

Tossups

- 1. In this novel, the corrupt businessman Phil Connor rapes Ona, who dies in childbirth; later, Ona's first child, Antanas, drowns in a puddle of mud in a busy street. This novel ends with the Lithuanian immigrant Jurgis (\*) Rudkis's prospects improving through socialism, but the lasting effect of this novel was its impact on the Chicago meatpacking industry. For 10 points, name this work of muckraking literature by Upton Sinclair.**  
Answer: The Jungle
- 2. In this novel, the ship *Demeter* runs aground near Whitby. One character in this novel is described by children as a "bloofer lady" and is engaged to a man who later becomes Lord Godalming. The Texan, Quincy, is killed while (\*) stabbing the antagonist in the heart. That antagonist had earlier bit both Lucy and the protagonist's wife, Mina. For 10 points, name this novel in which Jonathan Harker and Van Helsing hunt the titular vampire.**  
Answer: Dracula
- 3. A narrator created by this author learns of a book that reads "O Time Your Pyramids" in a short story about a series of hexagonal rooms that house all possible 410-page books. Dr. Albert explains that (\*) Ts'ui Pen's novel is a maze in this author's story about German spy Yu Tsun. Both of those stories are collected in this man's *Ficciones*. For 10 points, name this Argentine author of "The Library of Babel" and "The Garden of Forking Paths."**  
Answer: Jorge Luis Borges
- 4. Zinc cofactors used in DNA replication are an example of this type of substance, whose kinetics are measured by the Michaelis-Menten equations. A conformational change occurs when allosteric regulation inhibits its (\*) active site, and this type of substance causes a specific substrate to proceed to product in the "lock and key" model. The suffix "-ase" denotes, for 10 points, what type of proteins used to speed up biological reactions?**  
Answer: enzymes (prompt on catalysts)
- 5. Male birds have two chromosomes denoted by this letter. In statistics, the number of standard deviations separating a value from the mean is denoted by this letter's "score." In i,j,k vector notation, the k component indicates movement in this (\*) direction, which also names the axis that differentiates cylindrical coordinates from polar coordinates. The set of integers is often denoted by, for 10 points, what Arabic letter that forms the third coordinate of an ordered triple?**  
ANSWER: Z (accept Z chromosome or Z-score or z-axis)
- 6. The tractive force causes these phenomena, which can create bores, in which water travels against the current of a narrow river. This phenomenon can be classified at its bi-monthly maximum as "spring" and at its minimum as (\*) "neap," and the world's most drastic difference between spring and neap is seen at the Bay of Fundy. The gravitational pull of the Moon helps cause, for 10 points, what rise and fall of sea levels?**  
Answer: tides
- 7. This disease is quickly diagnosed by the presence of erythema migrans. The "chronic" form of this disease is controversially treated by high-dose, long-term antibiotics. This disease is commonly found along the mid-Atlantic seaboard and in western (\*) Wisconsin, whose forests are home to infected mice and deer. A "bull's-eye" shaped rash indicates, for 10 points, what bacterial disease spread by ticks?**  
Answer: Lyme disease

8. **Missouri Governor Claiborne Jackson led a convention that sought to perform this action, which was ruled illegal in *Texas v. White*. The Wheeling Convention revoked one of these actions, leading 50 counties to form the state of (\*) West Virginia. Missouri and Kentucky did not complete this action, but South Carolina and 10 other Southern states did. For 10 points, name this action that preceded the formation of the Confederate States of America.**  
Answer: **Secession** (of a state or states) **from the United States** (accept word forms and equivalents, such as **breaking away from the Union**)
9. **This President ended the practice of "yellow-dog" labor contracts by signing the Norris-LaGuardia Act, and he gave loans to troubled banks by starting the Reconstruction Finance Corporation. Near the end of his term, he sent (\*) Douglas MacArthur to clear out the Bonus Army that was protesting for relief from the Great Depression. For 10 points, name this U.S. President who was succeeded by Franklin Roosevelt.**  
Answer: Herbert (Clark) **Hoover**
10. **This nation's Magic Lantern Theater headquartered the Civic Forum, led by members of Charter 77. Protester Jan Palach set himself on fire in this nation's Wenceslas Square, which had been occupied by Soviet troops trying to end Alexander (\*) Dubcek's reforms. The Velvet Revolution toppled Communism and elected President Vaclav Havel in, for 10 points, what Soviet republic, the site of the 1968 Prague Spring, that split into two countries in 1993?**  
Answer: **Czechoslovakia** (do not accept or prompt on Czech Republic or Slovakia)

Bonuses

1. Identify some Southern Gothic authors for 10 points each.  
[10] This author wrote about Atticus Finch's two children, Scout and Jem, who befriend the mysterious Boo Radley in her only novel, *To Kill a Mockingbird*.  
Answer: (Nelle) Harper **Lee**  
[10] This friend of Harper Lee was labeled a Southern Gothic writer for the short story collection *Other Voices, Other Rooms*. He also wrote *In Cold Blood* and *Breakfast at Tiffany's*.  
Answer: Truman (Streckfus Persons) **Capote**  
[10] This author's stories include "Everything that Rises Must Converge" and "The Life You Save May Be Your Own," which appears in this author's collection *A Good Man is Hard to Find*.  
Answer: (Mary) Flannery **O'Conner**
2. One author used Shakespearean quotes to title the novels *Sad Cypress* and *There is a Tide*, both of which feature the Belgian detective Hercule Poirot [ayr-KYOOOL pwa-ROE]. For 10 points each,  
[10] Name that "Queen of Crime," the author of *Murder on the Orient Express*, who also honored Shakespeare in *By the Pricking of My Thumbs* and *The Mousetrap*.  
Answer: Dame Agatha Mary Clarissa **Christie** née Miller (do not accept Mary Westmacott, as Christie published only romance novels under that pseudonym)  
[10] This author made reference to Shakespeare with *Mortal Coils* and *Brief Candles*, and with a novel about John the Savage, Lenina Crowne, and Bernard Marx.  
Answer: Aldous Leonard **Huxley**  
[10] *Under the Greenwood Tree*, a novel by this author, is a reference to Shakespeare's *As You Like It*. This author titled another novel, *Far From the Madding Crowd*, after a Thomas Gray poem.  
Answer: Thomas **Hardy**
3. He served as a fighter pilot in World War II and wrote a novel in which Aunts Spiker and Sponge terrorize James Trotter. For 10 points each,  
[10] Name this children's author of *Matilda*, who relates the cruel, Oompa-Loompa-narrated fates of Veruca Salt and Augustus Gloop in *Charlie and the Chocolate Factory*.  
Answer: Roald **Dahl**  
[10] This American author of *Light in August* tried to become a fighter pilot during World War I, and set *As I Lay Dying* and *The Sound and the Fury* near Jefferson, Mississippi.  
Answer: William (Cuthbert) Falkner **Faulkner**  
[10] This World War II bombardier and friend of Milo Minderbinder desperately seeks to avoid dying after he witnesses Snowden's death in a Joseph Heller novel.  
Answer: Captain John **Yossarian**
4. This organ, usually found in pairs in vertebrates, secretes progesterone and estrogen. For 10 points each,  
[10] Name this female sex organ that produces and releases eggs.  
ANSWER: **ovary**  
[10] Once released from the ovary, an egg must be fertilized; once it is, this type of cell division in the early embryo creates blastomeres. This process can be holoblastic or meroblastic.  
ANSWER: **cleavage**  
[10] Over time, individual cells of the embryo undergo this process to become specialized structures and functions that the cells will perform as adult cells.  
ANSWER: **differentiation**

5. The distance between molecules in this state of matter is, ideally, far greater than the size of the molecules themselves. For 10 points each,  
[10] Name this state of matter that exists above a substance's boiling point but is not energetic enough to be a plasma.  
Answer: **gas** (accept **ideal gas**)  
[10] This gas law defines a direct relationship between the volume and temperature of a gas at constant pressure. The ideal gas law combines it with Avogadro's, Gay-Lussac's, and Boyle's laws.  
Answer: **Charles's Law**  
[10] This law states that the total pressure of a mixture of gases is equal to the sum of their partial pressures.  
Answer: **Dalton's Law of Partial Pressures**
6. For 10 points each, give the following about things you cannot do with a simple straight-edge and compass.  
[10] The regular polygon with this many sides is the fewest-sided regular polygon that cannot be constructed by compass and straightedge. Its internal angles each measure roughly 128.57 degrees.  
Answer: **7** sides (accept **heptagon** or **septagon** or **7-gon**)  
[10] Given one of these shapes, compass-and-straight-edge construction cannot create another one of these polyhedra with double the volume. They have 8 vertices and 6 faces, and each pair of adjacent edges meets at a 90 degree angle.  
Answer: **cube** (accept **regular hexahedron**)  
[10] Another famous problem of compass-and-straight-edge construction is the general case of performing this process on an angle.  
Answer: **trisecting** an angle (accept equivalents along the lines of "**cutting** an angle into **three equal** angles")
7. This man claimed to be ill and was therefore not present when his men surrendered on October 19th, 1781. For 10 points each,  
[10] Name this British general whose fort at Yorktown, Virginia was sieged by forces under the Comte de Rochambeau and George Washington.  
Answer: Lord Charles **Cornwallis**  
[10] Cornwallis' surrender effectively ended this war.  
Answer: American **Revolutionary War** (accept the American **Revolution**)  
[10] The Revolutionary War was officially ended by this 1783 treaty, signed by one British member of Parliament and three American statesmen: John Adams, Ben Franklin, and John Jay.  
Answer: Treaty of **Paris**
8. Frederick William Benteen brought reinforcements to this battle. For 10 points each,  
[10] Name this Montana battle that saw Sioux warriors defeat the Seventh Cavalry.  
Answer: Battle of (the) **Little Bighorn** (accept Battle of (the) **Greasy Grass**; prompt on, but do not otherwise reveal, Custer's Last Stand)  
[10] This man led the U.S. forces in his "Last Stand" at the Battle of Little Bighorn. Prior to his defeat, he had been a decorated cavalry leader in the Civil War.  
Answer: George (Armstrong) **Custer**  
[10] This Sioux tribe, led by Crazy Horse and Chief Sitting Bull, defeated Custer and his troops.  
Answer: **Lakota** Sioux

9. For 10 points each--give the following about global tragedies in the 1910s.
- [10] In 1918, a pandemic of this disease killed tens of millions of people worldwide. This disease was nicknamed "Spanish" because Spain, being neutral in World War I, was not censored from lowering morale by reporting on the disease.  
Answer: (Spanish) **influenza**
- [10] More than one million citizens of this country were killed in a civil war between the Bolsheviks and Mensheviks. In the midst of the civil war, this country signed the Treaty of Brest-Litovsk with the Central Powers to withdraw from World War I.  
Answer: **Russia** (accept **Russian Federation** or **Soviet Russia**, but do not accept or prompt on USSR)
- [10] In the 1910s and 20s, the Young Turks perpetrated a genocide on this ethnic group, in which the Ottoman Empire forced this group from their homeland. The modern Turkish government refuses to identify the event as a genocide.  
Answer: **Armenians** (accept **Armenian genocide** or **Armenian Holocaust**, but do not prompt on Holocaust)
10. For 10 points each, give the following about military surprise attacks launched during holidays.
- [10] On Christmas night, 1776, George Washington's forces crossed the Delaware River and captured Hessian forces stationed in this New Jersey city.  
Answer: (Battle of) **Trenton**
- [10] During this war, communist forces launched the 1968 Tet Offensive during a Lunar New Year ceasefire. The coordinated effort attacked numerous cities, include Hue and Saigon.  
Answer: **Vietnam** War
- [10] On Yom Kippur in 1973, Syrian forces briefly retook the city of Quneitra in an assault on this territory, occupied by Israel since the Six-Day War.  
Answer: **Golan** Heights