QQBC Packet 5

1.  **Levels of this molecule in the liver are reduced by HMG CoA [koh-ay] reductase inhibitors, better known as statins. This molecule, which is transported through the circulatory system by lipoproteins, is a precursor of vitamin D and estrogen. A build-up of this waxy substance can cause (\*)** atherosclerosis, the hardening of arteries. For 10 points, name this modified steroid molecule whose   
  
LDL, or low-density, form is known as its “bad” type for its role in heart disease.   
  
Answer: cholesterol   
  
<SCI, BIO>

The religion of ancient Egypt changed dramatically over time, leading to some complicated relationships between the gods. For ten points each,  
  
Name this sister-wife of the undead god Osiris, who put her husband back together after Set cut him into pieces.  
  
ANSWER: Isis (accept Aset)  
  
This god was usually the son of Isis and Osiris, but in other myths, he was Isis’s husband instead. This falcon-headed god was sometimes syncretized with Ra as “Ra-Horakhty,” and his eye was symbolically known as the Wedjat.  
  
ANSWER: Horus  
  
Horus’s sons are described either as the children of Isis or of this goddess of motherhood and the sky, who is often depicted with the horns or head of a cow.  
  
ANSWER: Hathor  
  
<RMPSS, MYTH>

2.  **In this work, Heck Tate orders the shooting of Tim Johnson, and the protagonist discusses   
  
entailment to calm down Walter Cunningham’s father. This novel’s narrator frightens Calpurnia by sitting in a balcony with (\*)** Dill to watch her father defend Tom Robinson against the Ewells. Atticus Finch appears in, for 10 points, what novel about Jem and Scout, written by Harper Lee?   
  
Answer: To Kill a Mockingbird   
  
<LIT, AMER>

El Greco painted a city from this country in his View of Toledo. For 10 points each, [10] Name this European country, home to artists Salvador Dalí and Pablo Picasso.   
  
Answer: Spain   
  
[10] The Infanta Margarita poses in the center of Las Meninas, a painting by this Spanish court painter.   
  
Answer: Diego (Rodriguez de Silva y) Velázquez   
  
[10] This artist depicted Spanish citizens under attack from Napoleonic soldiers in his painting The Third of May, 1808. His “Black Paintings” include a depiction of Saturn Devouring His Son.   
  
Answer: Francisco (José de) Goya (y Lucientes)  
  
<FA, VISUAL>

3.  **The Well of Urd is one of three wells under this object, which is tended by the Norns. This object is ironically called “Odin’s horse,” and is home to Ratatoskr, a squirrel that carries messages between Nidhogg and an eagle who perches in the (\*)** branches of this tree. For ten points, identify this enormous ash that stretches between the worlds of Norse mythology.  
  
ANSWER: Yggdrasil [IG-drah-zill] (accept World Tree before “world” is read)  
  
<RMPSS, MYTH>

This man survived a 1962 assassination attempt by the OAS, a group of French dissidents who wanted to stop the negotiation of the Évian Accords. For 10 points each,   
  
[10] Name this French President, the founder of the Fifth Republic, who had earlier led the Free French forces during World War II.   
  
Answer: Charles André Joseph Marie de Gaulle   
  
[10] The Évian Accords granted independence to this French colony in northern Africa. The independence movement here was led by Ahmed Ben Bella's National Liberation Front, or the FLN.   
  
Answer: Algeria   
  
[10] The FLN's use of terrorism to oppose French rule, and the French paramilitary response, were dramatized in the 1966 film The Battle of this Algerian capital city.   
  
Answer: The Battle of Algiers  
  
<HIST, EURO>

4.  **This city is home to the City Lights Bookstore and a music festival on its Treasure Island. Its Telegraph Hill is just south of Fisherman's Wharf. Its Haight-Ashbury district was a center of hippie culture in the (\*)** 1960's, and its bay was once home to a federal prison on Alcatraz Island. For 10 points, name this California city across the bay from Oakland, the home of cable cars and the Golden Gate Bridge.   
  
Answer: San Francisco   
  
<GEO, GEO>

California geologists lamented the June 2016 repair of a curb in Oakland because it destroyed a remarkable example of the effects of one of these systems. For ten points each,  
  
[10] Name these fractures in the Earth’s crust, along which large sections of rock may move. Examples of these systems are the aforementioned Hayward and the San Andreas, also in California.  
  
ANSWER: fault line  
  
[10] A quick movement along a fault can release a great deal of energy, causing one of these natural disasters. A catastrophic one of these events, named for nearby Loma Prieta Peak, struck San Francisco in 1989.  
  
ANSWER: earthquake  
  
[10] The San Andreas is a transform fault on the boundary between tectonic plates; the stress along the fault is caused in part by this process, in which one tectonic plate moves under another and is forced toward the mantle.  
  
ANSWER: subduction  
  
<SCI, OTHER>

5.  **These compounds are used to treat fats in saponification, or soap-making; such examples of these chemicals include sodium hydroxide. According to the Bronsted-Lowry definition, these substances (\*)** accept hydrogen ions, and according to the Lewis definition, they donate electron pairs. Litmus paper is turned blue by, for ten points, what type of bitter, slippery chemical compound that has a pH value greater than 7 and that can neutralize acids?  
  
ANSWER: bases (prompt on “hydroxides” before it is read)   
  
<SCI, CHEM>

Historians have been largely prevented from studying whether this event took place over 25,000 li, as traditionally claimed, or whether that figure is exaggerated for propaganda purposes. For ten points each,  
  
Name this year-long retreat of the Red Army as they were chased by Kuomintang forces through China.   
  
ANSWER: Long March (accept Cha´ngzhe¯ng or Coe`ng z¯ing)  
  
This man’s leadership during the Long March began his ascent to leadership of the Red Army and, eventually, mainland China, which he ruled as Chairman until 1976.  
  
ANSWER: Mao Zedong  
  
Specifically, Mao was Chairman of this political party, which rules China. Under Mao, this partycontrolled a planned economy, which has since been replaced by a socialist market economy.  
  
ANSWER: Communist Party of China   
  
<HIST, OTHER>

6.  **The first person to understand this man’s teachings was Kaundinya, who became the first arhat and was one of this man’s Five Companions. This man’s cousin Ananda recorded the Sutta PItaka [soo-tah pee-tah-kah], part of the (\*)** Pali Canon [”polly” canon], for this man, who sat under a Bodhi tree and preached about the Eightfold Path and the Four Noble Truths. For ten points, name this religious leader, born Siddhartha Gautama, who founded a meditative Indian religion.  
  
ANSWER: Gautama Buddha (accept Siddhartha Gautama before it is read)  
  
<RMPSS, REL>

Answer the following about Edgar Allan Poe’s short stories, for 10 points each.   
  
[10] The Narrator and his friend Dupin attempt to solve a homicide on the title street in this story, only to discover that the murderer isn’t human.   
  
Answer: The Murders in the Rue Morgue   
  
[10] A prince’s lavish party is invaded while he attempts to take refuge from a dangerous plague in this allegorical tale.   
  
Answer: The Masque of the Red Death   
  
[10] Name the prince who, at the end of “The Masque of the Red Death,” corners a mysterious robed figure. He shares his name with the rightful Duke of Milan in Shakespeare's The Tempest.   
  
Answer: Prince Prospero   
  
<LIT, AMER>

7.  **In a story by this author, Gerda’s tears melt an ice shard in Kai’s heart, which allows him to escape the title character. In another story recorded by this man, a child tells the title ruler that he is naked. In addition to “The (\*)** Snow Queen” and “The Emperor’s New Clothes” this man wrote about a girl who gives up her voice to marry a prince at the risk of turning into sea foam. For ten points, name this Danish recorder of folk tales like “The Little Mermaid.”  
  
ANSWER: Hans Christian Anderson   
  
<LIT, EURO>

This concept is described as “not optional” because “You are embarked” in Pensees, a posthumously-published work. For ten points each,  
  
[10] Name this philosophical argument, which suggests a payoff table in which infinite gain is made by believing in heaven while God exists, while mere finite gains or losses would be had if God does not exist.  
  
ANSWER: Blaise Pascal’s Wager (accept equivalent terms for wager; prompt on partial answers)  
  
[10] Pascal’s Wager is an example of this type of rhetoric, which seeks to explain and defend an idea. Though this term usually refers to religious arguments, it also names Plato’s depiction of Socrates’ defense at trial.  
  
ANSWER: apologetics (accept word forms; accept the Apology)  
  
[10] Pascal’s Wager was an early use of this branch of mathematics within philosophy. This branch studies the likelihood of events, and is often taught within classrooms alongside statistics, in which data from this branch is often analyzed.  
  
ANSWER: probability  
  
<RMPSS, PHIL>

8.  **The loser of the first of these events was further threatened by an uprising called the Mercenary War. The Siege of Saguntum triggered the second of these events, while the last was spurred by   
  
Cato the Elder's calls for destruction. The second of these conflicts saw (\*)** Scipio Africanus win the Battle of Zama against a force of war elephants led by Hannibal. For 10 points, name this series of three wars between Rome and Carthage.   
  
Answer: Punic Wars   
  
<HIST, OTHER>

In 2016, a 2,300 square mile region deeper and farther from the coast than this region was discovered to have donut-shaped structures formed by the Halimeda algae. For ten points each,  
  
[10] Name this largest coral reef system in the world.  
  
ANSWER: Great Barrier Reef  
  
[10] The Great Barrier Reef lies off the coast of Queensland, a northeastern state of this island country with capital Canberra.  
  
ANSWER: Australia  
  
[10] The reef extends all the way to this strait, which separates Australia from New Guinea to its north.  
  
ANSWER: Torres Strait  
  
<GEO, GEO>

9.  **In Judaism, one of these creatures is a transformed man named Enoch, and another creature of   
  
this type stood in the way of Balaam’s donkey. Two of these creatures visited Lot’s home before the destruction of Sodom. These creatures are organized into (\*)** “hosts,” which include seraphim and cherubim. For 10 points, name these holy beings, whose leaders include Michael and Gabriel, and who are often depicted wearing halos.   
  
Answer: angels (accept archangels before “Balaam” is read)   
  
<RMPSS, REL>

In announcing that striking governmental employees were in violation of federal law, this man noted “I’m maybe the first one ever to hold this office who is a lifetime member of an AFL-CIO union,” relating to his time as the President of the Screen Actors Guild. For ten points each,  
  
[10] Name this U.S. President who fired over 11,000 striking air traffic controllers in 1981.  
  
ANSWER: Ronald Reagan  
  
[10] A few months prior, Reagan quipped to his surgeons, “I hope you’re all Republicans!” after he was wounded in an attempted assassination attempt by this deranged Jodie Foster fan. This man was released from a mental hospital in September 2016.  
  
ANSWER: John Hinckley, Jr.  
  
[10] In 1984, in sound testing prior to a weekly radio address, Reagan joked that “I’m pleased to tell you that today I signed legislation that will outlaw” this country “forever. We begin bombing in five minutes.” This Cold War superpower and rival of the U.S. did not find the joke funny.  
  
ANSWER: Russia (accept Soviet Union or USSR or the Union of Soviet Socialist Republics)  
  
<HIST, AMER>

10.  **Gluconeogenesis finishes in this organelle’s lumen. In muscle cells, a similarly-named analog to this organelle stores and releases calcium ions. This organelle is bound to the nuclear envelope, and like the (\*)** Golgi body, it consists of flattened sacs or tubes called cisternae. For ten points, name this eukaryotic cell organelle that transports proteins and, depending on whether ribosomes are present on its surface, is classified as “rough” or “smooth.”  
  
ANSWER: endoplasmic reticulum (accept ER; accept rough and/or smooth ER; prompt on “sarcoplasmic reticulum” after “muscle” is read)  
  
<SCI, BIO>

For ten points each, answer the following about the numbers three, five, and seven.  
  
Three, five, and seven can be the side lengths of one of these three-sided polygons, because the sum of the smaller two is greater than the third.  
  
ANSWER: (scalene) triangle (accept triangle inequality)  
  
Seven is greater than five and five is greater than three. Because the “greater than” relation has this property, you can assume that seven is greater than three, as well.  
  
ANSWER: transitive property (accept word forms like transitivity)  
  
Three, five, and seven are the only set of three of these numbers that are two apart from each other. In 2013, Yitang Zhang announced a monumental proof toward answering whether there are infinitely many pairs of these numbers that are two apart, like eleven and thirteen.  
  
ANSWER: prime numbers (accept twin primes)   
  
<SCI, OTHER>

11.  **In a novel by this author, Harriett Smith is the victim of failed matchmaking attempts by the title woman. In two of this author’s novels, Edward Ferrars and Colonel Brandon marry Elinor and Marianne (\*)** Dashwood, who represent the title concepts, and Mr Darcy falls in love with Elizabeth Bennett despite their preconceived ideas about each other. For ten points, name this English author of “sentimental novels” like Emma, Sense and Sensibility, and Pride and Prejudice.  
  
ANSWER: Jane Austen  
  
<LIT, BRIT>

For ten points each, answer the following about references to hip-hop and musicals in Lin-Manuel Miranda’s hip-hop musical, Hamilton.  
  
The Hamilton song “Ten Duel Commandments” is a direct adaptation of this rapper’s work. After this rapper’s death in a 1997 shooting, his tracks “Hypnotize” and “Mo Money Mo Problems” reached number one on the Billboard Hot 100.  
  
ANSWER: The Notorious B.I.G. (accept Biggie Smalls or Christopher Wallace; prompt on Smalls)  
  
Another shoutout to Biggie Smalls is Alexander’s spelling of his own name during this third song in Hamilton, in which he notes “I’m just like my country, I’m young, scrappy, and hungry.”  
  
ANSWER: My Shot  
  
In “Right Hand Man,” George Washington introduces himself as “the model of” one of these military leaders, as does Stanley in a patter song in Gilbert and Sullivan’s Pirates of Penzance.  
  
ANSWER: Modern Major General (prompt on “Major General” but not major or general)   
  
<TRASH, POP CULT>

12.  **In a painting in this genre, a plowing farmer doesn’t notice a pair of legs disappearing into the sea. Pieter Bruegel painted this type of scene with the Fall of Icarus, and the Barbizon school specialized in these paintings, like Millet’s The Gleaners. John (\*)** Constable painted these works in Dedham Vale, including one of a hay wain by the river Stour. For ten points, name this style of painting, which feature wide views of forests, valleys, and other natural scenery.  
  
ANSWER: landscape  
  
<FA, VISUAL>

Electroplating uses this process to coat an electrode with another metal. For 10 points each,   
  
[10] Name this process in which an atom or ion gains electrons. Its opposite is oxidation.   
  
Answer: reduction   
  
[10] In a voltaic [vol-TAY-ic] cell, reduction takes place at this positively-charged electrode.   
  
Answer: cathode   
  
[10] In this equation, the log of the reaction quotient is multiplied by a factor which includes the number of moles and Faraday's constant. This equation gives the cell potential at nonstandard conditions.   
  
Answer: Nernst equation   
  
<SCI, PHYS>

13.  **This actress won an Oscar for a role in which she notes “It can still be a date if you order Raisin Bran.” She earned her third Best Actress nomination for playing the inventor of the Miracle Mop, Joy Mangano, in a 2015 film, and stars opposite Chris Pratt in a film set on the (\*)** Avalon, a colony ship that woke them up too soon. Passengers stars, for ten points, what actress who played Katniss Everdeen in the Hunger Games films?  
  
ANSWER: Jennifer Lawrence  
  
<TRASH, POP CULT>

This economic concept can be illustrated by spending a Saturday playing quizbowl, as that's one fewer day you could spend doing homework, working a part-time job, or relaxing with friends. For 10 points each,   
  
[10] Give this two word term that describes the value lost in a trade-off by choosing to spend resources on a different option.   
  
Answer: opportunity cost   
  
[10] Opportunity cost is often described in economics by the food-related catchphrase that "there is no such thing as" one of these.   
  
Answer: a free lunch   
  
[10] Someone who does receive a lunch at no cost is said to be a "free rider," benefiting from someone else's paying of the cost of the lunch. This "tragedy" is a scenario where free lunches, or other public goods, are exploited by individuals who don't replenish whatever resource is providing them.   
  
Answer: tragedy of the commons   
  
<RMPSS, SOC SCI>

14.  **One of these objects discovered by Wilhelm Tempel was visited by the Deep Impact mission. These bodies originate from the Oort cloud or the Kuiper [kye-per] belt, depending on the length of their period. As these bodies (\*)** approach the Sun, solar heating creates a mini-atmosphere, called a coma, and a trail of gas and dust often visible from Earth. For ten points, name these “dirty snowballs” that may travel in regular elliptical orbits, such as a 76-year orbit made by one named for Edmond Halley.  
  
ANSWER: comets  
  
<SCI, OTHER>

This literary character tells Miss Caroline that Walter Cunningham can’t afford to bring a lunch to school, since the teacher does not understand the workings of Maycomb, Alabama. For ten points each,  
  
Name this narrator of To Kill a Mockingbird, who punches Cecil Jacobs in the schoolyard when he makes fun of her father, Atticus Finch, for defending black townspeople like Tom Robinson in court.  
  
ANSWER: Jean Louise “Scout” Finch (accept either underlined name)  
  
During the summer, Scout and her brother, Jem, try to lure the reclusive Boo Radley out of his house with the help of this small Mississippian boy, the nephew of Rachel Haverford.  
  
ANSWER: Charles Baker “Dill” Harris (accept any underlined name)  
  
Francis is another temporary visitor to Maycomb, but he is much less friendly with Scout and Jem than Dill is. Francis is brought to town by this woman, his grandmother and Atticus’s sister, who tries to feminize Scout.  
  
ANSWER: Aunt Alexandria Finch Hancock (prompt on “Hancock”)  
  
<LIT, AMER>

15.  **This event was made possible when Leopold Lojka [loy-ka] followed the original directions to drive to the National Museum, rather than to a hospital to visit victims of Nedeljko Cˇ abrinovic´’s [neh-DAY-ko cha-brin-oh-vitch’s] bombing earlier in the day. The July Ultimatum was sent in response to this event, which was planned by the (\*)** Black Hand, a pro-Serbian group. For ten points, name this June 28, 1914 event in which Gavrilo Princip killed an Austro-Hungarian royal, triggering World War I.  
  
ANSWER: assassination of Archduke Franz Ferdinand (accept terms like “killing” or “shooting” instead of “assassination;” do not accept or prompt partial name)  
  
<HIST, EURO>

For 10 points each, give the following about early American agriculture.   
  
[10] The Jamestown colony was heavily supported by the export of this crop, which was grown by John Rolfe and introduced to Europe by Sir Walter Raleigh.   
  
Answer: tobacco   
  
[10] Tobacco rivaled a certain textile crop as the primary export of the South until 1793, when this machine simplified production of a certain textile crop by quickly separating the seeds from the fiber.   
  
Answer: cotton gin (prompt on "gin")   
  
[10] This businessman invented the cotton gin in 1793.   
  
Answer: Eli Whitney   
  
<HIST, AMER>

16.  **The T2 type of these were labeled with radioactive sulfur and phosphorus in the Hershey-Chase experiment. Latency results when these entities enter a lysogenic cycle. The first discovered one of these causes tobacco mosaic disease, and AZT is a (\*)** treatment for a widespread retro- one. A protein capsid surrounds these entities, which are unable to reproduce outside a host cell. For 10 points, name these non-living pathogens, such as influenza and HIV.   
  
Answer: viruses (accept bacteriophage and phage before “tobacco” is mentioned)   
  
<SCI, BIO>

For ten points each, answer the following about literary diaries and memoirs.  
  
[10] This German teenager kept a diary while hiding in a Secret Annex in Amsterdam during World War II; her father edited and published the diary after the war.  
  
ANSWER: Anne Frank  
  
[10] This author’s 1972 memoir, A Circle of Quiet, breaks the usual structure of a diary by piecing together facts into a single, not-completely-true story. Her 1963 novel A Wrinkle in Time broke the then-usual structure of a children’s novel by directly considering evil.  
  
ANSWER: Madeleine L’Engle  
  
[10] This rival of Lady Murasaki recorded Japanese courtly goings-on in The Pillow Book.  
  
ANSWER: Sei Shonagon  
  
<LIT, OTHER>

17.  **One king of this name was arrested in Varennes [vah-REN] while fleeing from a revolt. An earlier king of this name was a child when the nobles rose against him in the Fronde uprising. The House of Capet included five kings of this name. The last king of this name took power in the 1814 (\*)** Bourbon Restoration, and the longest serving king of this name was nicknamed "the Sun King." For 10 points, give this name shared by eighteen royal leaders of France.   
  
Answer: Louis   
  
<HIST, EURO>

For ten points each, give the following about 20th century art.  
  
This Spanish surrealist painted a sphinx with Shirley Temple’s head in Shirley Temple, The Youngest, Most Sacred Monster of Contemporary Cinema. This artist’s The Persistence of Memory depicts soft-textured clocks.  
  
ANSWER: Salvador Dal´ı  
  
Though the original copy of this painting was made in 1893, Edvard Munch continued making copies and lithographs of it for decades. This painting depicts a swirling red sky above a frightened, anxious figure.  
  
ANSWER: The Scream (accept Skrik; accept The Cry)  
  
This American “action painter” was a leading abstract expressionist. Late in life, he began numbering, rather than naming, his drip paintings.  
  
ANSWER: Jackson Pollock  
  
<FA, VISUAL>

18.  **This author wrote about Dr. Edwin Ransom’s encounters with life on Mars and Venus in Out of the Silent Planet and Perelandra. This author of The Screwtape Letters wrote about Digory and Polly, who pave the way for the (\*)** Pevensie children, and about Prince Caspian and the lion Aslan. For 10 points, identify this author of The Chronicles of Narnia, including The Lion, the Witch, and the Wardrobe.   
  
Answer: C(live) S(taples) Lewis (prompt on “Lewis” alone)   
  
<LIT, BRIT>

This process requires the enzyme RNA polymerase and pairs adenine with uracil. For 10 points each,   
  
[10] Name this process in which DNA is used as template for synthesizing a complementary strand of messenger RNA. Answer: transcription   
  
[10] Transcription in bacteria is organized around these blocks of genes with a single switch that can be turned off by a repressor protein. The lac [LACK] and trp [TRIP] ones are found in E. coli.   
  
Answer: operons   
  
[10] Operons and eukaryotic genes are always preceded by this type of DNA sequence where the RNA polymerase attaches. The TATA box is commonly found within this region of DNA.   
  
Answer: promoter   
  
<SCI, BIO>

19.  **After 1916, this project included an arm that followed the Amur River to avoid Manchuria. When it was first opened, this system included a ferry across Lake Baikal. In August 1945, Japanese spying on part of this transportation system failed to indicate the (\*)** Soviet Army’s mobilization. For ten points, name this transportation system that allows trains to travel from the Pacific port city of Vladivostok to Moscow by train, crossing a vast, cold region of Russia.  
  
ANSWER: Trans-Siberian Railway (accept equivalents for “railway,” such as “railroad”)  
  
<HIST, EURO>

This man’s sister, Dorothy may have inspired his “Lucy” poems, and accompanied him on a walk through an ancient Welsh abbey on the banks of the River Wye. For ten points each,  
  
Name this English writer who included a poem about “Tintern Abbey” in the collection Lyrical Ballads, on which he collaborated with Samuel Taylor Coleridge.  
  
ANSWER: William Wordsworth  
  
“Lake Poets” like Wordsworth and Coleridge were members of this nineteenth-century poetic movement, which favored dreamy fantasy settings and natural imagery. Members of this movement reacted to neoclassicism by emphasizing intuition and emotion, rather than reason, in their work.  
  
ANSWER: English Romanticism (accept word forms like Romantics or Romance)  
  
Wordsworth wrote that he “saw a crowd, / a host, of golden daffodils” in a poem that beings, “I wandered lonely as” one of these meteorological objects. Another Romantic poet, Percy Shelley, wrote that these things “bring fresh showers for the thirsting flowers” and “laugh as [they] pass in thunder.”  
  
ANSWER: clouds (accept I Wandered Lonely as a Cloud; accept The Cloud)  
  
<LIT, BRIT>

20.  **This county was home to an expressionist art movement called “The Bridge.” A man with a walking stick stands on a rocky mound in this country in Wanderer above the Sea of Fog, by Caspar David Friedrich. (\*)** Franz Marc and several Russian emigrants to this country, including Wassily Kandinsky, founded a secession movement called Der Blaue Reiter. For ten points, name this European country where the Bauhaus school was founded in Weimar and briefly centered in Berlin.  
  
ANSWER: Germany (accept Deutschland)  
  
<FA, VISUAL>

The European Space Agency launched the Planck spacecraft to measure the CMBR and estimate this value. For 10 points each,   
  
[10] Name this quantity, estimated to be a bit less than 14 billion years.   
  
Answer: age of the Universe (accept clear knowledge equivalents)   
  
[10] This event occurred 14 billion years ago and is currently the best model for how the Universe came into existence. It was followed by cosmic expansion.   
  
Answer: the Big Bang   
  
[10] This event, the creation of heavier-than-hydrogen elements like helium-4 and lithium-7, took place within minutes after the Big Bang. This term can also refer to the creation of elements within stars.   
  
Answer: Big Bang (or primordial) nucleosynthesis (accept stellar nucleosynthesis; prompt on "nuclear fusion")   
  
<SCI, OTHER>