Toss-ups

1. Terrestrial devices are produced by Leica, Isite, Faro, and Trimble. In forestry, it can be used to calculate forest biomass and timber volume. The music video for “House of Cards” by Radiohead is believed to be the first recorded using this technology. The best aerial systems can achieve better than 1 centimetre range resolution. For 10 points, name this remote sensing technology that can measure distance to objects with lasers.

LIDAR (Light Detection And Ranging)

2. Character examples of this Japanese popular culture concept or trait include: Aoi Oribe from “Myself; Yourself”; Mayuki Takara from “Lucky Star”; initially, Yuki Nagato from “The Melancholy of Haruhi Suzumiya”; Sheska from “Fullmetal Alchemist”; and Lucca from “Chrono Trigger”. Characters with this trait are usually bookish and/or sweet, and evoke feelings of “moe” (pronounced moé) in readers or viewers. For 10 points, what is this Jconcept or trait that literally means, glasses girl?

Meganekko

3. When this play premiered at the Alexandrinsky Theatre in St. Petersburg, it was booed by the audience, one actress was so intimidated that she lost her voice, and the playwright soon announced that he was finished writing plays. In 1898, two years after the premiere, the presentation of play directed by Constantin Stanislavski was heralded as a triumph. For 10 points what is this play, in which a story about the titular bird by Trigorin presages how he would abandon Nina between acts 3 and 4, written by Anton Chekhov.

The Seagull
4. Finnish, Italian and Esperanto have shallow ones. The Japanese Hiragana and Katakana systems together represent a shallow one, which is complicated by the use of the Kanji logographs. English is considered to have a deep one because of the need to use digraphs extensively to represent all the phonemes. For 10 points, what is this concept that describes the degree to which a written language deviates from the one-to-one correspondence between graphemes and phonemes?

**Orthographic depth** (also accept orthography)

5. In anticipation of this event, JetBlue offered flights between Bob Hope Airport and Long Beach Airport for $4 or $5. In fact, the workers involved completed their work 17 hours ahead of schedule. It was originally estimated that the work causing this event would take up 53 hours. This event was caused by construction work involving the demolition of part of the Mulholland Drive Bridge on Interstate 405, in California, on July 15, 16 and 17, 2011. For 10 points, what was this over-hyped event that shares its name with a 1997 vehicular combat video game published by Interplay?

**Carmageddon** (accept Carpocalypse before the video game is mentioned)

6. This place, known by its codename, was established in December 2001. In actuality, its existence was a hardly a secret. It was closed as a result of a diplomatic spat between the host country government and the government of Canada over the refusal to grant landing rights to Emirates and Etihad Airways at Vancouver International Airport and Calgary International Airport by the Canadian government. For 10 points, what was this Canadian military facility that, until November 2010, served as a forward logistics facility, reportedly at Al Minhad Airbase in the United Arab Emirates.

**Camp Mirage**
7. This settlement was established soon after the completion of Fort Henry, near the mouth of the Cataraqui River. Currently home to between 100,000 and 150,000 people, it was first incorporated as a town in 1838, and reincorporated as a city 8 years later. Its first mayor was Thomas Kirkpatrick. From 1841 to 1844, it served as the first capital of the united Canadas. For 10 points, what is this Ontario city that is home to the Royal Military College of Canada, and Queen’s University?

**Kingston**

8. This man was ostricised from his home city in 472 or 471 BC, and fled to Argos. Soon after, his political enemies in Sparta implicated him in a treasonous plot by Pausanias. He eventually made his way to Asia Minor, where he came into the service of his former enemy, Artaxerxes I, and he served as the governor of Magnesia. This was, perhaps, a peculiar fate for a man who had served as an Archon of Athens in 493 BC, and fought at the Battle of Marathon. For 10 points, who was this Athenian who led the allied Greek navies at the Battles of Artimisium and Salamis?

**Themistocles**

9. Born in the small town of Luseland, Saskatchewan, this man has three children, one of whom was briefly held for a ransom in 1990. He owns Guinness World Records, the publishing company. He also owns the Ripley’s Believe It or Not! franchise. Former BC premier Glen Clark works for his company, and his yacht, the Nova Spirit is frequently seen in Pacific coastal waters. His holding company is the third largest privately held corporation in Canada. For 10 points, name this Vancouver billionaire, the fourth wealthiest in Canada, whose notable grocery chain brands include Nesters Markets, Overwaitea Foods, and Save-On-Foods.

**Jim Pattison**
10. The awards this man has won include: a Peabody Award, two CableACEs, a Grammy Award, a National Humanities Medal, and he is a member of the National Radio Hall of Fame. He maintains homes in New York City, and St. Paul, Minnesota, his home state. This radio personality and writer is best known as the creator and host of the radio show, “A Prairie Home Companion.” For 10 points, who is this man whose hometown is Anoka, Minnesota, not Lake Wobegon?

Garrison Keillor

11. This value in physics can be calculated using quantum mechanics. Originally it was determined empirically from spectroscopy. As of 2010, it is the most accurately measured physical constant, with relative experimental uncertainty of less than 7 parts in 10 to the power of 12. It represents the wavenumber of the lowest-energy photon capable of ionizing a hydrogen atom from its ground state. For 10 points, what is this physical constant named after the Swedish physicist that discovered it?

Rydberg Constant

12. Examples of this from film include: The scene from “Fistful of Dollars” shown in “Back to the Future Part II”; the murdered historian in “Monty Python and the Holy Grail”; a certain object found behind the counter at the Winchester in “Shaun of the Dead”; almost any device introduced by Q in the James Bond franchise; and the Swedish-made penis enlarger in “Austin Powers”. For 10 points, what is this literary technique in which an apparently insignificant element introduced in a story is later revealed to be important, such as the stage prop later used to attempt homicide in “Uncle Vanya.”

Chekhov’s Gun
13. This sect has approximately 24.5 million members. It does not have a homogeneous theology. Instead, each of its member churches is nominally independent, each with its own theological and formal organization. For 10 points, what is this Protestant Christian sect formed from regional or state-level Lutheran and Reformed churches in 1948 at the Conference of Eisenach?

Evangelische Kirche in Deutschland (Evangelical Church in Germany) (accept sufficiently similar variants) or EKD

14. Prominent attendees at this event included George Brown, George-Étienne Cartier, John A. MacDoland and Charles Tupper. Initially planned to involve only representatives of the maritime colonies, upon hearing of it, representatives of the Province of Canada asked to be included. In the preceding month, representatives from Newfoundland also asked to attend, but were too late to make the trip. For 10 points, what was this event held from September 1-9, 1864, attended by Canada’s fathers of confederation in the capital of Prince Edward Island?

Charlottetown Conference

15. The steps involved in this method are: first, the application of crystal violet dye to the smear of a bacterial culture; second, the application of iodine as a trapping agent; third, the application of acetone as a decolourant; and finally the application of safranin. The result is: bacteria with high peptidoglycan content in their cell walls appear purple, while bacteria with low content appear pink. For 10 points, what is the method identifying and classifying bacteria named after the Danish bacteriologist that developed it in 1884?

Gram staining
16. In this operation, French paratroopers airdropped in Dien Bien Province to establish a fortified position. The commander in charge of the ground operation was Brigadier General Jean Gilles. At the time, it was the largest airborne operation since World War II. The result was an initial victory for the French Union forces, who met their objectives of securing the Dien Bien Phu airstrip, and landing all 9,000 troops and their equipment. For 10 points, what was this operation in the First Indochina War that preceded the battle of Dien Bien Phu, and that didn’t really have anything to do with a twin Greek god or beavers.

Opération Castor

17. Samuel Johnson and George Bernard Shaw are on record as complaining that this play lacked the high artistry for which the playwright was often capable. Act II, Scene 7 features a famous monologue by Jacques stating, “All the world’s a stage / And all the men and women merely players; / They have their exits and their entrances, / And one man in his time plays man parts.” For 10 points, what is this Shakespeare comedy, in which the heroine Rosalind, with her cousin Celia, and the court jester, Touchstone, flee the court of Duke Frederick to the forest of Arden, where they all find love.

As You Like It

18. This theory is now, on occasion, being used to explain the development of resource-dependent countries. It holds that the heartland of the country aims to dominate and exploit the hinterlands, since the heartland is dependent upon the processing, financing and transporting the eponymous commodities to grow the economy. It also holds that the characteristics of the commodities exported influences the political character of the hinterlands. It was originally developed to explain the social, political and economic development of the Canadian regions. For 10 points, was is this theory or thesis of economic development developed by Harold Innis and W. A. Mackintosh?

Staples theory or thesis

19. This city’s sister cities include Vancouver, BC; Glasgow, Scotland; and Le Havre, France. Having an important international shipping centre and logistics hub, it was dominated by foreign powers in the late 19th and early 20th centuries, namely the British, the Russians and the Japanese. It is the second largest city in Liaoning province in the Peoples’ Republic China. And it made international
headlines in July 2010 when two oil pipelines exploded, releasing up to 400,000 barrels of oil into the Yellow Sea. For 10 points, what is this city that in 1950, was merged with the nearby port formerly known as Port Arthur, and is named after its Russian name, literally meaning faraway or remote?

Dalian

20. This painting depicts six soldiers firing muskets or rifles at three men on the left-hand side, one of whom appears to be an important bearded man wearing a sombrero. On the right-hand side, another soldier in a red and white cap looks downward while apparently cocking his firearm. In the background, a group of onlookers watch from behind a stone wall. For 10 points, what is this painting by Édouard Manet that depicts the titular event that occurred on June 19, 1867.

The Execution of Emperor Maximillian of Mexico

21. In Shin Megami Tensei: Persona 3 and 4, this being is depicted as a tentacled phallus riding some kind of chariot. This being has literal and psychological interpretations in Buddhist teaching. Early Buddhists viewed this being as a nuisance rather than an all-powerful lord of evil. As a demon, it personifies unskillfulness, and the abandonment of the spiritual life to temptation. For 10 points, who or what is this demon that tempted Gautama Buddha with visions of beautiful women?

Mara

22. The origins of this city are disputed, Excavations indicate that the earliest settlement dates to 2300 BC. It may have been later refounded in the Hellenistic period by Seleucus I Nicator. Located on the Orontes River, currently this city is home to over 1.2 million people. This may change, however, as a result of the events of the “Arab Spring”. In May this year, the city was occupied by the Syrian army in a clampdown on protesters. It has continued to be a major site of unrest. For 10 points, what is this city, the third largest in Syria after Damascus and Aleppo, that was known in classical and Byzantine times as Emesa?
Homs
Bonuses

1. For 10 points within 15% or 5 points within 25%, give estimates for populations of these Canadian cities or towns.
   a) Whitehorse (as of June 2010)  
      26,418 (22455 to 30380 for 10 points, 19813 to 33022 for 5 points)
   b) Iqaluit (as of 2006)  
      6,184 (5256 to 7112 for 10 points, 4638 to 7730 for 5 points)
   c) Yellowknife (as of 2006)  
      18,700 (15895 to 21505 for 10 points, 14025 to 23375 for 5 points)

2. For the stated number of points, identify the following individuals involved in the upcoming US debt default.
   a) For 5 points, he is the current House Majority Leader  
      Eric Cantor
   b) For 5 points, he is the current Speaker of the US House of Representatives  
      John Boehner
   c) For 5 points each, identify any four of the so-called “Gang of Six” on the national debt  
      Any 4 of: Mark Warner, Dick Durbin, Kent Conrad, Saxby Chambliss, Mike Crapo, Tom Coburn

3. Visual Bonus: For 5 for 1, 10 for 2, 20 for 3, and 30 for all four, match each of the following query languages to one of the given queries (Moderator: Please hand out visual bonus page)  
   a) SQL  
   b) MDX  
   c) XPath  
   d) XQuery
   Answer: a → iii, b → i, c → iv, d → ii

4. For 5-5-10-10, answer the following about the Brontë sisters  
   a) The eldest sister, and author of Jane Eyre and The Professor  
      Charlotte Brontë
   b) The second eldest, and author of Wuthering Heights
Emily Brontë
c) The youngest sister, and author of Agnes Grey and The Tenant Of Wildfell Hall
Anne Brontë
d) The shared last name of the sisters’ pen names as authors of Poems by Currer, Ellis, and Acton ____.
Bell

5. For ten points each, answer the following questions about Canadian mountains
   a) Once almost named Mount Trudeau by Jean Chretien, it is the highest mountain in Canada
      Mount Logan

   b) Situated near the end of Bute Inlet, it is the highest mountain lying entirely within British Columbia
      Mount Waddington

   c) The highest peak in the Canadian Rockies, it is also the second highest peak lying entirely within BC
      Mount Robson

6. 5-10-15, identify the work by Alan Moore given the names of some characters
   a) V, Evey Hammond, Adam Susan
      V for Vendetta

   b) Rorschach, Dr. Manhattan, The Nite Owl, Ozymandias
      Watchmen

   c) Mina Harker, Fu Manchu, Captain Nemo, Professor Moriarty
      The League of Extraordinary Gentlemen

7. For 10 points each, answer the following related questions about a recently slain photojournalist.
   a) Name this British-American photojournalist who was killed by mortar fire on April 20, 2011.
      Timothy Alistair Telemachus Hetherington
b) Name the city in which Hetherington and American photojournalist Chris Hondros were killed.
Misrata

c) Name the 2010 documentary Hetherington co-directed with Sebastian Junger named after an observational post in Afganistan. Restrepo

8. For 10 points each, name these double reed instruments.
a) This instrument’s name stems from the Italian rendering of a 17th century French word meaning high wood.
Oboe

b) This 1.34m long instrument is folded over, giving a total sounding length of 2.54m to generate its noted warm, dark timbre. Bassoon

c) This medieval predecessor to the oboe was usually turned from a single piece of wood and featured a flared bell. Shawm

9. For 10 points each, name these Greek muses.
a) Greek for ‘delight of dancing’, she rules over dance and the dramatic chorus.
Terpsichore

b) The mother of Hyacinth and the muse of history, from the Greek for recount or make famous.
Clio

c) From the Greek for heavenly, she is the muse of astronomy, commonly depicted with a globe.
Urania

10. For the stated number of points, answer these questions about board games.
a) For 5 points, this game is played with 3 to 4, or up to 6 with an expansion. Players build roads and settlements using resources. A robber steals resources on a roll of a 7. Settlers of Catan

b) For 10 points, name the designer of Settlers of Catan
Klaus Teuber

c) For 15 points, name any one of the other three games Teuber has designed that were awarded the Spiel des Jahres (Game of the Year). Barbarossa, Drunter und Drüber or Hoity Toity (also accept Adel Verpflichtet)

11. For ten points each, answer the following questions about the Canadian north.
a) This gravel highway, Yukon Highway 5 and NWT Highway 8, connects Dawson City to Inuvik Dempster Highway

b) In the winter, an ice road extends to this town on the Arctic Ocean Tuktoyaktuk

c) Near Tuktoyaktuk, 8 of these geographical features consisting of earth covered ice are protected in a Canadian National Landmark. Pingo

12. For ten points each, answer these questions about the Byzantine-Sassanid War of 602-628 AD,
a) This man was king or shah of Sassanid Persia at the time. He initiated the war after the Emperor Maurice, who had helped him regain the Sassanid throne, was murdered by Phocas. Khosrau II (accept close approximations)

b) Name any one of the three major Christian relics that were allegedly looted by the Persians after their successful siege of Jerusalem in 614 AD. The True Cross, the Holy Lance (or the Lance of Longinus; accept equivalents), or the Holy Sponge

c) This man deposed Phocas, made himself emperor, and ruled from 610 to 641. During that time the Byzantines eventually defeated the Sassanid Persians, and recovered all their lost territory, only to subsequently lose most of it to the invading Muslim Arabs. Heraclius

13. For 10 points, name these schools of thought in modern psychology.
a) Founded by John B. Watson, major followers include Edward Thorndike, Clark L. Hull, and Edward C. Tolman. Behaviorism
b) Co-founded by Wolfgang Kohler, Max Wertheimer and Kurt Koffka. *Gestalt*

c) Influenced by William James, other major thinkers include John Dewey and Harvey Carr. *Functionalism*

14. For 10 points each, name these statistical terms.
   a) For a sequence S of numbers, this is a new sequence defined by taking the arithmetic mean of sub-sequences of n terms in S. *Moving average* (also accept rolling or running average)
   
   b) This is the probability that a variate would assume a value greater than or equal to the observed value strictly by chance. *P-Value*
   
   c) This is the degree to which a given quantity is correct and free from error. *Accuracy*

15. For 5-10-15, identify these stories by Edgar Allan Poe.
   a) It follows an unnamed narrator who begins to hallucinate after murdering an old man with a ‘vulture eye’.
      *The Tell-Tale Heart*
   
   b) Set in a nameless Italian city, it follows the narrator’s deadly revenge on a friend he believes had insulted him.
      *The Cask of Amontillado*
   
   c) The narrator visits a mental institute known for a revolutionary new treatment called the ‘system of soothing’.
      *The System of Doctor Tarr and Professor Fether*

16. For 5-5-10-10 points, answer these questions about the Lewis and Clark expedition.
   a) For 5 points each, name the year Lewis and Clark reached the Pacific and the president who commissioned them. *1805* and Thomas *Jefferson*
   
   b) Their visit to the Pacific Northwest, creation of maps, and declarations of sovereignty were used as steps to claim each indigenuous nation’s land under this international law concept. *Doctrine of Discovery*
c) In the winter of 1804, this fort was established along the banks of the Missouri.
Fort Mandan

17. For 10 points each identify the British new wave band, given a selection of band members (5 points if you need a hit single as a hint)
   a) Nick Rhodes, John Taylor, Simon le Bon
      Hint (for 5 points): Hungry like the Wolf
      Duran Duran
   b) Neil Tennant, Chris Lowe
      Hint (for 5 points): West End Girls
      Pet Shop Boys
   c) Bernard Sumner, Peter Hook, Stephen Morris, Gillian Gilbert
      Hint (for 5 points): Blue Monday
      New Order

18. For 10 points each, answer the following questions about biochemistry.
   a) This is the field of study dealing with changes in gene expression due to mechanisms other than changes to a DNA sequence
      Epigenetics
   b) Discovered by Stanley Prusiner in 1982, these infectious proteins induce well-folded proteins to fold into a diseased form
      Prions
   c) Known as “new-variant Creutzfeldt-Jakob Disease” in humans, this bovine affliction was first reported in North America in May 2003
      Bovine Spongiform Encephalopathy or Mad-Cow Disease

19. For 5-10-15 points, answer these questions about a 2011 uprising.
   a) For 5 points, name the country: Over 1300 civilians have been killed so far in protests in this country began on January 26th and became an uprising by March 15th.
      Syria
   b) For 10 points, name the current President of Syria who protesters are trying to force the resignation of.
      Bashar al-Assad (Prompt on al-Assad, DO NOT ACCEPT Hafez)
   c) For 15 points, give the pseudonym of used by an American man posing
as a lesbian Syrian blogger who was uncovered after initially claiming to be arrested.

Amina Arraf

20. For 10 points each, name these famous Chinese emperors.
a) The sixth emperor of the Qing dynasty, in his 60 year reign, he led successful wars of expansion, and was a renown collector of jade objects.
Qianlong

b) The founder of the Yuan Dynasty, he reigned for 33 years. He initiated the conquest of Sakhalin.
Kublai Khan (also accept Khubilai)

c) The seventh emperor of the Han dynasty, he ruled for 54 years and is noted for territorial expansions and paranoia in later life.
Wu

21. For 10 points each, answer these related questions about a contemporary author.
a) Published in 2009, this novel takes place a near future world where bees are extinct.
Generation A

b) For another 10, name the author of Generation A.
Douglas Coupland

c) Other than Generation A and Generation X, name any two of Coupland’s other works of fiction.
Shampoo Planet, Life After God, Microserfs, Girlfriend in a Coma, Miss Wyoming, All Families are Psychotic, God Hates Japan, Hey Nostradamus!, Eleanor Rigby, jPod, The Gum Thief, or Player One

22. For ten points each, answer the following questions about the race to become the 2012 Republican presidential candidate
a) Afflicted by migraines, and without a bill to her name, she is the founder of the house Tea Party Caucus
Michele Bachmann

b) The Governor of Minnesota from 2003 until early 2011, he has also previous served as president of the National Governors Association
Tim Pawlenty

c) This is the term used by T-Paw to tie Mitt Romney’s record on
health care to that of President Obama
Obamneycare
Bonus 3 (Visual Bonus -- Query Languages)

Query Languages:
   a) SQL
   b) MDX
   c) XPath
   d) XQuery

Sample Queries:
   i) SELECT [Employee].Members ON 0,
       {{Measures}.[EmployeeIDCount], [Measures].[SalarySum]} ON 1
       FROM EmployeeCube WHERE [Location].[Canada]

   ii) for $x in doc("books.xml")/bookstore/book
       where $x/price>30
       order by $x/title
       return $x/title

   iii) SELECT * FROM Employees WHERE Employees.EmployeeID = 0

   iv) /bookstore/book[price>35]/title