

James Blair Bowl Packet 1

Buzzer Question: “If you could have any superpower what would it be?”

1. The tic and toc proteins aid in diffusion across this organelle’s outer membrane, while plastoquinones help carry electric charges across its inner lumen. One substructure of these organelles requires VIPP1 and produces the b6f cytochrome complex. Carotenes and xanthophylls are important compounds found in this organelle, whose primary function is dependent on the antenna complexes. One substance in this organelle is composed of a porphyrin ring surrounding a magnesium ion and is typically found in the thylakoids. For ten points, name this organelle, which serves as the primary sight of photosynthesis.

Answer: Chloroplast

2. This author won a prize for an all female play entitled *Madame de Sade*. In one of this man’s novels, an elderly writer manipulates a young man into taking revenge against all women by having as many affairs as he can and in another novel, a fisherman falls in love with the pearl diver Hatsue. This author of *Forbidden Colors* and *The Sound of Waves* created Honda, who tries to save reincarnations of his friend Kiyooki from early deaths and wrote a book in which Mizoguchi burns down the eponymous structure. For ten points, name this author of *The Sea of Fertility* tetralogy and *The Temple of the Golden Pavilion*.

Answer: Yukio Mishima

3. As a young man, this individual served on the Herter Committee during the aftermath of the second world war, while during one election he used “pink sheets” to smear Helen Douglas’ Senate campaign. This president argued for the devolutionary philosophy of “New Federalism” and also helped create the Environmental Protection Agency. Earlier in his life, this man defended his source of campaign funds in a speech named for a cocker spaniel. His first Vice President was forced to resign due to a tax evasion scandal. Spiro Agnew was the VP of, for ten points, what US President, who was himself forced to resign in the wake of the “Watergate Scandal”?

Answer: Richard Nixon

4. This work, originally based on a story by Cinthio, features a scene where one character claims that men go mad when the moon draws too close to the earth. A former governor in this work, Montano, comes to aid another character with the guards Gratiano and Ludovico, both of whom had earlier served Brabantio. One character loves the prostitute Bianca who, at one point, discovers a white handkerchief decorated with strawberries. In one scene, Cassio is drawn into a brawl during a party thrown to celebrate the destruction of the Turkish fleet. This play’s villain warns its title character to “beware the green-eyed monster”, though he later causes that character to strangle his wife Desdemona. For ten points, name this Shakespeare play about the treacherous Iago and the titular “Moor of Venice”.

Answer: *The Tragedy of Othello, the Moor of Venice*

5. Robert Nozick criticized this school of thought with a thought experiment involving an eponymous “monster”. The “preference” form of this school of thought was espoused by a scholar who famously taught Brian McGuinness and another notable member of this school, Peter Singer. Aside from Richard Hare, proponents of this movement have outlined its principles in works such as *Methods of Ethics*. Variables such as “intensity”

and “fecundity” are used in a central algorithm of this school called the “felicific calculus”. The concept of the “harm principle” was first discussed in the book *On Liberty*, which is, for ten points, a major work in what philosophical school, famously espoused by John Stuart Mill and Jeremy Bentham?

Answer: **utilitarianism**

6. This artist drew the Three Graces in red chalk after designing the altarpiece of Oddi. One series of paintings shows St. Paul preaching in Athens and the apostles fishing. This artist of some namesake cartoons painted two versions of St. George and a portrait of a woman cradling a unicorn. This man depicted the infant Christ and John the Baptist handling the titular bird in his *Madonna of the Goldfinch*. One of his paintings depicts a woman standing in a shell drawn by dolphins, his *Galatea*, while his most famous painting sees Aristotle and Plato debating beneath an arch in the titular location. For ten points name this Renaissance artist of *The School of Athens*.

Answer: **Raphael** Sanzio

7. Researcher John Holt discovered that debris on Mars may cover one type of this entity three times the size of Los Angeles and the Ismenius Lacus shows evidence of these bodies, which can form slopes of rock called roche moutonnées. When these objects are absent, surrounding areas can experience isostatic rebound and these objects are known to create entities known as eskers. The Glen-Nye law regulates these entities when there is inequality between the stress and strain during ablation, causing the formation of drumlins. Other features created by these bodies include cirques. For ten points, name these large masses of ice.

Answer: **glaciers**

8. One of this writer’s works sees Deianeira tricked into poisoning her husband with a robe imbued with the blood of centaur Nessus. Aside from creating *The Women of Trachis*, this man also wrote a work in which Neoptolemus attempts to steal the bow of Heracles from the titular figure, who suffers from a wounded foot. Other than the plays *Philoctetes* and *Ajax*, this author is known for a work in which the titular exiled king offends a group of villagers by entering a garden sacred to the Furies. The body of Polynices is left to rot while Eteocles is praised by Creon in a play that also features the eponymous character committing suicide to escape being buried alive. For ten points, name this Greek playwright, who wrote about the tragic history of Oedipus and his daughter Antigone.

Answer: **Sophocles**

9. In one story this figure gathers a feather from the world’s birds in order to fashion a robe while in another this character acquires an army of 100 warriors with a single ear of corn. This figure’s mother is the agricultural deity Asase Ya and he once brought Wulbari the sun, moon, and darkness. This figure once escaped Death by throwing flour in his face and his son Ntikuma mocked this figure when he could not climb a tree with a pot containing wisdom tied to his chest. According to the Ashanti people this figure and his wife Aso brought Nyame a python, a leopard, and hornets, resulting in him winning the stories of the world. For ten points, name this African trickster spider.

Answer: **Anansi**

10. This leader started the construction of the Annio Novus and removed Flaccus from power in Egypt. This leader's father died prematurely in Antioch, and he and Macro may have murdered his predecessor by smothering him. This leader annexed Mauritania after executing Ptolemy, but ended his campaign into Britain by having his men collect seashells from the shores of Gaul. This leader was succeeded by his uncle Claudius and his name means 'little boots'. For ten points, name this successor of Tiberius who was assassinated by the Praetorian Guard.

Answer: **Caligula** (Gaius Julius Caesar Germanicus)

11. Along with lithium and beryllium, this element is produced in cosmic ray spallation. It does not occur on Earth in its elemental form, but it has been found in Moon dust and meteoroids. Along with sodium, this element is used to make kernite and helps to strengthen cell walls in plants. This element's hydrides follow Wade's rules for clusters and is able to form banana bonds. Able to be derived from colemanite and ulexite, this element violates the octet rule by having only 6 valence electrons and is found in Pyrex glass. For ten points, name this metalloid with atomic number 5 and symbol B.

Answer: **boron**

12. Christopher Patrick formulated the triarchic model for diagnosing this disorder, basing it on Hervey Cleckley's definition. David Marcus linked this disorder to depression and tried searching for it among prisoners. This disorder forms the dark triad of psychology with narcissism and Machiavellianism. Though not clinically diagnosable, there is a distinction between this disorder and psychosis because affected individuals act of their own free will. For ten points, name this personality disorder characterized by impaired empathy, synonymous with aggression and sociopathy.

Answer: **psychopathy** [accept **sociopathy** until mentioned]

13. The Parliament buildings in this city were burned in 1849 in retaliation for the passage of the Rebellion Losses Bill. The opening of the Saint Lawrence Seaway allowed vessels to bypass this city, decreasing its status as the national economic center. This city is serviced by the Dorval International Airport and its "Underground City" is a notable tourist attraction. It is the home of the Just for Laughs festival and it is bordered to the north by the township of Laval. The town of Plattsburgh, New York, calls itself the US suburb of this city. Home of the Jacques Cartier Bridge and its own Notre-Dame Basilica, for ten points, name this largest city of Quebec that is named for a mountain.

Answer: **Montreal**

14. Prior to this event, George Hawkins wrote an address entitled the "Farewell to the American People". Tensions between the state government and the group in question were strained by the discovery of gold in Dahlonega. The Treaty of New Echota provided the legal basis for this event. The result of *Worcester v. Georgia* was famously ignored by Andrew Jackson, who said "John Marshall has made his decision; let him enforce it." For ten points, name this forced removal of the Cherokee Nation from Georgia to Indian Territory.

Answer: **Trail of Tears** (accept "Indian Removal" or similar)

15. After "The End", two figures in this work's credits discuss the fate of the protagonist before telling him to wake up. In the settings, this work has diverse language options that

include Esperanto, Latin, and Pirate Speak. One new item in this game, the Elytra (*E-ly-tra*), is only accessible after beating the final boss, and the recently added Stray and Husk enemies are alternate versions of Skeletons and Zombies that appear in specific biomes. FTP, name this popular, cube-based indie sandbox game that was purchased in 2014 by Microsoft

Answer: **Minecraft**

16. Even though these astronomical bodies are composed of carbon and oxygen, the spectral lines from their atmosphere usually come from hydrogen or helium. Binary systems with this entity accreting matter from another star are called cataclysmic variables. This type of star can undergo a Type Ia supernovae if it accretes enough mass to surpass the Chandrasekhar limit of 1.44 solar masses. They experience carbon detonation and are unable to undergo nuclear fusion. For ten points, name this type of star which is from created electron degeneracy preventing the collapse of a stellar mass.

Answer: **white dwarfs**

17. One story written by this author involves a boy who lies about his name being Bevel who is eventually drowned. In another story, Mr. Shiftlet talks about a doctor cutting out a heart and holding it in his hand “like a day-old chicken.” Besides “The River” and “The Life You Save May Be Your Own”, this author wrote a story where a black woman hits Julian’s mother in the face with her purse. Aside from “Everything that Rises Must Converge”, this author wrote another story where the Misfit kills a grandmother. For ten points, name this Southern Gothic author of “A Good Man is Hard to Find.”

Answer: Flannery **O’Connor**

18. “Procedure for Writing Words, Music, and Plain-song” in this script is a book published by its creator to expand this system of writing for use by musicians and mathematicians. This system of writing was modified from Charles Barbier de la Sarre’s military methods intended for night deciphering. Shubham Banerjee created a low-cost printer for this system of writing out of a Lego Mindstorm set. This first modern binary system of writing was created by 15 year old French boy after an accident involving a piece of leather and an awl leading to an infection. FTP, name this script, comprised of sets of 6 raised or lowered dots, that is commonly used by the blind and visually impaired.

Answer: **Braille**

19. A piece from *The Damnation of Faust* known as the “Dance of the Sylphs” is performed by a double bass in this work’s fifth movement. One movement from this work was written for the glass harmonica and influenced “Hedwig’s Theme” from Harry Potter. Another movement from this work ironically slows down Offenbach’s “Infernal Galop” to mimic the movement of the titular slow creature. Another movement from this work borrows motifs from the composer’s “Danse Macabre” * to lampoon the musical antiquities of the day. FTP, movements such as “Aquarium,” “Tortoises,” and “Fossils” comprise what satirical circus-themed suite by Camille Saint-Saëns?

Answer: The **Carnival of the Animals** / Le carnaval des animaux

20. Claims have been made that this individual was arrested alongside Cecil Williams on advice given by the CIA. This man helped found a military branch of his political party known as the “Spear of the Nation”. This individual led a campaign against AIDS through his namesake foundation, and served briefly as the Secretary-General of the Non-Aligned Movement. After the Rivonia Trial, this individual was imprisoned on Robben

Island. For ten points, name this anti-Apartheid activist who served as the first black president of South Africa.

Answer: Nelson **Mandela**

21. Lord Fermor tells of how this character's mother Margaret ran off with a soldier and this character discusses music with Victoria. Shortly after that meeting, this character explains how he is called Prince Charming by an actress he saw in Romeo and Juliet, Sybil Vane, whose suicide he causes when he spurns her. Lord Henry corrupts this character when he gives him a yellow book and this character dies when he plunges a knife into the work of Basil Hayward. For ten points name this Oscar Wilde character, the subject of a certain picture.

Answer: **Dorian Gray** (accept either)

22. A group of academics found by Pythagoras studied these numbers for their "mysticality". Much later, in 1509, Charles de Bovelles published one of the first books about these numbers. Any odd version of this type of number, who form a subclass of Ore Harmonic Numbers, must have at least 300 digits and must have at least 75 non-distinct prime factors. Euclid proved that the sum of all numbers from 1 to a Mersenne Prime is an even type of these numbers, and Euler later proved that all even types of these numbers must be Mersenne Primes. Nicomachus of Gerasa classified all numbers as deficient, superabundant or this. For 10 points, name this type of numbers where each number is the sum of its factors not including itself, the first three of which are 6, 28 and 496.

Answer: **Perfect** Numbers

Bonuses:

1. For ten points each, name these third party candidates.
 - a. This businessman ran in 1992 and 1996, the latter under the banner of the Reform Party.
Answer: Ross **Perot**
 - b. This individual, a former governor of Alabama, ran for President alongside Curtis LeMay in 1968, famous for proclaiming “Segregation now, Segregation Tomorrow, Segregation forever!”
Answer: George **Wallace**
 - c. This candidate from South Carolina ran for president in 1948, and later gave the longest filibuster in Senate history in opposition to the Civil Rights Act of 1957.
Answer: Strom **Thurmond**
2. One law named for this function can be used to generalize the Pythagorean theorem to non-right triangles. For ten points each-
 - a. Name this trigonometric function, which, for an angle, is defined as the adjacent over the hypotenuse.
Answer: **cosine**
 - b. The primitive period of this other trigonometric function is a full a circle. It is also defined as the reciprocal of the cosine function.
Answer: **secant**
 - c. The cosine function has “2n factorial” in the denominators of its series of this type. It is defined as the infinite sum of derivatives at a single point. When centered as 0, it is called the Maclaurin series.
Answer: **Taylor** series
3. Tennessee Williams is often considered one of the most quotable American dramatist of all time. For ten points, given a notable line from a Tennessee Williams play, name the work from which it comes.
 - a. “I have always depended on the kindness of strangers.”
Answer: A **Streetcar Named Desire**
 - b. “But I am the opposite of a stage magician. He gives you illusion that has the appearance of truth. I give you truth in the pleasant disguise of illusion”
Answer: *The* **Glass Menagerie**
 - c. “Everybody is nothing until you love them”
Answer: *The* **Rose Tattoo**
4. The Pearl Incident involved several individuals involved with this entity. For ten points each-
 - a. Name this institution whose famous members include Levi Coffin, Peg Leg Joe, and Harriet Tubman.
Answer: The **Underground Railroad**
 - b. There were many routes taken in original Underground Railroad, but those leading from the Southern United States often instructed its “passengers” via song to follow what heavenly marker?

Answer: the “**drinking gourd**” or the **Big Dipper** (do not prompt on or accept “little dipper. Prompt on “North Star”)

- c. This Quaker also aided the Underground Railroad during her lifetime, a fact she openly admitted during her speech at the World’s Anti-Slavery Convention, where she also met Elizabeth Caddie Stanton. Stanton and this woman would later go on to host the Seneca Falls Convention.

Answer: Lucretia **Mott**

5. The term ‘robot’ only started appearing in literature in the 20th century. For ten points each:

- a. The word ‘robot’ was first used in this play by Karel Capek, in which a rebellion kills every human being except Alquist.

Answer: **Rossum’s Universal Robots** ; **R.U.R.**; or **Rossumovi Universální Roboti**

- b. This author wrote the short story “Nightfall”, but is best remembered for creating the Three Laws of Robotics.

Answer: Isaac **Asimov** (accept **Ozimov**)

- c. Rick Deckard is the protagonist of this Philip K. Dick novel in which he tracks down Nexus-6 models in San Francisco.

Answer: **Do Androids Dream of Electric Sheep?**

6. The winter goddess Skadi was originally one of these beings before joining the Aesir. For ten points each-

- a. Name these mythological beings, other examples of which include the thieving Thrymyr and the primordial Ymir.

Answer: **giants** (also accept **jotunns**, **jotnar**, and **frost giants**)

- b. The giantess Hyrrokin was needed to push Hringhorni, an enormous ship that served as the funeral pyre of this Norse god of light. He was killed by his twin brother Hodr.

Answer: **Baldr**

- c. This fearsome giant and king of Muspellheim is said to emerge during Ragnarok to lead the fire giants against the forces of Asgard. It is said he will battle and slay Freyr before casting his flames over the earth.

Answer: **Surtr**

7. For ten points each, name these British military figures.

- a. This Admiral commanded the HMS Victory at the Battle of Trafalgar, where he died of a sharpshooter’s bullet. He is memorialized on a column in London.

Answer: Horatio **Nelson**

- b. This general, along with Gebhard Leberecht von Blucher, defeated Napoleon at the Battle of Waterloo.

Answer: Arthur Wellesley, 1st Duke of **Wellington** (also accept **Wellesley**)

- c. This victor of the Battle of Blenheim in 1704 is an ancestor of a 20th century Prime Minister.

Answer: John Churchill, 1st Duke of **Marlborough** (accept ‘Churchill’ before mentioning Winston; prompt otherwise)

8. This famous critic of the Treaty of Versailles had notably determined that aggregate demand could be defined as the sum of consumption, government spending, and investment. For ten points each-

- a. Name this British economist who was an outspoken proponent of deficit spending during times of recession and depression.

Answer: John Maynard **Keynes**

- b. Keynes' seminal work was this treatise, which introduced the ideas of the consumption function, effective demand, and liquidity preference.

Answer: **The General Theory** of Employment, Interest, and Money

- c. Throughout *The General Theory* Keynes discusses the marginal efficiency of this concept, which AMECO defines as the "change in GDP at constant market prices of year T per unit of grossed fixed formation of " this concept.

Answer: **capital**

9. Anthropologist James Frazer placed this between the stages of magic and science in one section of his *The Golden Bough*. For ten points each-

- a. Name this concept, described as the emotional unifier of society by one scholar and as the "opiate of the masses" by Karl Marx.

Answer: **religion**

- b. That aforementioned scholar described faith in his *Elementary Forms of Religious Life*, where he discussed his idea of epistemological realism, a concept he also espoused in *The Division of Labor in Society* and his *Rules of Sociological Method*.

Answer: Emile **Durkheim**

- c. Durkheim's works were often regarded as precursors to this school of thought that focuses on the idea that society's various parts work toward mutual solidarity. Other proponents of this school of thought include Talcott Parsons and Robert Merton.

Answer: structural **functionalism**

10. This island chain was discovered by William Ambrose Cowley when he went looking for Pepys Island. For ten points each:

- a. Name this archipelago made a UNESCO World Heritage Site and reserve for its endemic species such as the giant tortoise and marine iguana.

Answer: **Galapagos** Islands

- b. Darwin's study of finches in the Galapagos led him to propose this concept, in which the environment determines the reproductive success of species through inherited traits.

Answer: **natural selection**

- c. This biologist proposed his own theory of evolution independently of Charles Darwin; his namesake effect describes how species avoid hybridization through natural selection.

Answer: Alfred Russel **Wallace**

11. The female lead of one of this man's works laments that the body of a certain knight "grows brighter" in the aria "Liebestod". For ten points each-

- a. Name this composer, who created that aforementioned aria for his opera *Tristan and Isolde*, and also included the work *Siegfried* in his famous *Ring Cycle*.

Answer: Richard **Wagner**

- b. A group of maidens are assailed by the misanthropic dwarf Alberich in this Wagner opera, during which time Alberich seizes the titular entity to create the Ring of the Nibelung. It is the first opera in the *Ring Cycle*.

Answer: *The* **Rhinegold** or *Das Rheingold*

- c. Wagner's *Ring Cycle* and many other works such as his *Parsifal* were premiered in this town. Located in Northern Bavaria, this town's *festspielhaus* has been the site of the annual Wagner music festival for the last century.

Answer: **Bayreuth** (buy-roit)

12. Malcolm McDowell improvised 'singing in the rain' in a movie based on this novel. For ten points each:

- a. Name this novel which starts at the Korova Milk Bar and sees the government attempt to cure Alex of violent episodes using the Ludovicio technique.

Answer: **A Clockwork Orange**

- b. This author of *A Clockwork Orange* claims he wrote the book in three weeks; his other works include *The Malayan Trilogy* and *One Hand Clapping*.

Answer: John Anthony **Burgess** Wilson

- c. This is the nadsat term Burgess uses to refer to Alex's friends Dim, Pete, and Georgie.

Answer: **droogs**

13. For ten points each, answer some questions about basic kinematics-

- a. Name this law that equates the product of mass and acceleration to force, often summarized as $F=ma$.

Answer: **Newton's second** law

- b. In an ideal rocket equation, rockets apply thrust by getting rid of its mass, being able to move by conserving this entity according to Newton's second law. It is symbolized p .

Answer: **momentum**

- c. This quantity is the integral of force with respect to time and is equal to the change in momentum of an object.

Answer: **impulse**

14. When it comes to sports, one little mistake can be immortalized forever. For ten points each, answer these questions about notable sports blunders.

- a. In Game 6 of the 1986 World Series, first baseman Bill Buckner let the ball roll between his legs which ultimately cost this team the game, allowing the New York Mets to win their second World Series.

Answer: **Boston Red Sox** (accept either)

- b. In 1964, the Viking's Defensive End Jim Marshall got in a lot of trouble during a game against the 49ers when, after recovering a fumble, he performed what infamous blunder, often considered the most embarrassing incident in NFL history?

Answer: **ran the wrong way with the ball** (accept obvious equivalents, including things like "scoring against his own team")

- c. Andres Escobar, a player for this country, was brutally murdered by a group of zealous fans in the aftermath of the 1994 World Cup when Escobar mistakenly scored a goal on his team. Prior to that Escobar played for the club Atletico Nacional, based in this country's city of Medellin.

Answer: **Colombia**

15. For ten points each, name these European countries based on their fates in World War II.

- a. Kurt Schuschnigg attempted to keep this country independent, but Germany annexed it during the Anschluss.

Answer: **Austria**

- b. Allied bombings in this neutral country were explained as navigational accidents; during the war, it was led by Henri Guisan [ON-ree GHEE-sahn].

Answer: **Switzerland**

- c. In 1940, the United Kingdom invaded this island country in the North Sea to deny it to the Germans.

Answer: **Iceland**

16. One work shows a tea house after it snows and another shows a reflection of the subject in Lake Kawaguchi. For ten points each:

- a. Name this series of works depicting the titular place, including The Great Wave of Kanagawa and South Wind, Clear Sky.

Answer: **36 Views of Mount Fuji**

- b. This artist of 36 Views of Mount Fuji proved so popular after its release that he painted an additional 10 pictures.

Answer: Katsushika **Hokusai**

- c. Hokusai's series was done in this type of art, where a block of wood was carved, covered in ink, and reapplied to paper. It roughly translates to "pictures of the floating world".

Answer: **ukiyo-e**

17. For ten points, let's take a trip to some Italian Leaning Towers.

- a. This tower hosts seven bells tuned to the musical scale and stands in an square named the Piazza dei Miracoli. Galileo famously used this monument in one of his experiments.

Answer: The **Leaning Tower of Pisa**

- b. One can see that a famous Venetian bell tower leans slightly when viewed from this namesake touristy, pidgeon-filled Square.

Answer: **St Mark's** Square or Piazza di **San Marco**

- c. Here, one can get two leaning towers for the price of one, as the Asinelli and Garisenda towers are feet away from each other in this northeastern Italian city, which gives its name to a popular ragu.

Answer: **Bologna**

18. This collection starts with the lines "Folly, error, sin, avarice/ Occupy our minds and labor our bodies." For ten points each:

- a. Name this poetry collection in which the first poem addresses the "hypocrite reader." It includes the poem "The Albatross".

Answer: *The **Flowers of Evil** or **Le Fleur du Mal***

- b. This author of *The Flowers of Evil* also translated a few stories of Edgar Allan Poe.

Answer: Charles **Baudelaire**

- c. The speaker of this poem in *The Flowers of Evil* repeatedly asks the titular figure to "have pity on their long despair," and begins with the lines, "Wisest of Angels, whom your fate betrays, / And, fairest of them all, deprives of praise."

Answer: **"The Litanies of Satan"**

19. Most scholars believe this piece of literature to be fictional due to the fact that only one character within it has a Hebrew name.

- a. For ten points, name this book that appears in the Jewish Ketuvim and the Christian Old Testament that depicts the misery of the tile righteous man whose faithfulness was tested by God and explores the question of why bad things happen to good people.

Answer: **Job**

b. It's not the Leviathan, but this Babylonian creature depicted in Job is also mentioned by God to show his reign over creation. In modern times, its name is used to mean something intimidating or of great size.

Answer: **Behemoth**

c. The Book of Job is often grouped by religious scholars alongside the Book of Ecclesiastes and the Book of Proverbs into this genre of literature, named for the three books' discussion on the title virtuous concept, having the experience to make sound judgements.

Answer: **Wisdom** literature

20. This substance's stability region is denoted with a green line on Pourbaix diagrams as it is subject to frequent pH shifts due to its neutrality. For ten points each-

a. Name this substance, whose heavy variety contains deuterium, and whose hydrogen bonding has led to it being called the "universal solvent".

Answer: **water** or **H₂O**

b. One of water's key properties is its high value for this quantity, which for water is around 4.18 Joules per Kelvin. A common definition for this property is the amount of energy needed to raise a substance's temperature by one degree Celsius.

Answer: **specific heat** capacity or **heat capacity**

c. Specific heat can be measured using one of these devices which are often used to measure the enthalpy change of a chemical reaction. A simple one can be made with a thermometer and a couple of Styrofoam cups.

Answer: **calorimeter**

21. Answer some questions regarding the end of the Era of Good Feelings for ten points each:

a. This financial crisis ended the economic expansion caused by the end of the War of 1812 and was accompanied by a namesake Banking Crisis.

Answer: **Panic of 1819**

b. This court case ruled that states were not allowed to tax the federal government, helping to declare the constitutionality of the Second Bank of the United States.

Answer: **McCulloch vs. Maryland**

c. This compromise resulted in the namesake state being admitted as a slave state despite prohibiting slavery north of the thirty-six thirty parallel.

Answer: **Missouri** Compromise

22. There are many infamous women who appear in the Bible. FTPE,

a. After being paid 1,100 pieces of silver, this woman shaved the head of Samson. A song by the Plain White T's coincidentally uses her name as the title love interest.

Answer: **Delilah**

b. This woman, the wicked wife of King Ahab, was eventually thrown off the balcony by two of her eunuchs and eaten by dogs. She convinced her husband to worship Ba'al and conspired to seize the vineyard of Naboth

Answer: Queen **Jezebel**

c. This woman lied to the Apostle Peter and the Church when she and her husband kept back part of the proceeds of a property sale but wanted to be recognized for the generosity of the gift. She, like her husband, fell down dead after Peter pronounced judgement on her.

Answer: **Sapphira**

