In order to make a billion dollars in a hundred weeks, there must be at least one week where you made ten million dollars.

    Answer: <u>Pigeon-Hole Principle</u>

3. (15) If you are packing oranges, the most efficient way to do so is to pack them like you would likely pack cannonballs, obtained by stacking triangular layers of balls, placing each layer as tightly as possible on top of the previous layer.

    Answer: <u>Kepler Conjecture</u>

13. Name the piece of classical music, from 10 points for its use in a film Earl just saw or from another clues for 5. Movement number is not required.

1st 10 pts: During the scene on the beach in the Truman Show, a four-minute clip from this piece is heard.

1st 5 pts: The movement heard is marked Larghetto, and supposedly suffers from Chopin's lack of orchestration skills. It was used to show off the pianist's/composer's virtuoso ability early in his career.

Answer: Chopin's <u>Piano Concerto Number Two</u> in F Minor, Op. 21 (second movement)
2nd 10 pts: After Ace Ventura and Melissa come aboard and enter the party, a small ensemble is playing this piece in Ace Ventura.
2nd 5 pts: Translated, this piece also names a Sondheim work. The composition was written by Mozart for string orchestra.
    Answer: Mozart's <u>Eine Kleine Nachtmusik</u> (I guess accept A Little Night Music).
3rd 10 pts: Played during the scene of Age of Innocence when Countess Olenska crosses the party to speak to Newland Archer.
3rd 5 pts: Also the name of a Tchaikovsky Symphony, this piano sonata was the only one that received its nickname from Beethoven.
    Answer: Beethoven's <u>Pathetique</u> sonata number eight in C Minor, op. 13

14. Answer the following questions about the celebrated Asian temples at Angkor Wat.
1. (5) In what present-day nation is Angkor Wat located?
    Answer: <u>Cambodia</u> (or Kampuchea, sure)
2. (10) Name the civilization that built Angkor Wat and ruled from it for 500 years before the Thais sacked it.
    Answer: the <u>Khmer</u>
3. (15) From what rock is almost the entire temple complex constructed?
    Answer: <u>Sandstone</u>

15. Identify these classics of anthropology by Ruth Benedict for 15 points each.
1. (15) The US government commissioned this 1946 study of the Japanese mind, based only on interviews with POWs and Japanese-Americans.
    Answer: The <u>Chrysanthemum And The Sword</u>
2. (15) This book contrasts the Zuni, Kwakiutl, and Dobu islander cultures, and puts forth Benedict's famous thesis that culture is "personality writ large."
    Answer: <u>Patterns Of Culture</u>

16.
1. (10) For 10 points, what name is commonly given to the "pregastric fermenters," animals like cattle and sheep whose stomach is divided into four compartments?
    Answer: <u>Ruminants</u>
2. (20) Now, for 5 points each, name the four compartments in a ruminant's stomach.
    Answer: <u>Rumen, Reticulum, Omasum, Abomasum</u> (accept Paunch for rumen and Honeycomb for reticulum)

17. Identify these Roman authors, for ten points each from clues about their time in exile, or for 5 points if you need a list of works.
1st 10 pts: The emperor Augustus banished this poet to the Greek port of Tomis on the Black Sea in 8 AD.
1st 5 pts: Ars Amatoria and Fasti
    Answer: <u>Ovid</u>
2nd 10 pts: Domitian banished him in 86 AD for bitter works he wrote after failing to be promoted in the Roman court.
2nd 5 pts: His 16 Satires, in which he coined phrases like "Who watches the watchmen?"
    Answer: <u>Juvenal</u>
3rd 10 pts: He fled to Rome in 42 BC as persona non grata after Octavian's defeat of Brutus' army, in which he was a tribune.
3rd 5 pts: Ars Poetica and 88 Odes
    Answer: <u>Horace</u>

18. Identify the Presidential candidates who were the victims of these infamous smear ads for ten points each.
1. (10) A little girl picks petals off a daisy. Seconds later, she is blown to hell by an atomic mushroom cloud.
    Answer: Barry <u>Goldwater</u>
2. (10) Extremely pregnant black women were hired to march at the convention wearing signs bearing this candidate's slogan that "(He's) the one!"
    Answer: Richard Milhous <u>Nixon</u>
3. (10) Prisoners walk through a revolving door while a voice says, "(He) wants to do for America what he did for (his state)."
    Answer: Michael <u>Dukakis</u>

19. Name the philosophical work from a first clue for 15, or from the philosopher for 5.
1st 15 pts: After a foreword to Richard Wagner, the first line reads, "We shall do a great deal for the science of esthetics, once we perceive not merely by logical inference, but with the immediate certainty of intuition, that the continuous development of art is bound up with the Apollonian and Dionysian duality."
1st 5 pts: The author is Friedrich Nietzsche.
    Answer: The <u>Birth Of Tragedy</u>
2nd 15 pts: After a dedication to John Stuart Mill, the preface explains that "the lectures were delivered at the Lowell Institute in Boston in . . . 1906, and . . . 1907, at Columbia University, in New York." The first lecture begins by quoting G.K. Chesterton saying that "We think that for a landlady considering a lodger, it is important to know his income, but still more important to know his philosophy."
2nd 5 pts: The author is William James.

Answer: <u>Pragmatism</u>

20. Answer the following question about the U.S. Human Genome Project.
1. (10) For 5 points each, what two government agencies are co-sponsoring the program?
> Answer: the Department of <u>Energy</u> and the <u>National Institutes Of Health</u> (NIH)
2. (10) Within one percentage point either way, what percent of the human genome has so far been sequenced?
> Answer: 6.3% (accept 5.3% - 7.3%)
3. (10) What DNA duplication technique, for which Kary Mullis won a Nobel Prize, has been key to progress on the project?
> Answer: <u>Polymerase Chain Reaction</u> or PCR

21. Identify these guest musicians on Beatles albums for ten points each.
1. (10) He plays organ on two Beatles #1 hits: "Let It Be" and "Get Back."
> Answer: Billy <u>Preston</u>
2. (10) It is his guitar gently weeping on "While My Guitar Gently Weeps."
> Answer: Eric <u>Clapton</u>
3. (10) This frequent Beatles collaborator plays harpsichord (actually piano, sped up to twice its normal speed) on "In My Life."
> Answer: George <u>Martin</u>

22. Identify these great films with famous traffic jam scenes for ten points each.
1. (10) This Fellini film opens with a man caught in traffic imagining himself levitating out of his car and floating out to sea.
> Answer: <u>8 1/2</u>
2. (10) This bizarre 1967 Godard film features a famous 15-minute tracking shot of a traffic jam on a lonely country road.
> Answer: <u>Weekend</u>
3. (10) This 1975 Robert Altman classic involves almost its entire 24-person cast in a huge pileup on I-41 on the way home from the airport.
> Answer: <u>Nashville</u>

23. Identify the following people associated with 1775's so-called "Olive Branch Petition" for ten points each.
1. (10) This diplomat, who would go on to draft the New York state constitution, wrote the original draft of the Petition.
> Answer: John <u>Jay</u>
2. (10) This moderate author of Letters from a Farmer in Pennsylvania completely re-wrote Jay's draft of the Petition.
> Answer: John <u>Dickinson</u>
3. (10) The man who brought the Petition before George III was so chosen because he was the great-grandson of what respected British admiral?
> Answer: William <u>Penn</u>

24. Name the following types of options for ten points each.
1. (10) This contract has the following conditions: at expiration, and only at expiration, the holder may purchase the underlying for the strike price.
> Answer: <u>European Call</u> option
2. (10) This contract has the following conditions: at expiration, or at any time before, the holder may sell the underlying for the strike price.
> Answer: <u>American Put</u> option
3. (10) This type of option has values which depend on the history of the asset price, not just its value at exercise. An example is an option to purchase an asset for the average value of that asset over the month before expiry.
> Answer: <u>Exotic</u> option (also accept Path-Dependent options)

25. Given a list of colorful gemstones, For 10 points identify the transition element that gives them their color.
1. (10) Ruby, emerald, garnet   Answer: <u>Chromium</u>
2. (10) Amethyst, aquamarine, tourmaline   Answer: <u>Iron</u>
3. (10) Malachite, turquoise   Answer: <u>Copper</u>