

Combined Age Was Well Over 100

Authors: Jo Soo, Brittany Zenger, Geoff Zenger, and formerly Hanson Ho

1) As strong proponent of the view of Canada as an Anglo-French union of equals, in 1915 this man denounced the “enemies of the French language... the English-Canadian anglicizers”. As a member of parliament, he opposed sending Canadians to the Boer War, and out of parliament he man later fought successfully against Borden’s plans to impose conscription during the first world war. In 1910 he founded *Le Devoir* to promote the Nationalist League, an organization that he had founded a few years earlier in 1903 to promote Canadian autonomy within the British Empire. For ten points, name this man, seen as Laurier’s protege by Conrad Black, who is often viewed as the father of French-Canadian nationalism.

Answer: **Henri Bourassa** (prompt on Bourassa as Robert Bourassa was a Premier of Quebec)

2) The third of this class of vessel is scheduled to be launched in 2025 and will carry the name Enterprise. The first of its kind, with hull number CVN-78, began in August 2005. As of 2013, construction costs have crept past \$12.8 billion, more than \$4 billion over the 2005 estimate. The size and shape of the island has been greatly reduced over previous generations, which increases deck capacity. The use of EALS, or Electromagnetic Aircraft Launch System over steam catapults will increase sortie capacity and reduce the required crew complement over the previous generation. For ten points, name this replacement for the Nimitz class aircraft carrier named after a U.S. president.

Answer: **Ford class carrier**

3) The city of Semarang marks the beginning of this event with the Dugderan carnival, which involves parading the Warak ngendog, a dragon-like creature allegedly inspired by the Buraq. Most scholars quantify a journey of at least 82 kilometers as sufficient to relax this event’s primary daily obligations. Nightly during this period, the meal usually begins with dates, as indicated by tradition. The conclusion of this event is marked by a celebratory day of feasting and gift giving, and in 2015, this event’s end was marked on July 17. For ten points, name this month-long fast observed by millions and named for the Arabic for *scorching heat*.

Answer: **Ramadan**

4) Everything from buildings to hairbrushes, clay pots to waste middens forms part of the record for this area of study. Language, gestures, and folk tales are some examples excluded from this categorization. Historian Jules Prown defines it as “the study through artifacts of the beliefs — values, ideas, attitudes, and assumptions — of a particular community or society at a given time”. In the absence of written record, this forms the nearly exclusive method for understanding prehistoric societies in archeology. For ten points, name this area of study or concept that focuses on the physical remnants left behind by a group.

Answer: **Material culture**

5) “I am the Smoke King! / I am Black! / I am swinging in the sky, / I am wringing worlds awry.” Begins one of the more famous of poet’s works. This author’s Black Flame Trilogy, follows the life of one man, Manuel Mansart, raising issues to the black fight against discrimination and intolerance in the post-Reconstruction era. One of the founding directors of the NAACP, this man was the first African American doctoral graduate from Harvard. For ten points, name this famous American historian and civil rights activist, author of “The Souls of Black Folk”.

Answer: **“W. E. B.” Du Bois**

6) The capital of this regime was originally called Yashodharapura or “glory bearing” city, and at its height it was the biggest city in the world, covering a thousand square kilometers. The decline of this empire is linked by some to the kings' adoption of Theravada Buddhism in which the king lost his god-king status. Other historians point to environmental changes that impacted the empire's massive water management systems. In 802 CE, Jayavarman II claimed the title “chakravartin”, beginning the 629 year reign of this empire. For ten points, name this southeast Asian empire with capital at Angkor whose name was appropriated by murderous communists in the 1970s.

Answer: **Khmer empire**

7) This Saskatchewan local made her feature film debut in the werewolf movie sequel *Ginger Snaps II: Unleashed*. So far, 2015 has marked a number of milestones for this actress as, community leaders have proposed a street be named after her in Regina, her acclaimed tv series resumed broadcast with its third season, and on July 16, after two years of snubs, she received a much awaited Emmy nomination. For ten points, name this versatile Canadian actress who simultaneously portrays the “seestra” characters Toni, Krystal, Rachel, Helena, Cosima, Alison, and Sarah, on the BBCAmerica and Space co-production *Orphan Black*

Answer: **Tatiana Maslany**

8) It was one of the featured applications in the first Apple Watch commercial even though it started life as an internal tool for the company Tiny Speck, which grew out of the team behind Flickr. Launched as a standalone product in August of 2013, it experienced rapid growth, and by June of 2015, it had over a million daily active users. At its core, it's a team and topic based communication tool that segregates discussion by channels, though you can also send direct messages and create private groups. Its popularity is due partly to its ease of use and wealth of 3rd party integrations. For ten points, name this software product and the namesake company, led by CEO Stewart Butterfield, that raised its last round of funding in March of 2015 at a valuation of \$2.76b.

Answer: **Slack**

9) Every third weekend of September, fans of this author make an annual pilgrimage to her homestead, Rocky Ridge, in Mansfield, Missouri. On February 7th, 2015, this author was honoured with a Google doodle commemorating the 148th anniversary of the writer's birth. This author's first novel of eight was not published until she was in her 60s. Modern scholars of her work now credit her daughter, journalist and libertarian, Rose W____ Lane as editor, and even ghostwriter for her mother's later novels. Famously portrayed on TV by Melissa Gilbert, For ten points, name the subject of the 2014 work entitled *Pioneer Girl: an Annotated Autobiography*, and the author of the "Little House" series.

Answer: **Laura Ingalls Wilder**

10) This German mathematician from St. Petersburg was the namesake of a function, a set, a distribution, a paradox, a theorem, a space, and a cube, and is widely considered to be the founder of modern set theory. His namesake set is constructed by starting from a unit line and repeatedly removing the open middle third of each segment infinitely until there is no line segment remaining of non-zero length, and his continuum hypothesis became the first of Hilbert's 21 problems. Confined in his late years to a sanatorium, for ten points name this mathematician best known for his diagonal argument and proof that there are more real numbers than integers.

Answer: **Georg Cantor**

11) While painting portraits of children, this artist began to introduce this signature augmentative feature into her work. In 1961, her painting "Our Children" was presented to the United Nations Children's fund. Later commissions included Joan Crawford, Liberace, and Linda Cardellini. In 1986, the artist sued both *USA Today* and her by then ex-husband for an article continuing to misattribute her work to her ex-husband. At the trial, the judge decided to settle the case by having both plaintiff and defendant paint a canvas featuring the notable augmentation, a battle in which this artist emerged triumphant. For ten points, name the painter who was portrayed by Amy Adams in the 2014 Tim Burton film, *Big Eyes*.

Answer: **Margaret Keane** prompt on Keane as paintings were formerly attributed to Walter Keane

12) It contains elements of the Latin comedy *Aulularia* by Plautus. The title character is a widow who tries to marry a young woman who is already in love with his son. He also wants to marry his daughter to a rich man, even though she too is already in love with someone else. The play ends with the young lovers getting married after a series of farcical incidents involving stolen money and almost-incest. For ten points, name this comedy in 5 acts by Molière, whose titular character Harpagon really loves his money.

Answer: **The Miser (L'Avare)**

13) Project E-PANA was started by the RCMP in 2005 to investigate it, even though the incidents under investigation started as early as 1969. Institutional racism was blamed for the delay in the investigations, as many of the victims like Ramona Wilson were First Nations women. For ten points, name the moniker given to a 724 km stretch of Highway 16 between Prince George and Prince Rupert, so named for the murder or disappearance of at least 18 women along in and nearby roads between 1969 and 2011.

Answer: **Highway of Tears**

14) Born in Louisiana, this man was a Rhodes Scholar before going on to serve as Louisiana Health Secretary at the age of 24, and later was appointed to the Bush Administration as an Assistant Secretary of Health at the age of 30. Later as the assistant governor of the Republican Governor's Association he famously called on the Republican party to "stop being the stupid party". For ten points, name this man, currently running for the Republican nomination for the President of the United States, the first of America's Indian-American governors, and the current Governor of Louisiana.

Answer: **Bobby Jindal**

15) This recurring ceremony typically opens with a chant beginning "Deus, in adiutorium meum intende", meaning "O God, come to my assistance", although the final word of the chant, "Alleluia", is omitted during Lent. Following this, a hymn and some psalms are sung, and this is followed by a bible reading. Later, the "Magnificat" is sung, and often a priest will conclude the ceremony with the Benediction of the Blessed Sacrament. Meant to give thanks for the day just past, for ten points, what is this evening service in the Catholic tradition?

Answer: **Vespers** (prompt on "Evening Prayer")

16) Celebrating its 50th anniversary of independence in August 2015, this country's current leader Lee Hsein Loong, is the son of its founder. Its main island is Pulau Ujong, and was the site in February 1942 of what Winston Churchill later called the "largest capitulation" in British history. Long known for its strict order and lack of corruption, it is famous for its ban on chewing gum except for medicinal purposes as prescribed by a doctor. For ten points, what is this small city-state situated on the southern end of the Malay peninsula?

Answer: **Singapore**

17) A member of this phylum forms the centre of Botticelli's "The Birth of Venus", from which a goddess is emerging. The largest of all marine phylums, membership is characterized by the presence of a mantle for breathing, a radula for feeding, and a pair of nerve cords to control the body. Parts of some of its members, such as the cowrie, have been used as currency, while other parts are today commonly consumed as food. For ten points, name this phylum that includes animals such as snails, mussels, and slugs

Answer: **Molluscs or Mollusca**

18) Earlier in 2015 this man guest-starred as himself on an episode of The Simpsons, in which he constructed the Springfield Hyperloop, the Glavinator, and installed a magnetohydrodynamic generator at the power plant, in addition to becoming Homer's best friend. In real life, the Hyperloop is one of this South African/Canadian/American man's many ideas, as were PayPal and the recently announced Powerwall. Sometimes called a real world Tony Stark, for ten points, name this man, the founder of PayPal, SpaceX, and Tesla Motors.

Answer: **Elon Musk**

19) First articulated by Henry Sedgwick in the late 19th century, there are several possible solutions to these economic problems, such as the introduction of a Pigovian tax or the imposition of regulations to mitigate them. On a supply and demand curve, they are represented by the addition of either a second supply curve or a second demand curve to represent the difference between the private and social cost or benefit of the good, and the Coase theorem describes the efficiency of an allocation in the presence of these. For ten points, what is this concept that describes the costs or benefits affecting a party that did not choose to incur that benefit or cost.

Answer: **Externality or Externalities**

20) The first practical one of these devices was invented by James Hillier and Albert Prebus in 1938 while they were graduate students at the University of Toronto. Different types of this device include "scanning", "transmission", "scanning transmission", and "reflection", and the most powerful are able to achieve a resolution of 50 picometres. For ten points, what are these devices that are able to use a beam of their namesake small negatively charged particles to view matter at a tiny scale.

Answer: **Electron microscope**

21) Ruled by the Askiya dynasty for most of its existence, it conquered cities such as Djenné and Timbuktu as it expanded, with Gao as its capital. Its ascension coincided with the decline of the Mali Empire, but it collapsed before Mali did at the hands of invading Moroccan forces at the Battle of Tondibi. For ten points, name empire named after its most prominent ethnic group, whose culture continued with the Dendi Kingdom, that ruled from the middle of the 15th century CE to the late 16th century in western Africa.

Answer: **Songhai Empire**

22) Its official language is French, it uses the Euro as its currency. It was occupied by Great Britain between 1794 to 1815, but it was traded back to France at the end of the Napoleonic Wars. First sighted by Christopher Columbus in 1493, it is northwest of Barbados, south of Dominica, and north of Saint Lucia. Paul Gauguin lived there for a period, and it was the setting of the film To Have and Have not. For ten points, name this island in the eastern Caribbean sea with a population of around 400,000, an overseas department of France.

Answer: **Martinique**

23) The approximately 30,000 species that comprise this family of creatures range from 1.5 to 160mm. They have clubbed antennae composed of plates called lamellae, which can be used to detect odours, and their front legs are well suited for digging, which aids them in scavenging for dung and other waste material. For ten points, name this family of insects that include dung beetles and Japanese beetles, as well as a type that was worshipped by ancient Egyptians as being sacred, the symbol of the god Khepri.

Answer: **Scarab beetles (Scarabaeidae) [prompt on dung beetle]**

24) The Canadian House of Commons passed motion M-387 in 2009 to add the word “Canadian” to its name, staking its claim to something whose ownership is disputed by other countries. Estêvão Gomes, Martin Frobisher, and Sir John Franklin attempted to navigate it, but ultimately failed in doing so. For ten points, name this sea route, first navigated in the early 20th century by Roald Amundsen, located in Northern Canada, connecting the Atlantic and Pacific Oceans.

Answer: **Northwest Passage**

BONUS QUESTIONS

1) **(Visual Bonus #1)** Selfie, schmelfie, it's time to take things old school. Have a look at these examples from mydageurreotypeboyfriend.tumblr.com, and give us the names of these handsome, steely-eyed gentlemen for the stated number of points

- A. For 5 points, who is the man in picture A?

Answer: **Dwight D. Eisenhower** (pictured with Mamie Doud Eisenhower on their wedding day)

- B. For 5 points, who is the man in picture B?

Answer: **Teddy Roosevelt**

- C. For 10 points, who is depicted in picture C?

Answer: **Hermann Rorschach**

- D. For 10 points, who is depicted in picture D?

Answer: **Frederick Douglass**

2) Given a short description of some of this year's Canada Reads picks, provide the author and title for five points each.

- A. In this controversial book inspired by true events, a middle-schooler and his best friend experiment with sex, drugs, and provocative behavior that results in major consequences for the star of the show.

Answer: **[5, 5] When Everything Feels Like the Movies, Raziel Reid**

- B. Suffocated by a macho upbringing in Croydon Harbour, Labrador, this titular character, who is intersex and was raised as a male, moves to St. John's to embrace her biological femininity that was suppressed by her stoic father, but was secretly nurtured by her mother and her mother's best friend.

Answer: **[5, 5] Annabel, Kathleen Winter**

- C. The winner of this year's debate was this coming of age story that tells of a young girl's journey from war-stricken Vietnam to Quebec via a Malaysian refugee camp. Originally published in French in October 2009.

Answer: **[5, 5] Ru, Kim Thúy** (confirm with spelling if needed)

3) For ten points each, answer the following questions related to Earth's highest mountain, which is 8848 metres high.

- A. Give the Nepalese name for this mountain.

Answer: **Sagarmāthā**

- B. Give the Tibetan name for this mountain.

Answer: **Chomolungma**

- C. Although Mount Everest may be the highest mountain, due to its location on the equatorial bulge, this peak has the summit that is the furthest from the Earth's core.

Answer: **Chimborazo**, in the Andes

4) **(Visual Bonus #2)** You have been handed a sheet with several items. For ten points each, identify the following textile crafts as presented.

Answers:

- A. (Illusion) **Knitting**
- B. **Amigurumi** or accept **Crochet**
- C. Needle/ Wet **Felting**

Photo credits :

- A. <http://www.ravelry.com/projects/illusionary/game-of-thrones-house-stark-direwolf-illusion>
- B. <http://www.ravelry.com/patterns/library/joy-from-the-inside-out>
- C. <http://meowoof.com.au/2015/05/needle-felted-neko-atsume-kitties/>

5) **(Visual Bonus #3)** You have been handed a sheet featuring several written characters. For ten points each, identify the written script / style of writing.

Answers:

- A. Accept either **Zhuyin** fuhao, Zhuyin or **Bopomofo**
- B. **Simplified Chinese** or equivalents
- C. **Traditional Chinese** or equivalents

6) On April 24, 2015, Former Olympian Bruce Jenner formally acknowledged his desire to transition from male to female. For the stated number of points, answer the following about Jenner's new role as the world's arguably most high profile transgender person.

- A. [5] What new feminine name has Jenner chosen for herself?

Answer: **Caitlyn**

- B. [5] On the cover of which magazine did Jenner choose to reveal her new image?

Answer: **Vanity Fair**

- C. [10] Jenner accepted which award at the 2015 Excellence in Sports Performance Yearly awards ceremony?

Answer: **Arthur Ashe Courage Award**

- D. [10] Prior to Jenner's AACA award acceptance, these two LGBT figures were also awarded an AACA. Two answers required

Answer: **Michael Sam** and **Robin Roberts**

7) For ten points, answer the following questions about Chinese Claims in the South China Sea

- A. This famously vague and disconnected line describes China's standard claim to the South China Sea

Answer: **Nine-Dashed Line** or **Nine-Dotted Line**

- B. The original line drawn in 1947 included another two dashes lying in this body of water formed between Vietnam and China's Hainan Island

Answer: **Gulf of Tonkin**

- C. In June 2014, China added a tenth dash to their line, visually demonstrating their claim to this large island that lies approximately 180km off the south east coast of China

Answer: **Taiwan or Formosa**

8) For ten points each, name the game made by Gabe Newell and his merry crew down at the Valve Corporation

- A. The fourth game in its franchise, this tactical first-person shooter features short games of terrorists vs counter-terrorists where in each round the player can only die once.

Answer: **Counter-Strike: Global Offensive** (accept CS:GO or variants)

- B. Based off of a popular Warcraft 3 mod and curated by IceFrog, this multiplayer online battle arena (MOBA) sees players controlling an individual hero and is played by approximately 11 million players each month

Answer: **DOTA 2**

- C. The first game in its franchise, this first-person puzzle game based on a series of teleportation aptitude tests introduced the world to the creepy voice of GLaDOS. The cake was a lie.

Answer: **Portal**

9) For ten points each, name the American poet given lines from one of their poems. Five points if you need some of his or her poem's names.

- A. so much depends
upon

a red wheel
barrow

glazed with rain
water

beside the white
chickens

For 5 points: **Poem Names:** The Red Wheelbarrow, To Elsie, On The Road to the Contagious Hospital

Answer: **William Carlos Williams**

- B. APRIL is the cruellest month, breeding
Lilacs out of the dead land, mixing
Memory and desire, stirring
Dull roots with spring rain.

For 5 points: **Poem Names:** The Waste Land, The Hollow Men, Ash Wednesday

Answer: **T.S. Elliot**

- C. I placed a jar in Tennessee,
And round it was, upon a hill.
It made the slovenly wilderness
Surround that hill.

For 5 points: **Poem Names:** Anecdote of the Jar, The Idea of Order at Key West, The Emperor of Ice Cream

Answer: **Wallace Stevens**

10) (**Visual Bonus #4**) For 10 points each and 5 points if you need a hint of why it's notable, identify the Canadian mountain, given a photo:

- A. Hint: Found in the St. Elias Range, it is Canada's highest mountain

Answer: **Mt. Logan**

- B. Hint: Found near the head of Bute Inlet, it is the highest mountain lying entirely within British Columbia

Answer: **Mt. Waddington**

- C. Hint: Located east of Jasper along the Yellowhead highway, it is the tallest peak in the Canadian Rockies

Answer: **Mt. Robson**

11) For 10 points each, identify the main ethnic group killed in each genocide.

- A. Rwanda, 1994

Answer: **Tutsi**

- B. The Holodomor, 1932-1933

Answer: **Ukrainian**

- C. German South-West Africa (now Namibia), 1904-1907

Answer: **Herero**

12) (**Visual Bonus #5**) For ten points each, answer the following questions about some memes:

- A. Name the woman who inspired this drawing.

Answer: **Bree Newsome**

- B. Name the space craft satirized in this drawing.

Answer: **New Horizons**

- C. Name this man, who in February 2015, was suspended without pay from *Nightly News* for exaggerating his proximity to danger while covering a news story in Iraq in 2003.

Answer: **Brian Williams**

13) How long has it been since you did some first year integrations? For 5-5-10-10, what are the results of the following integrals?

--- Note to reader, write on chalkboard if available. Ignore missing constants in answers

- A. For five points - $\int a \, dx$ (The integral of a by dx)

Answer: **$ax + C$** (a times x plus a constant)

- B. For five points - $\int x^2 \, dx$ (The integral of x squared by dx)

Answer: **$\frac{x^3}{3} + C$** (x cubed divided by 3 plus a constant)

- C. For ten points - $\int \sec^2(x) \, dx$ (The integral of secant squared of x in radians by dx)

Answer: **$\tan(x) + C$** (tangent of x plus a constant)

- D. For ten points - $\int a^x \, dx$ (The integral of a to the power of x by dx)

Answer: **$\frac{a^x}{\ln(a)} + C$** (a to the power of x divided by natural log a plus a constant)

14) For ten points each, from the National Gallery of Canada description, name the piece of art.

- A. Limiting his colours to red and blue, ... this powerful vertical canvas ... appears simple in form ...[but] conveys a range of meanings. [The artist] intended the work to be studied from a short distance; its enormous scale transforms the space and tests our sensory experience.

Answer: **Voice of Fire**

- B. Inspired by the landscape around Little Cauchon Lake, this picture of a solitary [tree], its drooping boughs silhouetted in the light of a northern Ontario sunset, assumes special emotional and symbolic significance through the artist's formal treatment.

Answer: **The Jack Pine**

- C. The [artist] produced lithographs about the hardships and inconveniences of rail travel as early as 1843 ... the humble circumstances of the family in the foreground are portrayed with a noble simplicity, and the look of stoic resignation and fatigue etched on the face of the old woman evokes profound sympathy.

Answer: **The Third-class Carriage**

15) For ten points each, given a chemical name of a vitamin, name the vitamin, 5 points if you need the name of a condition caused by a deficiency of that vitamin.

- A. Ascorbic Acid (for 5 points: Scurvy)

Answer: **Vitamin C**

- B. Niacin (for 5 points: Pellagra)

Answer: **Vitamin B3**

- C. Retinol (for 5 points: Night Blindness)

Answer: **Vitamin A**

16) For ten points each, identify the book of the King James' Bible containing the following verse

- A. "Thou shalt not kill"

Answer: **Exodus**

- B. "And I saw when the Lamb opened one of the seals, and I heard, as it were the noise of thunder, one of the four beasts saying, Come and see."

Answer: **Revelations**

- C. "Blessed are the meek: for they shall inherit the earth"

Answer: **Matthew**

17) For 5-5-10-10, identify the classic rock band given some album names

- A. Master of Puppets, ... and Justice for All, Load, St. Anger

Answer: **Metallica**

- B. The Number of the Beast, Powerslave, Somewhere in Time, Seventh Son of a Seventh Son

Answer: **Iron Maiden**

- C. Rust in Peace, Countdown to Extinction, Peace Sells... but Who's Buying?

Answer: **Megadeth**

- D. British Steel, Painkiller, Screaming for Vengeance, Ram It Down

Answer: **Judas Priest**

18) You have just been handed a piece of paper depicting in visual form the core statements of three computing science theorems. For ten points each, identify the theorems.

Answers:

- A. **Savitch's Theorem**
- B. **Time Hierarchy Theorem**
- C. **PCP Theorem**

19) Answer the following questions about North West coastal folklore.

- A. According to Squamish legend, a "warrior chief" in the pursuit of "clean fatherhood" was transformed into this "noble and upright" landmark when he defied the orders of Xáays (Q'uas) the transformer.

Answer: **Siwash Rock**

- B. A man returns from a prolonged hunting expedition to find his industrious wife, who as a new bride amused herself by swimming, nowhere to be found. He eventually discovers she has been living in a partially submerged home, and has been transformed into this creature.

Answer: **Beaver**

- C. These creatures are said to be the reincarnated souls of those lost at sea. Legend also claims that these creatures were once white wolves, and all that remains of their former selves are white markings on their sides and tendencies toward pack behavior.

Answer: **Orca** (accept equivalents such as Killer Whale or Blackfish)

20) For ten points each, answer the following questions about some Canadian notable names.

- A. Annette and Cecile are, at 81 years old, the last remain sisters in this famous sibling group born in 1934.

Answer: **Dionne Quintuplets**

- B. This man both delivered and later became guardian/exhibitor of the Quints until they were finally returned to their parents at the age of nine.

Answer: **Allan Roy Dafoe**

- C. Name any one of the three deceased sisters who lived as with Annette and Cecile at the Dafoe Hospital and Nursery while they were Wards of the King under the Dionne Quintuplets' Guardianship Act of 1935.

Answer: **Émilie, Marie, or Yvonne**

21) For ten points each, given a short description, name the instrument and the character it represents in Sergei Prokofiev's composition of Peter and the Wolf.

- A. This instrument/character stalks both the Oboe and Flute before the Strings chase him off.

Answer: **Clarinet/Cat**

- B. This character is caught in a noose by the tail and tied to a tree by the Strings

Answer: **French Horn/Wolf**

- C. This character scolds and admonishes the Strings throughout the short symphony.

Answer: **Bassoon/Grandfather**

22) For 5-5-10-10, identify the organ from the rat dissection description:

- A. For five points, It is a gray or brown swelling on either side of the trachea.

Answer: **Thyroid** gland

- B. For five points, it is a coiled tube on the surface of the testis.

Answer: **Epididymis**

- C. For ten points, it is a brownish, flattened gland found in the tissue between the stomach and small intestine.

Answer: **Pancreas**

- D. For ten points, it pierces the diaphragm and is distinguished from the trachea by its lack of cartilage rings.

Answer: **Esophagus**

Visual Bonus #1

1) 5 points



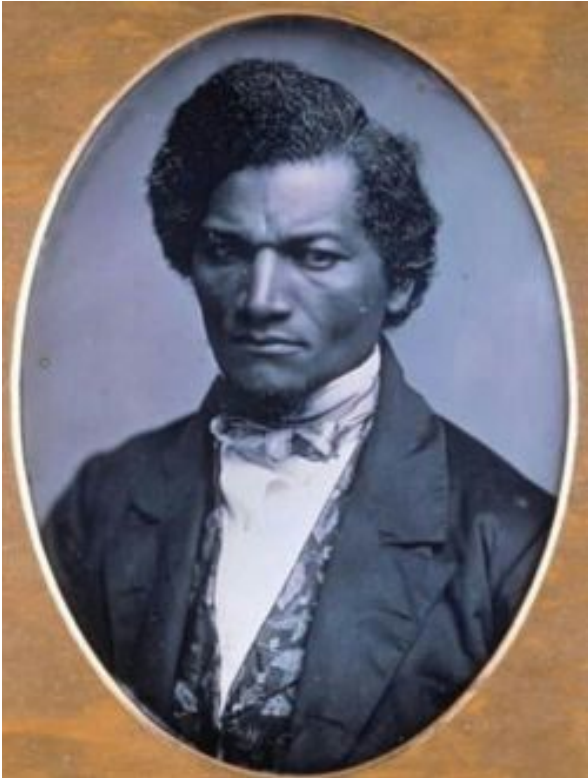
2) 5 points



3) 10 points



4) 10 points



Visual Bonus #2

勺 叉 冂 匚

フ又口亡
勿去乃
く巧尸
耳く下
虫糸尸
尸ちム
一又口
丫丕世
所へ玄又
乃く尤
凡・く・

A.

B.

学

C.

學子

Visual Bonus #3



A.



B.



C.

Visual Bonus #4

A.



B.



C.

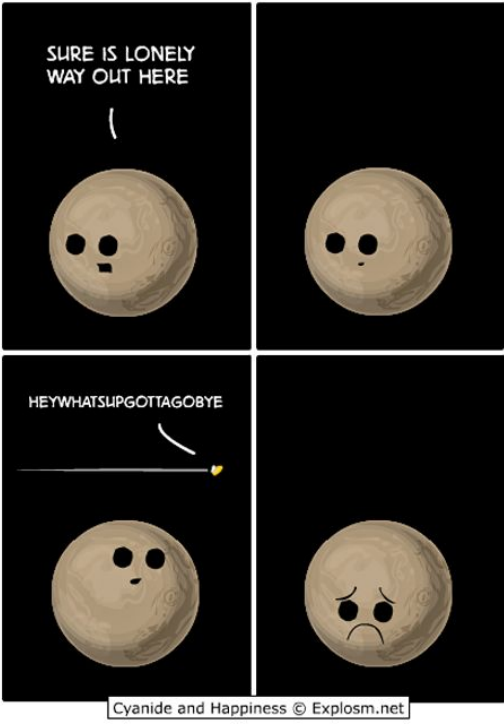


Visual Bonus #5

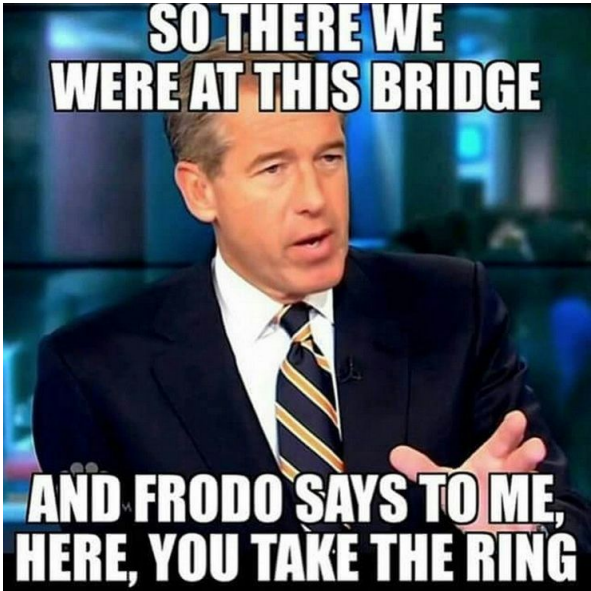
A.



B.



C.



Visual Bonus #6

A.

$$\text{NSPACE}(f(n)) \subseteq \text{DSPACE}((f(n))^2)$$

B.

$$\text{DTIME}\left(o\left(\frac{f(n)}{\log f(n)}\right)\right) \subsetneq \text{DTIME}(f(n)).$$

C.

$$\text{NP} = \text{PCP}[\text{O}(\log n), \text{O}(1)]$$