

**2021 AQBL February
Packet 11**

1. **A character in this film is introduced hanging upside down from a bunk bed and saying “What’s happening, hot stuff?” In this film, Ted and Caroline wake up in the back of a Rolls-Royce in a church parking lot, where the protagonist’s sister Ginny is getting married. Gary Watanabe played the Asian foreign exchange student Long Duk (*) Dong in this film, in which Ted charges high school students \$1 to see the protagonist’s underwear. For 10 points, name this 1984 John Hughes film that ends with Samantha Baker, played by Molly Ringwald, receiving a cake from Jake for her birthday.**
ANSWER: *Sixteen Candles* <MB, Pop Culture>

2. **During this event, a group of Wintu Indians were killed in the Bridge Gulch Massacre. The S.S. Central America sank while carrying goods from this event. The newspaper editor Samuel Brannan was the first person to publicize this event with a headline about James Marshall and the American (*) River. Rocker boxes were used to process large amounts of rocks and gravel during this event, during which Levi Strauss began selling dry goods and jeans. A precious metal’s discovery near Sutter’s Mill began, for 10 points, what 1849 event that led to rapid population growth in a western state?**
ANSWER: California gold rush (or 1849 gold rush; accept answers indicating the discovery or prospecting of gold in California) <MB, American History>

3. **A book by Benjamin Hoff titled for this school of philosophy suggests that one of its central principles is embodied by Winnie-the-Pooh. This philosophy inspired a type of alchemy with “inner” and “outer” forms that aims to create elixirs that grant immortality as well as the “Three Treasures” of essence, energy, and spirit. In one of this philosophy’s two central texts, the author is existentially confused by a dream of being a (*) butterfly; that author is Zhuangzi [zhwahng-tsoh]. This philosophy’s founder espoused the “effortless action” of *wu wei* [oooh-way]. For 10 points, name this Chinese school of philosophy founded by Laozi [low-tsoh] that emphasizes “The Way.”**
ANSWER: Daoism [or Taoism; or Daojiao] <CL, Philosophy>

4. **In one story from this collection, Eliot is allowed to stay at home by himself after the titular babysitter gets into a car accident. After a power outage, in another story from this collection, two parents of a stillborn baby are brought back together but eventually separate. The tourist Mrs. Das tells a tour guide about her illegitimate son, who gets attacked by (*) monkeys, in a story from this collection. “Mrs. Sen’s” and “A Temporary Matter” are stories in, for 10 points, what Jhumpa Lahiri collection, whose title story refers to Mr. Kapasi, who translates for patients in a doctor’s office?**
ANSWER: *The Interpreter of Maladies* <MB, World Literature>

5. **This architect added a penthouse level to the Lamar Building in Georgia, and his namesake “plan” called for breaking down older buildings and reconstructing them in Oklahoma City. A pink, maze-like structure by this architect is inspired by Pueblo-Anasazi cliff dwellings, and he included two cantilevered wings in a building located on the shores of Lake (*) Erie. This architect designed the Mesa Laboratory in Colorado as well as the John Hancock Tower in Boston. This architect of the Cleveland Rock and Roll Hall of Fame also designed a glass pyramid for the Louvre. For 10 points, name this Chinese-American architect.**
ANSWER: Ieoh Ming Pei <AN, Other Fine Arts>

6. **This number is multiplied by twice the imaginary unit in the denominator of Cauchy's integral formula. A Ramanujan-Sato series generalizes formulas to calculate this number's inverse. The sum of the reciprocals of the squares of the natural numbers is equal to this irrational number squared divided by 6. Euler's number raised to (*) i times this constant is equal to -1, and Archimedes provided upper and lower bounds for this irrational number through the use of a 96 sided polygon. A common approximation of this constant is $22/7$. For 10 points, name this constant equal to the circumference of a circle over its diameter, or about 3.14.**
ANSWER: **π** (do not accept or prompt on tau) <DS, Math>
7. **An extended period of unrest began after four people of this ethnicity were killed by a military truck in the Jabalia Refugee Camp. A government led by people of this ethnicity controls land east of the green line, marked by a wall up to 26 feet high, and is led by Mahmoud Abbas from (*) Ramallah. These people led two periods of unrest known as *intifadas*, the first of which was ended by the Oslo Accords signed by Yitzhak Rabin and Yasser Arafat. For 10 points, name these Arab occupants of the Gaza Strip and West Bank.**
ANSWER: **Palestinians** (prompt on Arabs before mention) <MB, World History>
8. **Archibald Dunkley and Mortimer Planno were among the earliest promoters of this religion. A common gathering in this religion uses the thunder, funde, and repeater drums, and its central texts include *The Promised Key* and *Holy Piby*. This religion celebrates Grounation Day and its sects, known as "Mansions," include The Twelve (*) Tribes of Israel, Bobo Ashanti and Nyabinghi-Order. This religion worships the God Jah and his second coming, Emperor Haile Selassie of Ethiopia. For 10 points, name this Afrocentric Religion popular in Jamaica whose members often wear dreadlocks and smoke cannabis.**
ANSWER: **Rastafarianism** <AN, Religion>
9. **This author described a man who "thump, thump, thump, went his foot on the floor / He played a few chords then he sang some more" and who "with his ebony hands on each ivory key / he made that poor piano moan with melody." In that poem, this author describes a "drowsy syncopated tune" that he heard "Down on (*) Lenox Avenue the other night." In a poem, this author suggests something "just sags / like a heavy load" before asking "Or does it explode?" For 10 points, name this poet of "The Weary Blues" and "Harlem," which begins by asking "What happens to a dream deferred?"**
ANSWER: Langston **Hughes** <MB, American Literature>
10. **The LTEE, an experimental study of long-term evolution in this organism, resulted in its usage of citrate as a food source. Tatum and Lederberg demonstrated the presence of conjugation between two of these organisms. Meselsohn and Stahl proved that DNA replication is semiconservative by using cells of this organism. This model organism was infected by (*) bacteriophages in the Hershey-Chase experiment. The lac operon was first discovered in this organism. This organism's virulent O157:H7 strain can cause food poisoning. For 10 points, name this rod-shaped bacterium found in the lower intestine of endotherms.**
ANSWER: **Escherichia coli** <CS, Biology>

11. **The Brookings Institute has argued that this leader plagiarized his 1997 dissertation in economics, 5 years after his arrest for attempting to export metals in exchange for food shipments. Sergei Skripal and Alexander Litvinenko were spies allegedly killed on the orders of this leader, whose critics have included the politician Alexei (*) Nalvany. Under the rule of this leader, special forces killed over 200 hostages in a theater in an operation against Chechnyan terrorists. This leader has ordered invasions of Abkhazia, South Ossetia, and the Crimean Peninsula. For 10 points, name this Prime Minister under Dmitry Medvedev, who has otherwise served as President of Russia since 2000.**

ANSWER: Vladimir Putin <MB, European History>

12. **In a painting by this artist, two men in suits look up at Jim Edgerton, who wears a suede jacket with a paper sticking out of the front pocket, as he stands up to dissent during a town meeting. This artist depicted the title figure flexing and stepping on a copy of *Mein Kampf* in his portrait of Rosie the (*) Riveter, and painted Ruby Bridges accompanied by four U.S. marshals as she integrates a school in *The Problem We All Live With*. For 10 points, name this artist whose *Freedom From Want* depicts a family eating Thanksgiving dinner and appeared in the *Saturday Evening Post*.**

ANSWER: Norman Rockwell <MB, Visual Fine Arts>

13. **A Bjerrum [bie-rum] plot graphs the concentrations of species of these substances in a solution. In the Jones oxidation, primary alcohols react with Jones reagent to form these compounds. Mixing antimony pentafluoride and hydrogen fluoride creates a “super” type of these substances. Electrophiles fit the (*) Lewis definition of these substances. Cabbage juice turns red when exposed to a strong one of these substances, and aqua regia, which dissolves gold, is a mixture of two of these substances. For 10 points, name these substances with a pH below 7, a common example of which is the “citric” one in lemons.**

ANSWER: acids [accept carboxylic acids] <CS, Chemistry>

14. **A character in this work pretends to be the archangel Gabriel so he can sleep with various women. One character beats a mule after being instructed by Solomon to cross the ridge of Geese. In this work, Ser Ciappelletto is sainted after confessing to sinning at his deathbed. In this collection, (*) Federigo cooks a pet falcon in order to win the affections of Griselda. Themes of stories to be told in this work are told by travellers such as Dianeo and Fiametta. For 10 points, name this collection of one hundred stories told during the Black Death written by Giovanni Boccaccio.**

ANSWER: The Decameron <AK, European Literature>

15. **It is disputed whether it is this ruler’s mummy in tomb KV55 by Edward Ayrton. Rulers of the 19th Dynasty often referred to this Pharaoh with terms like “criminal” and “the enemy,” and many of his monuments were later destroyed by Horemheb. In addition to his predecessor Amenhotep the Magnificent, much of our information about this leader comes from the Amarna letters, named for the capital of this ruler. Berlin’s Neues Museum houses a namesake bust of the (*) wife of this ruler, who began the worship of the sun disk Aten. For 10 points, name this husband of Nefertiti and father of Tutankhamun.**

ANSWER: Akhenaten (or Amenhotep IV) <MB, Other History>

16. **It's not eight, but Chopin's Etude in G-flat major, Opus 10 No. 5, utilizes a "major" scale with this many notes. An interval with this number is found between the second and third harmonics in the harmonic series. The Mixolydian mode can be constructed by starting on the scale degree of this number on a major scale; that scale degree is the (*) dominant. A "perfect" interval of this number occurs above the root of all major and minor triads and contains 7 semitones. A well-known system of organizing the 12 chromatic pitches is the "circle" of this numbered interval. For 10 points, give the number of notes found in a pentatonic scale.**
ANSWER: five [or 5; accept perfect fifth] <DS, Auditory Fine Arts>
17. **A number describing this phenomenon equals the ratio of diffusivities due to momentum and due to heat transfer, and is named for Prandtl. The first theory of this phenomenon grew out of the Richardson Cascade, which explains this phenomenon as a range of velocity fluctuations, and was made by Kolmogorov. This phenomenon occurs at higher levels of inertial forces, resulting in a higher (*) Reynolds number, and is characterized by chaos, leading to the formation of many vortices and eddies. Laminar flow is contrasted with, for 10 points, what type of flow that leads to bumpy airplane rides?**
ANSWER: turbulence (or turbulent flow) <MB, Physics>
18. **In one play by this author, a Swiss "chocolate-cream soldier" climbs into Raina's window during the Serbo-Bulgarian War. In another play by this author, the anarchist Mendoza captures the author of "The Revolutionist's Handbook," John Tanner. The section *Don Juan in Hell* is often cut from that play by this author. A play by this author begins with Freddy (*) Eynsford-Hill bumping into the female protagonist in Covent Garden, causing her to drop the flowers she sells. This author of *Arms and the Man* and *Man and Superman* wrote a play centered on a bet between Henry Higgins and Colonel Pickering. For 10 points, name this Irish author of *Pygmalion*.**
ANSWER: George Bernard Shaw <MB, British Literature>
19. **Renzo Piano designed this city's green, boat-shaped NEMO museum. Coronations in this city take place in the "New Church," or Nieuwe Kerk [new kirk], and its popular neighborhoods include Jordaan. The Amstel River ends in this city, the site of the world's oldest stock exchange. This city has considered making (*) prostitution illegal and moving De Wallen, its red-light district, and its "coffeshops are places where customers can legally purchase cannabis. Attractions in this city include the Rijksmuseum, home to many Rembrandts, and 60 miles of canals. For 10 points, name this capital of the Netherlands.**
ANSWER: Amsterdam <MB, Geography>
20. **This hero used the cyclopes to fortify the walls of a kingdom he founded after drinking water from a mushroom on its future site. This hero held an eye ransom to gain information from the three Grae ["gray"] sisters. After killing the sea monster Cetus, this hero rescued a princess stranded on a rock. This hero was born in a (*) wooden chest at sea and fulfilled a prophecy when a stray discus killed his grandfather Acrisius. This son of Danaë and husband of Andromeda received help from the Hesperides to achieve his most notable task, in which he used a reflection in a polished shield to kill a Gorgon. For 10 points, name this Greek hero who killed Medusa.**
ANSWER: Perseus <ES, Mythology>

Tiebreaker/Extra Question

Johann Chrysostom Magnenus was the first person to attempt to determine this value by experimenting with an incense stick in an empty church. Cannizzaro revealed its significance to the Karlsruhe Conference after its namesake's death, and it was defined as the number of atoms in thirty two grams of oxygen gas by Jean (*) Perrin. An early form of this constant was named after Johann Joseph Loschmidt. This quantity is equal to the Faraday constant divided by the charge of a single electron. Before 2019, this quantity was defined as the number of atoms in twelve grams of Carbon-12. For 10 points, name this number of molecules in a mole.

ANSWER: Avogadro constant [accept Avogadro number or 6.02×10^{23}] <CS, Chemistry>