

Montgomery Blair Academic Tournament

We hope you enjoy this sample half-packet from MBAT. Given its length, this sample does not exactly match the set's formal question distribution, which you can find in our housewrite announcement. If you have any questions about our questions, please let us know at mbhs.quizbowl@gmail.com.

Tossups

1. An early patriarch of this family was a charlatan with the alias Dr. William Levingston. An anthropologist from this family was likely devoured by cannibals in New Guinea, and another led Chase Bank from 1969 to 1980. One politician from this family was a long-time senator from West Virginia, while another served as (*) Governor of New York and Gerald Ford's Vice President. The originator of this family's fortune founded the University of Chicago and was criticized for his monopolistic tendencies by Ida Tarbell. For ten points, name this wealthy American family with a namesake New York "Center."

Answer: Rockefeller Family (accept any Rockefeller mentioned: William, Michael, David, Jay, Nelson, or John Rockefeller)

2. The artist who headed the Cologne branch of this movement created reliefs like *Shirt Front and Fork* and often incorporated random chance into his collages. Another artist from this movement created photographs without the use of a camera which he eponymously dubbed "Rayographs." This movement was developed in Zurich with the help of those two artists: Jean Arp and (*) Man Ray. One work by another artist from this movement was a urinal signed R. Mutt, a kind of work the artist termed a "readymade". For 10 points, name this early 20th century avant-garde art movement epitomized by *Fountain* and other works by Marcel Duchamp.

Answer: Dada

3. One element in this group mixed with oxygen activates production of HIF1A, which can improve athletic performance. Lee and Osheroff used a Pomeranchuk cell to study one element in this group, while Neil Bartlett prepared a compound containing one of these elements and four fluorine atoms with a (*) square planar molecular geometry. Exposure to one of these elements is the second-leading cause of lung cancer in the United States. Shorthand electron configuration is written using the symbols of these elements, which possess the highest first ionization energies. For 10 points, name this group of unreactive elements which includes Xenon, Radon, and Helium.

Answer: Noble Gases (accept "Inert Gases" or "Group 18" or "Group 8A")

4. In an Arthur Miller play titled for one of these things, Marco stabs Eddie Carbone after being turned in to Immigration Services. In a novel about one of these things, one character uses letters to communicate with her daughter in Lima. That character, Doña María, later dies on one of these things in an event witnessed by (*) Brother Juniper. The sound of a watch seems unbearably loud to Peyton Farquhar in an Ambrose Bierce short story named for one of these structures at Owl Creek. For 10 points, Thornton Wilder's most famous novel is about one of what kind of structure "of San Luis Rey"?

Answer: Bridges

5. Early in his life, this figure helped secure the submission and friendship of Galehaut. Originally called the White Knight, this figure discovers his name after lifting up a rock. This man receives three shields from the Lady of the Lake before chasing the Copper Knight from the Dolorous Guard, which he renames the (*) Joyous Guard. Elaine of Astolat dies as a result of her love for this figure, and he mortally wounds Gawain in a duel. This man's affair with Guinevere prevents him from locating the Holy Grail. For 10 points, name this brave knight of the Round Table whose son Galahad succeeds in finding the Holy Grail.

Answer: Sir Lancelot du Lac

6. He's not Planck, but the reduced form of a constant named for this man is the sum of the Compton wavelengths of a proton and electron divided by 2π times the fine-structure constant.

This physicist developed a unit for describing the magnetic moment of an electron attributable to angular momentum, his namesake (*) magneton. This mentor of Werner Heisenberg successfully reproduced the Lyman series, which in turn was used to derive the Rydberg formula. For 10 points, name this Danish physicist who postulated that electrons orbit the nucleus at a discrete set of distances in his namesake atomic model.

Answer: Niels Bohr

7. In this war, one side employed bandits and brigands known as the Chunguses. Early defeats in this war led one side to order an epic 18,000 mile redeployment of its fleet, during which it suffered the humiliating Dogger Bank Incident. Two-fifths of Sakhalin was awarded to this winner of this conflict, which that country started with a (*) surprise assault on Port Arthur. The decisive battle of this conflict was fought at Tsushima, and this war concluded with the Treaty of Portsmouth. For ten points, name this conflict which saw a rising Asian nation cripple the Romanov dynasty.

Answer: Russo-Japanese War

8. One theme in this work is transposed up a perfect fifth to F-sharp the second time it is played, and another section depicts the abduction of a bride during "Ingrid's Lament". The seductive dance of a Bedouin woman is heard in "Anitra's Dance", while the central character is sung a lullaby in (*) "Solweig's Song." A scene depicting a sunrise over the Moroccan desert is accompanied by a flute solo descending from B to E in this work's "Morning Mood". For 10 points, name this set of incidental pieces containing "In the Hall of the Mountain King" composed by Edvard Grieg.

Answer: Peer Gynt Suite (prompt on "In the Hall of the Mountain King" before "abduction")

9. This river is home to the crocodile-eating Goliath Tigerfish. Diego Cão was the first European to explore this river, which powers the massive Inga Dams. Fed by the rivers Kasai and Lomami, this river picks up speed in the "Gates of Hell" before entering Lualaba. Dangerous rapids emerge from this river's (*) Livingstone Falls, while it begins at Boyoma Falls near Kisangani. This river can be used to reach the mineral-rich Katanga province, and it is linked by tributaries to Lake Tanganyika. For 10 points, name this second longest river in Africa that flows between Brazzaville and Kinshasa.

Answer: Congo River (prompt on "Zaire River")

10. This poet talks about how a title entity, "shall hang them up in silent icicles" in a conversation poem titled "Frost at Midnight." The main character of another poem by this man is implied to have slept with the daughter of her father's best friend. That poem is (*) Christabel. This poet wrote about a ruler who constructed "a stately pleasure dome" in the land of Xanadu, and in this poet's most famous work, the title character talks of "Water, water, every where, nor any drop to drink." For ten points name this poet of "Kubla Khan" and "The Rime of the Ancient Mariner".

Answer: Samuel Taylor Coleridge

Bonuses

1. Answer the following questions on the Canadian North. For ten points each:

Name this westernmost Canadian territory with capital at Whitehorse. It contains Canada's largest mountain, and experienced the Klondike Gold Rush during the late 19th century.

Answer: Yukon

East of the Yukon is this largest lake of Canada, which covers 12,000 square miles in the Northwest Territories.

Answer: Great Bear Lake (accept *Grand lac de l'Ours*)

The Northwest Territories, Yukon, and this newest and largest territory comprise the Canadian North. Founded in 1999, this region houses a mostly Inuit population of 32,000 people.

Answer: Nunavut

2. This identity states that cosine x plus i sine x all raised to the n equals cosine nx plus i sine nx. For 10 points each:

Name this theorem that allows complex numbers to be easily raised to powers by connecting them to trigonometry.

Answer: de Moivre's formula (accept equivalents like theorem or identity instead of formula)

In addition to that theorem, Abraham de Moivre first stated Stirling's approximation for this function. It is the product of all numbers less than or equal to a given x value, and is represented by an exclamation point.

Answer: Factorial

De Moivre also names a special case of the central limit theorem with this French statistician, whose namesake operator is denoted del squared.

Answer: Pierre-Simon, Marquis de Laplace

3. Many French explorers made significant contributions during the Age of Exploration. For ten points each:

This "Father of New France" charted much of eastern Canada and founded Quebec City. A lake in New York and Vermont is named for him.

Answer: Samuel de Champlain

This Rouen-born explorer built on Champlain's discoveries, travelling from the Great Lakes to the Gulf of Mexico and claiming the whole Mississippi Basin for France.

Answer: René-Robert Cavelier, Sieur de La Salle (accept *Robert de La Salle*)

This French Canadian disappeared in 1700, but only after exploring much of the Upper Mississippi with Jacques Marquette.

Answer: Louis Jolliet

4. Answer the following questions about biblical figures who changed their names. For ten points each:

Name this apostle who, following a revelation along the Road to Damascus, changed his name from Saul.

Answer: St. Paul the Apostle

In the Book of Genesis, this patriarch wrestled with God through the night, earning for himself both a permanent limp and the new name "Israel."

Answer: Jacob

This Jewish exile's name was changed from Azaria by his Babylonian captors. Along with Shadrach and Meshach, this man survived immolation at the hands of Nebuchadnezzar.

Answer: Abednego

5. In 2017, this man announced a new book entitled *We Were Eight Years in Power*. For ten points each: Name this national correspondent for *The Atlantic*. He writes predominantly about racial justice issues, and was awarded a MacArthur Foundation "Genius Grant."

Answer: Ta-Nehisi Coates

In 2014, Coates wrote a much-publicized article in *The Atlantic* about this policy proposal, which calls for the U.S. government to compensate a certain racial group for past injustices.

Answer: Reparations for Slavery (accept similar answers mentioning **Reparations**)

Coates also penned this 2015 best selling autobiography inspired by James Baldwin's *Fire Next Time*. It is addressed as a letter to Coates' teenaged son.

Answer: Between the World and Me

6. This man's controversial novel *Children of Gebelawi* caused an Islamic extremist to stab him in the neck. For ten points each:

Name this prolific Arab author and Nobel Laureate who penned *The Day the Leader was Killed* and *The Thief and the Dogs*.

Answer: Naguib Mahfouz

Mahfouz was from this Middle Eastern nation. His *Cairo Trilogy* followed three generations of families from this country.

Answer: Egypt

Mahfouz's novel *Midaq Alley* was adapted into a Mexican film starring this actress. This actress also appeared as Elisa in *30 Rock* and as the title character in *Frida*.

Answer: Salma Hayek Jiménez Pinault

7. In this process, aldolase produces dihydroxyacetone phosphate and glyceraldehyde 3-phosphate. For 10 points each:

Name this pathway that breaks down glucose into pyruvate.

Answer: Glycolysis

The first step of glycolysis involves the phosphorylation of glucose using this enzyme, which catalyzes the production of glucose 6-phosphate.

Answer: Hexokinase

The ATP-binding domain of hexokinase is composed of five of these structures, four of which are parallel.

This secondary protein structure is often contrasted with alpha helices, and the ends of these structures bond to form barrels.

Answer: Beta-sheets (accept **beta-pleated sheets**)

8. West Africa has been home to complex human settlement for the past 14,000 years. For ten points each: Name this West African kingdom founded Sundiata Keita whose legendarily wealthy ruler Mansa Musa made a pilgrimage to Mecca in 1325.

Answer: Mali Empire (accept **Manden Kurufaba**)

The Mali Empire was succeeded as the chief political power in West Africa by this kingdom, which dominated the Sahel during the 15th and 16th centuries and was governed from Gao.

Answer: Songhai Empire

Both the Mali and Songhai Empires were centered around this West African river, the namesake of a contemporary Saharan nation.

Answer: Niger River

9. This play ends with the main character shouting “I’m not capitulating” to the audience.

For 10 points each, name this play in which Berenger watches everyone he knows, including his love Daisy, turn into the title animal.

Answer: Rhinoceros

Berenger also appears in *Exit the King* and *The Killer*, two other plays by this Romanian-born absurdist playwright of *Rhinoceros*.

Answer: Eugene Ionesco

Ionesco wrote *Rhinoceros* in this language. Fellow absurdist Samuel Beckett originally wrote *Waiting for Godot* in this language, in which it was titled *En attendant Godot*.

Answer: French (or Français)

10. The area surrounding this plaza was entirely wetlands until the 7th century BC. For ten points each:

Name this large building complex in Rome, containing such structures as the Curia Julia and the Temple of Castor and Pollux.

Answer: Roman Forum (or Forum Romanum)

The Forum contains one of these structures dedicated to Septimius Severus. Structurally supported with voussoirs, other examples of these street-spanning constructions include those of Constantine and Titus.

Answer: Triumphal Arch

The final addition to the Roman Forum was the Column of Phocas, designed in this classical order. This order has characteristic slim, fluted columns with ornately decorated capitals.

Answer: Corinthian Order