

**1996 Georgia MLK Tossups by Wake Forest II (Ryan Bowles, McHenry Kane, etc.)**

1. He was born in 1939 in Mossbawn, County Derry in Northern Ireland, to Catholic parents, the eldest of their nine children. As a student he began to publish poetry under the pseudonym of "Incertus." In Belfast he became associated with "The Group," young writers including Derek Mahon, Michael Longley and James Simmons. Among his works are Death of a Naturalist, and The Haw Lantern. FTP, name this man who for his "works of lyrical beauty and ethical depth, which exalt everyday miracles and the living past," was awarded the 1995 Nobel Prize in literature.

Answer: Seamus Heaney

2. In 1930, he founded a society for space travel and later became head of research at Peenemunde, a rocket complex prohibited by the terms of the Treaty of Versailles. FTP, identify this developer of the V-2 rocket and head of Germany's rocket program who came to the U.S. and developed several rockets important in the space program.

Answer: Wernher von Braun

3. In 1880, shortly before making his conducting debut at a summer theater in the Austrian spa of Hall, he completed his first mature composition, Das Klagende Lied. He studied in Vienna under Anton Bruckner and during the 1880s accepted conducting posts at opera houses all over Europe. FTP, identify this man who while attending the funeral of conductor Hans von Bulow conceived the spectacular chorale finale to his second symphony, the Resurrection.

Answer: Gustav Mahler

4. Among the special varieties of these are the Gramian, Fredholm, Vandermonde, and Jacobian. They are useful in solving systems of linear equations and for complex ones, they are usually written as the sum of those of a lower order. FTP, what is this property of a matrix whose values are used in Cramer's rule to solve systems of equations?

Answer: determinants

5. In 1921 he became the first director of the U.S. Bureau of the Budget. Later he was ambassador to Britain and head of the Reconstruction Finance Corporation. The highlight of his career was during his term as Vice President, when in 1925 he won the Nobel Prize for Peace for working out a plan to restructure German war reparations. FTP, name this distinguished American after whom the plan was named.

Answer: Charles Dawes

6. He attended Cornell in the 1950s and took a course from Vladimir Nabokov, was on the editorial staff of The Cornell Writer, and also published his first short story, "The Small Rain." While employed writing technical documents for Boeing, he worked on his first novel and later won the 1974 National Book Award. FTP, identify this reclusive author of Gravity's Rainbow, V, and Vineland.

Answer: Thomas Pynchon

7. His first appearance is in the thirteenth-century Vulgate Cycle. His coming is predicted in the first romance in the cycle, where he is said to be the ninth in the line of Nascien, who was baptized by Josephus, son of Joseph of Arimathea, and who was one of those who is said to have brought Christianity to Britain. FTP, identify this son of Elaine and Lancelot who at the Round Table was the one destined fill the Siege Perilous.

Answer: Galahad

8. Born in Burlington, Iowa in 1896, he committed suicide in 1937 before he could claim credit for his greatest discovery. Earlier, he had invented neoprene, the first successful synthetic rubber, but despite this success came to an unhappy end. FTP, name this man whose posthumous patent for the invention of nylon was given to Dupont.

Answer: Wallace Carothers

9. The basic premise of this work is the empirical origin of ideas, which can be described as the raw material with which the mind works. It proposes that the mind of man at birth is like a blank sheet of paper and possesses no "innate ideas," and that man acquires knowledge through experience, which is made up of sensation and reflection. FTP, name the treatise, written in 1690 by John Locke.

Answer: An Essay Concerning Human Understanding

10. Experiments by agronomists have discovered a simple method that allows plants to grow faster and larger because of more efficient photosynthesis and a reduction in water loss. This method involves increasing the concentration of a certain atmospheric gas. FTP, identify this gas produced as a byproduct of animal respiration.

Answer: carbon dioxide or CO<sub>2</sub>

11. It is named for the leader of the geological party that was the first group of white person to see it in 1864. It can be found in Sequoia National Park in California and is located in the Sierra Nevada Range. FTP, what is this peak, that at 14,494 feet is the highest in the lower 48 states?

Answer: Mt. Whitney

12. It lasted from approximately 1598, with the death of Theodore I, until 1613 when Michael ascended to the throne. During it, a number of people claimed or attempted to claim the throne: Boris Godunov, Theodore II Godunov, False Dmitri I, Vasily IV Shuysky, False Dmitri II, and finally Wladislaw of Poland. FTP, what is the commonly used name for this period in Russian history.

Answer: Time of Troubles

13. This religious hypocrite wormed his way into the household of a rich man. Then he convinced the wealthy man to deed over all his property. The rich man's wife, Elmire, tricked the hypocrite into trying to seduce her, while the rich man, Orgon, was watching. Orgon then ordered the impostor out of the house, but the hypocrite was now the owner of the house. Fortunately, the king intervened at the last second. FTP, name this character created by Moliere.

Answer: Tartuffe

14. The first version of this picture was painted in Dusseldorf and unfortunately it was destroyed in World War II. Luckily, the artist had painted a second version which was sent to America and exhibited throughout the country. In spite of numerous errors in historical detail, a print published in 1853 gave the painting the status of a national monument. FTP, name this painting by Emmanuel Leutze which hangs in the Metropolitan Museum of Art.

Answer: Washington Crossing the Delaware

15. He is a self-made lawyer from a poor cotton and mining area of the American South. A corrupt, ruthless, right-wing politician, as governor of his home state he becomes a hero to the common people despite the shortcomings described by the narrator, Jack Burden. FTP, identify this central figure of Robert Penn Warren's *All the King's Men*.

Answer: Willie Stark

16. Its people's first encounters with Europeans were with the Portuguese who built Elmina Castle on the coast in 1482. Later the Dutch came in and finally the British who broke the authority of the traditional African rulers. FTP, identify this nation led to independence by Kwame Nkrumah, formerly known as the Gold Coast.

Answer: Ghana

17. In its common form, it is found as prismatic, curved or twisted monoclinic crystals. It is used as an optical material in its selenite form, as an ornamental stone, as satin spar and alabaster, and as a raw material in plaster of paris. FTP, what is this hydrated mineral of calcium sulfate.

Answer: gypsum (accept calcium sulfate before said)

18. He was dragged to death when his father cursed him in the name of his grandfather. Because of his devotion to the chaste goddess Artemis, he angered Aphrodite, who caused his stepmother to attempt to seduce him and upon his rejection, denounces him to his father. FTP, identify this mythological figure who spurned Phaedra and was killed by the curse of Theseus, his father.

Answer: Hippolytus

19. They derived their name from the uncle of the prophet Mohammed and during their reign reasserted the theocratic concept of the caliphate. In 750, they defeated the Umayyads and transferred the capital from Damascus to Baghdad. FTP, identify this dynasty that ruled the Islamic Empire from 750 until 1258.

Answer: Abbasids

20. While working as a photojournalist for ~~Life~~ <sup>Look!</sup> Magazine, he made an inconspicuous entrance into film-making with "Fear and Desire" and "Killer's Kiss" before achieving notice with "The Killing." His most famous works, however, are film adaptations of work by such authors as Vladimir Nabokov, Anthony Burgess, Henry Fielding and Arthur C. Clarke. FTP, identify this director of *Lolita*, *Barry Lyndon*, *A Clockwork Orange*, and *2001: A Space Odyssey*.

Answer: Stanley Kubrick

21. Marcel Duchamp's Nude Descending a Staircase, No. 2, George Bellows' The Circus, William Glackens' Family Group, Henri Matisse's The Red Studio, and Wassily Kandinsky's Improvisation No. 27. FTP, identify the famous 1913 art exhibition at which all these paintings were shown.

Answer: Armory Show

22. He helped organize the International Geophysical Year (IGY) of 1957-58 and during the 1950s, he used rockets equipped with Geiger counters, magnetometers, and transmitters to assist in his work. FTP, identify this American scientist whose high altitude studies led to the discovery of a belt of cosmic radiation encircling the earth.

Answer: James van Allen

23. They are the highest class of mollusks, having a distinct head and muscular tentacles. They include octopus, squid, and cuttlefish. FTP, name the class, whose name means "head-footed."

Answer: cephalopod

**1996 Georgia Tech MLK Bonuses by Wake Forest II (Ryan Bowles, McHenry Kane, etc.)**

1. Answer these questions about ancient Rome.

1. For 5 points each, according to legend who were the parents of Rome's founder, Romulus?

Answer: Mars and Rhea Silvia

2. Rhea Silvia was a princess of Alba Longa. For 5 more points each, according to legend who founded the line of kings of Alba Longa?

Answer: Aeneas and the goddess Venus

3. For 10 points, who succeeded Romulus as king of Rome?

Answer: Numa Pompilius

2. It's a Wonderful Life is one of the most beloved movies ever. Answer these questions about it for 10 points each.

1. Who directed it?

Answer: Frank Capra

2. In what fictional city is the story set?

Answer: Bedford Falls

3. What was the name of George Bailey's guardian angel. You'll earn 5 points each for the first and last names.

Answer: Clarence Oddbody

3. This bonus concerns two objects in the solar system that astronomers have searched for but never found. Name them each for 15 points.

1. The French mathematician Urbain Jean Joseph Leverrier, announced during a lecture on January 2, 1860, that the solution to Mercury's deviations could be explained by assuming the existence of an intra-Mercurial planet. Scientists searched for, but never found, this proposed planet. By what name did Leverrier call the hypothetical planet?

Answer: Vulcan

2. Give the name of the hypothetical dark companion of the sun that was suggested in 1985 by Daniel P. Whitmire and John J. Matese to explain mass extinctions that appear every 30 million years in the geologic record.

Answer: Nemesis

4. Name the author, 20-10-5.

20: His works include "Euclid and His Modern Rivals," a rare example of humor in mathematics, and "Sylvie and Bruno," which contains startling ideas including an 1889 description of weightlessness.

10: He was a man of diverse interests including mathematics, logic, photography, art, theater, medicine, and science. He was happiest in the company of children for whom he created puzzles, clever games, and charming letters.

5: His works include "The Hunting of the Snark," a classic nonsense epic (1876).

Answer: Lewis Carroll or Charles Lutwidge Dodgson

Now for 10 more points, name the man who illustrated Carroll's books about Alice.

Answer: Sir John Tenniel

5. Identify the Nobel Laureates in economics, for 10 points each.

1. He won in 1985 "For his pioneering analysis of savings and financial markets." He developed the Life-Cycle Savings model.

Answer: Franco Modigliani

2. He won in 1973 "For the development of the input-output method and for its application to important economic problems."

Answer: Wassily Leontief

3. He won in 1980 "For the creation of econometric models and their application to the analysis of economic fluctuations and economic policies." He spent most of his career at the University of Pennsylvania.

Answer: Lawrence Klein

6. Identify these scientists for 5 points each.

1. This American chemist was the first to discover how plants make food by photosynthesis.

Answer: Melvin Calvin

2. He developed the Soviet H-bomb and became an outspoken critic of Communist restrictions on human rights.

Answer: Andrei Sakharov

3. This British electronics engineer invented the first practical radar- around 1935.

Answer: Robert Watson-Watt

4. He discovered the Carbon-14 method of dating prehistoric plant and animal fossils.

Answer: Willard Libby

5. He built the first gyroscope and used a pendulum to prove the rotation of the earth.

Answer: Jean Foucault

6. He invented the first practical radio system in 1895 and sent the first transatlantic radio signals in 1901.

Answer: Guglielmo Marconi

7. Name the religious leader for 10 point each.

1. The Indian emperor who galvanized the growth of Buddhism in Asia by making it India's state religion and by sending Buddhist missionaries to distant countries.

Answer: Asoka

2. The Italian theologian and philosopher who ranks as the most influential figure in medieval philosophy. He formulated the official Roman Catholic philosophy most explicitly in Summa Theologica.

Answer: Thomas Aquinas

3. The Jewish philosopher and physician who organized Jewish oral law into concepts that were understandable to the layman. His most important work is Guide for the Perplexed.

Answer: Moses ben Maimon or Moses Maimonides

8. Queen Victoria reigned from 1837 to 1901. During that time Great Britain had ten different prime ministers. For 5 points each, name any six of them.

Answer: Viscount Melbourne, Robert Peel, Earl Russell, Earl of Derby, Earl of Aberdeen, Viscount Palmerston, Benjamin Disraeli, William Gladstone, Marquise of Salisbury, and Earl of Rosebery

9. It's Shakespearean family tree time. For 10 points each, name these relatives.

1. She is the sister of Caesar and wife to Antony.

Answer: Octavia

2. She is the daughter of Shylock.

Answer: Jessica

3. He is the father of Katherina and Bianca in the Taming of the Shrew.

Answer: Baptista

10. Identify the Beat Generation poet from his works for 5 points each. You'll get 5 extra points if you get them all.

1. On the Road

Answer: Jack Kerouac

2. Junkie

Answer: William Burroughs

3. A Coney Island of the Mind

Answer: Lawrence Ferlinghetti

4. Howl and Other Poems

Answer: Allen Ginsberg

5. The Happy Birthday of Death

Answer: Gregory Corso

11. Name the year in which these events occurred, for 10 points each.

1. The European Common Market comes into being, Pope John XXIII is elected, and NASA is established.

Answer: 1958

2. Lin Piao dies in a mysterious air crash, Congress votes to end funding of the SST, and William Calley is found guilty of premeditated murder.

Answer: 1971

3. The U.S. leaves the gold standard and the 21st Amendment is passed.

Answer: 1933

12. Name the artist by the work of art for 5 points each.

1. The Raft of the Medusa

Answer: Theodore Gericault

2. The Gulf Stream and Breaking Storm, Maine Coast

Answer: Winslow Homer

3. Les Femmes d'Alger (O. J. M. W. 1895)

Answer: Pablo Picasso

4. Mobiles such as Lobster Trap and Fish Tails

Answer: Alexander Calder

5. The Ecstasy of St. Theresa

Answer: Giovanni Bernini

6. "Fetes gallantes" paintings such as Pilgrimage to Cythera

Answer: Antoine Watteau

13. Name the labor leaders, for 10 points each.

1. He headed the Knights of Labor when they were at their peak from 1879 to 1893, was mayor Scranton, PA, and U.S. Commissioner of Labor.

Answer: Terence Powderly

2. A miner, he founded the Industrial Workers of the World in 1905, jumped bail and emigrated to the Soviet Union.

Answer: William "Big Bill" Haywood

3. He was jumped by goons of Ford Motor in the infamous "Battle of the Overpass," and died in an air crash in 1970.

Answer: Walter Reuther

14. Name the writers for 10 points each.

1. A founder of the Vorticist school of poetry; he wrote an epic poem meant to encompass the history of man; made anti-Semitic, pro-Axis radio broadcasts from Italy during WWII, and was kept in a mental hospital for over a decade.

Answer: Ezra Pound

2. His works include King Coal, Oil!, Boston (an account of the Sacco and Vanzetti Case) and Dragon's Teeth.

Answer: Upton Sinclair

3. On a trip from France to investigate the U.S. penal system he observed the people and institutions of the U.S.. The info in his fourteen travel notebooks was condensed and published in four volumes.

Answer: Alexis de Tocqueville

15. Identify the vitamins, for 5 points each.

1. It regulates the use of calcium. Deficiency causes rickets and other bones disorders.
2. Also called tocopherol.
3. Deficiency of it causes clotting disorders. Sources are liver and green leafy veggies.
4. Deficiency of it causes night blindness.
5. Deficiency of it causes the skin disease pellagra.
6. Deficiency of it causes beriberi.

Answer: Vitamin D

Answer: Vitamin E

Answer: Vitamin K

Answer: Vitamin A

Answer: Niacin

Answer: Thiamine or B1

17. The Greek Gods swore by the river Styx and could not break their word after doing so. One such case lead to disaster.

1. For 10 points, name the son of Helios who was allowed to drive the horses pulling the chariot of the sun. He lost control and burned much of the heaven and earth.

Answer: Phaeton

2. In Greek mythology Andromeda was rescued by Perseus. For 5 points each, name Andromeda's father and mother.

Answer: Cepheus and Cassiopeia

3. Name the daughter of Demeter who is the queen of Hades and who live six months of each year above ground.

Answer: Persephone

18. Name the explorers for 10 points each.

1. He was private secretary of Thomas Jefferson and first governor of the Louisiana Territory. He died of a mysterious gunshot wound (perhaps a suicide) in 1809.

Answer: Meriwether Lewis

2. The first Englishman and second captain to circumnavigate the globe, 1577-80. He established the British claim to the Pacific Northwest, and plundered the Spanish Main in his ship The Golden Hind.

Answer: Francis Drake

3. He left Venice for England in 1484. Financed by Henry VII, he explored the Northern Atlantic, looking for a passage to Asia. He sailed from the Chesapeake to Labrador and was lost a sea in 1499.

Answer: John Cabot

19. Identify the composers of each opera for 5 points each:

1. Wozzeck and Lulu
2. Manon Lescaut
3. Hansel and Gretel
4. The Bartered Bride
5. La Gioconda
6. Dido and Aeneas

Answer: Alban Berg

Answer: Giacomo Puccini

Answer: Engelbert Humperdinck

Answer: Bedrich Smetana

Answer: Amilcare Ponchielli

Answer: Henry Purcell

20. Answer these question about space exploration, for 5 points each.

1. In what year was Sputnik I, the first man-made satellite, launched?

Answer: (October 4) 1957

2. Who was the first American to orbit the earth and for 5 more points, what was the name of his spaceship?

Answer: John Glenn aboard Friendship 7

3. What was the first privately financed satellite?

Answer: Telstar I

4. Who was the first human to leave his spacecraft and "walk" in space?

Answer: Aleksei Leonov (Voshkod II in March 1965)

5. What was the first spacecraft to land on another planet?

Answer: Viking I (Mars, July 20, 1975)

21. Argentina seems to be the place to look for large dinosaurs: two of the largest dinos have been identified there from fossils in the past five years. For 10 points each, give the genus name of the following dinosaurs.

1. This dinosaur, discovered by car mechanic Ruben Carolini, is the largest carnivorous dinosaur on record. At eight tons, it weighs in three tons heavier than T. rex, the next closest competitor.

Answer: Giganotosaurus

2. Rudolfo Coria discovered this sauropod in the early years of this decade, but the rest of the world was slow to catch on. At 100 tons, it must have needed to eat a huge number of the pine nuts that Coria thinks may have been its diet. What is this largest dinosaur on record?

Answer: Argentinosaurus

3. What other sauropod at eight tons did Argentinosaurus unseat as world's largest dinosaur?

Answer: Seismosaurus

22. Name the author who created each of these characters, for 5 points each.

1. Lenny Small and George Milton
2. Mellors, the gamekeeper
3. Wolf Larsen
4. Nick Carraway
5. Charles Strickland
6. Henry Fleming

Answer: John Steinbeck  
Answer: D. H. Lawrence  
Answer: Jack London  
Answer: F. Scott Fitzgerald  
Answer: W. Somerset Maugham  
Answer: Stephen Crane

23. For 5 points each, identify these directors.

1. He directed schlock classics such as Glen or Glenda? and Plan 9 From Outer Space.
2. His works include City Lights, Modern Times, and The Great Dictator.
3. His movies include Repulsion and Rosemary's Baby.
4. His flicks include Ordinary People and Quiz Show.
5. Who directed Rain Man and Diner?
6. Who directed One Flew Over the Cuckoo's Nest and Amadeus?

Answer: Ed Wood  
Answer: Charlie Chaplin  
Answer: Roman Polanski  
Answer: Robert Redford  
Answer: Barry Levinson  
Answer: Milos Forman

24. Identify the poet and the poem in each case for 5 points each.

1. "Two roads diverged in a yellow wood, / And sorry I could not travel both / And be one traveler, long I stood / And looked down one as far as I could / To where it bent in the undergrowth."

Answer: Robert Frost, The Road Not Taken

3. "Hog Butcher for the World, / Tool Maker, Stacker of Wheat, / Player with Railroads and the Nation's Freight Handler, / Stormy, husky, brawling / City of the Big Shoulders."

Answer: Carl Sandburg, Chicago

3. "I will teach you my townspeople / how to perform a funeral / for you have it over a troop of artists- / unless one should scour the world- / you have the ground sense necessary."

Answer: William Carlos Williams, Tract

25. How well do you know the Big Bang?

1. For 5 points: What is the constant that indicates both the rate of expansion of the universe and the age of the universe? It is named for the astronomer who first measured it, and current measurements range from 50 to 100 kilometers per second per megaparsec.

Answer: Hubble's constant

2. For 10 points: Physicists were at first puzzled why a Big-Bang universe should be as flat as ours appears to be. Name the theory that not only explains why the universe is flat but also why our universe appears to be the same throughout.

Answer: inflation theory

3. For 15 points: The inflationary scenario also explains why we have never seen these super-heavy particles, because they would simply have been carried too far away from us to see. According to cosmology, these particles are point defects in the structure of their universe, and their absence leads to the Maxwell equation " $\nabla \cdot \mathbf{B} = 0$ ." What are they?

Answer: magnetic monopoles

26. Name the state or province by its geographical feature, for five points each.

1. Gardiner's Bay
2. Biscayne Bay
3. Upper and Lower Red Lakes
4. Queen Charlotte's Island
5. The Bitterroot Mountains (name two states)

Answer: New York (at the eastern end of Long Island)  
Answer: Florida  
Answer: Minnesota  
Answer: British Columbia  
Answer: Idaho and Montana