

by Bill Tressler

with thanks to Alex Dzurick, Bern McCauley, and the Great Valley Quiz Team

## Tossups

1. **The Firestone Company signed a 1926 contract with this country's government and operates the world's largest rubber plantation here. The People's Redemption Council headed by Samuel Doe governed it in the 1980s. Its first president, Joseph Jenkins Roberts, was born in Virginia, and its creation was aided by a (\*) colonization society founded by Charles Mercer and others. This country's neighbors include Sierra Leone and Guinea, and its capital is Monrovia. For 10 points—give this country whose name reflects its founding by liberated slaves.**

answer: Republic of Liberia [that Firestone agreement is still in effect and expires in 2026]

2. **This group's members Segwarides [segg-WAR-uh-deez] and Palamedes [pal-uh-MEE-deez] are sons of the Saracen [SAIR-uh-sin] king Esclabor [ESS-clay-bore]. One of its members went with Hélié to a place where Mabon caused trouble for Blonde Esmerée. This group included a son of Elaine of Corbenic able to sit at the (\*) Siege Perilous according to Thomas Malory. Another of these men was the greatest jousting of the age, had an affair with Queen Guinevere, and went on a quest for the Holy Grail. Gingalain, Galahad, and Lancelot are among—for 10 points—what group who served a king advised by Merlin?**

answer: Knights of the Round Table or King Arthur's Knights or Camelot's Knights  
(anything indicating people who serve Camelot or King Arthur is acceptable)

3. **French listeners of this composer thought his feast day overture sounded like hunting, so they called it "The Chase" rather than *Zur Namensfeier*. He never finished the opera *The Vestal Flame*, and "The Difficult Decision" titles part of his 16<sup>th</sup> string quartet in F major, written in 1826. Alternating E and D-sharp notes begin his piano solo titled (\*) *Für Elise*. His nine symphonies include the "Pastoral", "Eroica", and "Choral". For 10 points—name this German composer of the *Moonlight Sonata*.**

answer: Ludwig Van Beethoven

4. **The Richardson number is a ratio of this kind of force to shear forces. To simulate microgravity, the Sonny Carter training facility keeps this force neutral to train astronauts. Because the density of wax balls changes upon heating, a formula that can be written as density times gravity times volume explains this force in (\*) lava lamps. That principle by Archimedes says this vertical force on an object equals the weight of the fluid the object displaces. For 10 points—give this term that also means the ability of an object to float in water.**

answer: buoyancy or buoyant force (accept word forms; accept Neutral Buoyancy Laboratory; prompt on "floating" or "sinking" until "float")

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5. **One member of this family held a governorship between 1999 and 2007, and was succeeded by Ted Strickland. Another member of this family, Alphonso, was Grant's Secretary of War. A third member was an Ohio Senator when he sponsored a labor act with Fred (\*) Hartley.** This family also includes a Chief Justice who previously won the 1908 presidential election. For 10 points—give this family whose President's close ties to Roosevelt led some to joke the surname stood for "Take advice from Theodore."

answer: Taft (accept full names such as William Howard Taft; accept Taft-Hartley Act after "Hartley")

6. **The doomsday cult now called Aleph panicked this city in 1995 by releasing sarin gas in its subways. The Cubs and Mets opened the 2000 baseball season playing abroad in this city. Frank Lloyd Wright built a House of Tomorrow for a girls school here, and also constructed its Imperial Hotel. Chiba is part of its metropolitan area home to (\*) 38 million.** Between the Sumida River and the Ginza shopping district is this city's Tsukiji sue-KEE-gee fish market. Honshu island includes—for 10 points—what capital of Japan?

answer: Tokyo, Japan

7. **Desiderius Erasmus wrote the 1509 essay *In Praise of Folly* in this language. One early drama in this language is titled "The Mother-in-law" and features a man who takes back a wife. A 2<sup>nd</sup>-century BC poet used this language to write the *Annals*, an epic poem describing Tarquin the Proud. The (\*) *Ars Poetica* in this language has advice for young writers and was written by Horace.** Some historians writing in this language were Suetonius, Livy, and Tacitus. For 10 points—name this language used by Ovid and other Roman writers.

answer: Latin

8. ***By the Balcony* and *The Siesta* are portraits this artist made of his wife Beatrice Godwin, who also posed for *Harmony in Red: Lamplight*. *The Princess from the Land of Porcelain* hangs above the fireplace in his interior design of the *Peacock Room*. In his best known work, a landscape hangs on the wall while a (\*) woman dressed modestly sits with her hands clasping a handkerchief.** That work's formal title is *Arrangement in Grey and Black No.1*. For 10 points—name this artist who painted his mother.

answer: James McNeill Whistler (accept Whistler's Mother after "best known")

9. **Chris Newhall and Stephen Self devised a scale that rates these events from zero to eight. The largest of these historical events by volume may have occurred in the Paraná-Etendeka traps. According to the Toba catastrophe theory, one of these events reduced the pre-historical (\*) human population to several thousand.** A 2011 example in Iceland prevented air flight across Europe and in 2014 Japan experienced one at Mount Ontake. For 10 points—give these events that involve pyroclastic flow and lava.

answer: volcanic eruptions (accept volcano events)

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10. A corpse thought to be the remains of the first ruler of this name spent 140 years unidentified at a Niagara Falls museum. The Temple of Khonsu was started by the third leader of this name. These rulers belonging to the 19<sup>th</sup> and 20<sup>th</sup> dynasties have names meaning the Sun god gave birth to them. The second of these rulers fought the (\*) Hittites at the Battle of Kadesh, had Nefertari as a consort, and is often said to be the leader who reigned when the Hebrews began the exodus. For 10 points—give this name of eleven Egyptian pharaohs.

answer: Ramses or Rameses or Ramesses (accept more specific answers such as Ramses I or Ramses the Great)

11. This actor starred as Garth in the 1974 film *The Clansman* and was the boxer Joe Gallagher in two NBC films. One of his Pioneer Chicken franchises burned in the 1992 L.A. riot. An Emmy nomination went to Cuba Gooding Jr. for playing this man in a 2016 series. This man claimed he was repossessing (\*) sports memorabilia when he entered the Palace Station casino in 2007, but a jury convicted him of weapons and assault, charges for which he was paroled in July 2017. For 10 points—name this football star acquitted of murdering his wife Nicole Brown.

answer: O(renthal) J(ames) Simpson (accept O.J.)

12. In this book, Mrs. Bell teaches ratios by having the heaviest and lightest kids in class weigh themselves. Its character Ms. Morengo learns from Derrick Dunne that at 3:20 the protagonist was retrieving a notebook from a toilet. One of this book's authority figures has traded smoking for eating sunflower seeds, has a (\*) rattlesnake tattoo, and has oversees Squid, X-Ray, and Zero. The title excavations must be 5 feet across and 5 feet deep. Stanley Yelnats is sent to Camp Green Lake in—for 10 points—what Louis Sachar "sacker" work in which prisoners must dig?

answer: Holes

13. The "Chinese theorem" of number theory named for these values sometimes simplifies computations. Many programming languages, including PHP and Perl, use the percent sign to find this value. A polynomial theorem often named for these states that if  $f(x)$  "f of x" is (\*) divided by "x" minus "c", then  $f(c)$  "f of c" equals this value. In integer division, this value can never be greater than the divisor. For 10 points—name this quantity "left over" after an mathematical operation.

answer: remainder (accept modulus or modulo; accept polynomial remainder theorem after "f(c)")

14. The theologian Brant Pitre draws parallels between the epiclesis [epp-ih-KLEE-sis] of this observance and the biblical manna. Pope Eugene IV told Armenians to sparingly include water for one component, and some communities now allow a gluten-free option for its other part. In the Catholic Church it is observed after the moment of (\*) transubstantiation, and several churches allow intinction where one element is dipped into the other and consumed together. For 10 points—name this religious practice involving bread and wine to honor of the body and blood of Christ.

answer: Holy Communion or The Eucharist or the Lord's Supper

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15. A formal name of this compound is 1,3,7-trimethylxanthine ["tri"- "methyl"-ZAN-theen]. The World Health Organization once said this purine alkaloid caused bladder cancer, but has reversed the stance and now says it may reduce some cancer risk. This compound kills slugs and frogs, a pesticide benefit exploited by yerba mate and gurana plants. In the body it (\*) increases blood pressure and can inhibit sleep, and stopping its consumption can cause headaches. For 10 points—name this stimulant found in coffee and energy drinks.

answer: caffeine

16. One of this novel's chapters sees French prostitutes propose a carnival while a man in a workshop crafts golden fish. Its character Petra Cotes doesn't realize her lover is actually two similar-looking brothers. This work ends with a house in disrepair and a deformed child dying from neglect and being consumed by ants. The (\*) seven generations in this work begin with Úrsula Iguarán [ee-GWAR-an] and José Arcadio Buendía [bwen-DEE-ah]. The Colombian town of Macondo is the setting of—for 10 points—what Gabriel Garcia Márquez novel about a century of isolation?

answer: One Hundred Years of Solitude or Cien años de soledad

17. Pattison's process removes this element from lead. Tollens' reagent is a solution of a nitrate of this element and ammonia, and the nitrate of this metal was often used to prevent conjunctivitis in newborns. The body exhibits argyria after overexposure to this element whose nanoparticles are put in (\*) socks to kill bacteria. Useful in photography, a process of reducing a nitrate of it produced 19<sup>th</sup> century mirrors. For 10 points—name this element whose symbol is Ag, which is used in second-place Olympic medals.

answer: silver

18. These speakers of the Pama-Nyungan languages retell their histories during corroboree dancing ceremonies. These people made the Bradshaw rock paintings from Pleistocene times. Males in this culture become adults after wilderness walkabouts, and their beliefs include the (\*) Rainbow Serpent in the Dreamtime worldview. One myth of this country says Bobi-Bobi removed a rib which became the first boomerang. For 10 points—give these people who have inhabited the Outback since ancient times.

answer: Australian aborigines (accept either underlined word)

19. A book by Finis Bates controversially claimed this man lived into the 1880s under the pseudonym John St. Helen. Mary Surratt, the first woman executed by the federal government, met this man at her boarding house. Samuel Mudd created a splint for this man's (\*) broken leg. David Herold and this man hid in Richard Henry Garrett's barn, the end of a journey that began after he interrupted an 1865 production of *Our American Cousin* in Ford's Theater. For 10 points—name this man who shot Abraham Lincoln.

answer: John Wilkes Booth

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20. In a short story by this author, an Easterner, a cowboy, and a Swede stay at a "Blue Hotel". This writer also wrote about Mary and Jimmie Johnson, who throw Maggie out of an apartment and force her to live on the streets. This author described the plight of a captain, correspondent, and cook who survive a shipwreck in "The (\*) Open Boat". In his best known novel, the young flag-bearer Henry Fleming lacks bravery, but returns to his regiment after being hit on the head. For 10 points—who is this author of *The Red Badge of Courage*?

answer:           Stephen Crane

21. One person who held this position was perceived as against family and marriage when she gave the "Prince Charming" speech at Girls State. Another person in this office said he would eliminate the Energy Department, which he ironically now (\*) heads. The current holder of this position is Greg Abbott. Ann Richards and Rick Perry are people who served as this executive who leads from Austin. For 10 points—give this position George W. Bush vacated upon becoming president.

answer:           Texas governor

22. This modern country's lands included the medieval Kingdom of the Rhinns and the Mormaer of Moray. The 1685 Argyll's Rising was led Archibald Campbell, an earl of this country. The 1320 Declaration of Arbroath asserted its independence and was made while (\*) Robert the Bruce held its throne. The X-shaped cross used to crucify its patron saint Andrew is seen on its blue flag. In a 2014 referendum, 55 percent of its voters wanted to remain a part of the United Kingdom. For 10 points—name this country known for bagpipes and kilts.

answer:           Scotland or Alba (prompt on "United Kingdom" before "Campbell")

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**Bonuses**

1. For 10 points each—name these Renaissance artists:

A. This sculptor depicted Mary holding the crucified Christ in his *Pietà* and *The Creation of Adam* is a fresco he painted on the Sistine Chapel ceiling.answer: **Michelangelo** di Lodovico Buonarroti SimoniB. The equestrian statue *Gattamelata* [GAT-tuh-muh-LAH-tah] is by this sculptor whose bronze *David* shows him holding a sword and wearing a helmet and boots.answer: **Donatello** or Donato di Niccolò di Betto BardiC. If you've caught on to the *Teenage Mutant Ninja Turtle* theme, then you might be able to name this painter of *The School of Athens* who had a role in designing St. Peter's Basilica.answer: **Raphael** or Raffaello **Sanzio** da Urbino

2. Members of this family include kings Fahd and Abdullah. For 10 points each—

A. Give this Middle Eastern family name or its adjective form. They are the descendants of the founder of the Emirate of Diriyah ["dairy"- ah].

answer: House of **Saud** or the **Saudi** royal family (do not accept "Saudi Arabia")

B. This current head of the House of Saud ascended to the throne when Abdullah died in 2015.

answer: **Salman** bin Abdulaziz Al Saud

C. This figure met with King Fahd in 1990 and offered to defend Saudi Arabia from Iraq. Instead the Saudis turned to a U.S.-led coalition and banished this figure to Sudan, where he grew al-Qaeda.

answer: Osama **bin Laden** or Usama bin Mohammed bin Awad **bin Laden**

3. Flight simulators are one example of these used in training. For 10 points each—

A. Name these technologies that strive to produce an authentic user experience, a two-word term abbreviated VR.

answer: **virtual reality**B. This virtual reality headset was built after a 2012 Kickstarter campaign. The games *Eagle Flight*, *The Climb*, and *EVE: Valkyrie* can all make use of this device.answer: Oculus **Rift**

C. Scientists are using virtual reality to study this portion of the brain involved in spatial memory and navigation. Humans have two of these regions named for their resemblance to a seahorse.

answer: **hippocampus** or **hippocampi**

4. As this planet's composition has a mean density of 0.69 grams per cubic centimeter, it would float in a large enough bathtub. For 10 points each—

A. Name this gas giant with a spectacular ring system.

answer: **Saturn**

B. In 2004 this NASA probe landed its Huygens [HOY-gens] spacecraft on Saturn's moon Titan. This probe is named for an Italian who studied divisions in Saturn's rings.

answer: **Cassini** [after Giovanni Domenico Cassini]C. The first probe to reach Saturn was the 11<sup>th</sup> probe bearing this name. The 10<sup>th</sup> probe in this series was the first manmade object to leave the Solar System.answer: **Pioneer** (accept **Pioneer 10** or **Pioneer 11**)

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5. This figure was born after Zeus visited Danaë as a golden rain. For 10 points each—

A. Name this figure who stole the single eye shared among three hags to learn the location of their sister.

answer: **Perseus**

B. That sister Perseus wanted to slay was this Gorgon. She had snakes instead of hair, and those who gazed upon her turned to stone.

answer: **Medusa**

C. Perseus is the legendary founder of this civilization of the northeast Peloponnese peninsula. Linear B was a script used for the language of these people whose kings include Orestes and Atreus.

answer: **Mycenaeans**

6. The earliest drama to depict this character is the 17<sup>th</sup> century play *The Trickster of Seville and the Stone Guest*. For 10 points each—

A. Name this legendary Spanish figure who lives with his mother Donna Inez in a Lord Byron poem.

answer: **Don Juan** (accept **Don Giovanni**)

B. Don Juan was a subject of a 1665 play by this French dramatist whose other works include *Tartuffe* and *The Imaginary Invalid*.

answer: **Moliere** or Jean-Baptiste **Poquelin**

C. Erik works on a musical composition called *Don Juan Triumphant* in this Gaston Leroux [uh-RUE] novel. This book is titled for Erik, who lives in the shadows under a Paris performance house and abducts the singer Christine Daaé [DIE-ay].

answer: The **Phantom of the Opera** or Le **Fantôme de l'Opéra**

7. For 10 points each—give these answers related to atomic nuclei:

A. This force mediated by gluons is attractive at distances around 1 femtometer and holds nuclei together.

answer: **strong** nuclear force or **residual strong** force or **nucleon–nucleon interaction** (prompt on "nuclear force" and other partial answers)

B. Atomic nuclei are measured in this unit equal to one ten-billionth of a meter. It is named for a scientist and represented by a letter placed after Z in the Swedish alphabet.

answer: **ångström** (prompt on "å") [named for Anders Jonas Ångström]

C. The mass of the individual particles in a nucleus is more than the mass of the nucleus, which accounts for this energy required to disassemble a whole system into its parts.

answer: **binding** energy (prompt on "mass defect")

8. In its earliest use, this term meant "lord". For 10 points each—

A. Name this god of ancient Canaanite and Philistine religions who some link amorously to Anat. The name of this fertility god is similar to an Arabic word for "husband".

answer: **Baal** (or **Ba'al**, **Ba'al Hammon**, **Ba'al Zebûb**, or **Beelzebub**) [the Arabic term is ba'l]

B. The worship of Baal is promoted by Jezebel in this Old Testament book. This first of two similar books in the Catholic bible details wise rulers like Solomon and Elijah.

answer: First **Kings** (or 1 **Kings**) or the **Books of Kings** (do not accept "Second Kings")

C. Baal was also known as "Beelzebub," and in this form is depicted as a demonic one of these creatures. He is the "Lord of" these, as noted in a William Golding novel about stranded boys.

answer: **fly** or **flies** (accept **Lord of the Flies**)

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9. For 10 points each—give these answers related to books about politicians:

A. Although the main character was named Jack Stanton, the novel *Primary Colors* was a thinly-veiled account of this man's 1992 campaign. His presidency was between the two Bushes.

answer: (William) Bill Jefferson **Clinton** (or William Jefferson **Blythe** III)

B. This volume by John F. Kennedy describes acts of political bravery by eight historical senators.

answer: **Profiles in Courage**

C. Randy Shilts' biography *The Mayor of Castro Street* is about this member of the San Francisco Board of Supervisors, who was assassinated in 1978. Sean Penn portrayed him in a 2008 film.

answer: Harvey **Milk**

10. For 10 points each—give these bones of the human skeleton:

A. The cranium and the mandible are two components of this structure that provides a protective cavity for the brain.

answer: **skull**

B. Also known as the breastbone, this long flat bone connects the cartilages of the top seven pairs of ribs.

answer: **sternum**

C. Most humans have five of these bones in each hand, which are between the phalanges [fuh-LAN-geez] in the finger and the bones of the wrist.

answer: **metacarpal(s)** (do not accept "carpal bones" which are the connecting wrist bones)

11. Satellite dishes often have this shape. For 10 points each—

A. Give this conic section exemplified by the equation "y" equals "x" squared, which looks like the letter "U".

answer: **parabola**

B. All parabolas have this property because they can be scaled, translated, and reflected into "y" equals "x" squared. This property is shown in triangles through the angle-angle-angle theorem.

answer: **similarity**

C. Parabolas have a value of 1 for this parameter which measures how much the conic section deviates from being circular.

answer: **eccentricity** (or **eccentric** value)

12. For 10 points each—give these titles derived from nursery rhymes:

A. Randle McMurphy and Nurse Ratched are in this Ken Kesey work set at a psychiatric hospital. The title completes the rhyme "Three geese in a flock / One flew East / One flew West."

answer: **One Flew Over the Cuckoo's Nest**

B. This Robert Penn Warren novel is about the politician Willie Stark, and has a title referring to Humpty Dumpty characters.

answer: **All the King's Men**

C. This first James Patterson book to feature Alex Cross includes a murderer with a split personality. Its title is a line from "Little Miss Muffet".

answer: **Along Came a Spider**

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13. For 10 points each--name these things sought by New World explorers:

A. A popular legend states Ponce de León searched for these waters that would halt his aging.

answer: **Fountain of Youth**

B. Marcos de Niza told Francisco Coronado about these places in the American Southwest, but Coronado's expedition found no such riches.

answer: Cities of **Cibola** or the **Seven Cities of Gold** (prompt on partial answers)

C. Diego de Ordaz is one conquistador who looked for the ceremonial place where this mythical chief covered himself in gold and jumped into a lake. The term is Spanish for "the golden one."

answer: El **Dorado** (or El Rey **Dorado**)

14. The Kazakhstan government plans to abandon this writing system, a relic from its time in the Soviet Union. For 10 points each—

A. Give this script named for a brother of Methodius who taught Christianity to the Slavic peoples.

answer: **Cyrillic** script or writing

B. Cyrillic script is used for this language with the eighth-most number of native speakers. It was the official language of the Soviet Union.

answer: **Russian**

C. The unstressed "a" and "o" are the closest equivalents Russian has to this sound, also called the mid central, or neutral vowel. It is depicted in dictionary pronunciations as an upside-down "e" and often represents the "uh" sound.

answer: **schwa**

15. In ancient Rome the tribunes and consuls had this power, which they called the *intercessio*. For 10 points each—

A. Give this Latin term meaning "I forbid" in which an official stops the enactment of legislation.

answer: **veto**

B. This president had vetoes thwarted by Congress 15 times, which is still a record. One such override this impeached Tennessean saw was his 1866 rejection of the Freedmen's Bureau.

answer: **Andrew Johnson** (prompt on "Johnson")

C. Another overridden veto was this 1867 act that restricted powers to remove government officers. The House claimed Johnson violated this bill when Johnson fired Secretary of War Edwin Stanton.

answer: **Tenure of Office** Act

16. This cyberattack forced English hospitals to divert patients. For 10 points each—

A. Name this ransomware released in Spring 2017 that used the EternalBlue tool to exploit a Windows vulnerability known as MS17-010.

answer: **WannaCry** or **WanaCryptor** 2.0

B. One business affected by WannaCry was this courier founded by Frederick Smith. Over the years this company has acquired the Flying Tiger air service and Kinko's office supplies, and it sponsors the Washington Redskins home field.

answer: **FedEx** Corporation (or **Federal Express**)

C. The price to decrypt files had to be paid in this online currency whose transactions are recorded in a blockchain public ledger. It was created by a person or group known as Satoshi Nakamoto.

answer: **bitcoin**

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17. For 10 points each—name these members of musical collaborations:

A. *The Mikado* and *The Pirates of Penzance* are comic operas by W.S. Gilbert and what musician?

answer: Arthur **Sullivan** (accept **Gilbert and Sullivan**)

B. Richard Rodgers collaborated with this lyricist on *South Pacific*, *The King and I*, and *The Sound of Music*.

answer: Oscar **Hammerstein** II (accept **Rodgers and Hammerstein**)

C. *Paint Your Wagon*, *Brigadoon*, and *My Fair Lady* were produced by the librettist Alan Jay Lerner with what composer?

answer: Frederick **Loewe** (accept **Lerner and Loewe**)

18. For 10 points each—name these teams who have or had title droughts:

A. If they go another 102 years, this team's next World Series victory will be in 2118. They won the 2016 title with Kris Bryant and Kyle Hendricks on the roster.

answer: Chicago **Cubs** (prompt on "Chicago")

B. This team won Super Bowl III ["three"] with Joe Namath at quarterback, but have gone 48 seasons without another championship. They play home games in the Meadowlands.

answer: New York **Jets** (prompt on "New York")

C. This NHL team has the third most Stanley Cup victories behind Montreal and Detroit, but hasn't won since 1967.

answer: **Toronto Maple Leafs** (accept either underlined name)

19. The Composition of 1867 established this dual monarchy. For 10 points each—

A. Name this constitutional union of a kingdom and an empire overseen by the Emperor-King Franz Joseph I ["the first"] for much of its existence.

answer: **Austria-Hungary** or the **Austro-Hungarian** Empire (or **Österreich-Ungarn**)

B. Austria-Hungary was part of this side defeated by the Triple Entente in World War I.

answer: **Central Powers** or **Quadruple** Alliance

C. The Hungarian portions of the territory were officially called the "Lands of the Crown of" this 10<sup>th</sup>-century saint. A Budapest basilica is named for this first Hungarian king.

answer: Saint **Stephen** or Arpad(hazi) **Vajk**

20. For 10 points each—give these answers related to proof techniques:

A. Classical constructions and existence proofs only allowed these two tools, one of which was assumed to permit drawing of infinite lines.

answer: **compass** and **straightedge** (or **compass** and **ruler**; accept in either order)

B. In this proof technique a statement is assumed to be true and it is shown that an illogical result occurs. Thus, the assumption must have been wrong.

answer: proof by **contradiction** or **indirect** proof or **reductio ad absurdum** (accept **proof by paradox**)

C. One can use this technique to show the sum of the first "n" counting numbers equals "n" times "n" plus 1 all over 2. This technique requires two steps: showing the statement is correct for "n" equals 1, and showing then when it is correct for "n" it is also correct for "n" plus "1".

answer: proof by **induction** (do not accept "inductive reasoning")

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21. During the Okeechobee hurricane in this novel, Tea Cake is bitten by a rabid dog. For 10 points each—

A. Name this Zora Neale Hurston work with the protagonist Janie Crawford.

answer: **Their Eyes Were Watching God**

B. *Their Eyes Were Watching God* is set in this U.S. state. Janie and Tea Cake go to Jacksonville to marry and live in the Everglades.

answer: **Florida**

C. Also set in Florida is this Marjorie Kinnan Rawlings work. It sees Jody Baxter adopt a fawn, which Jody ends up killing because the deer is eating the family's food.

answer: The **Yearling**

22. Chemistry students are often introduced to this term when learning to place coefficients to balance equations. For 10 points each—

A. Name this branch of chemistry concerned with proportions of elements in compounds and the relationships between reactants and products.

answer: **stoichiometry** [STOY-key-OM-ih-tree]

B. One basic stoichiometric rule is the law of multiple proportions, which is also known as this English chemist's law. He proposed an atomic theory and published a table of atomic weights.

answer: John **Dalton**

C. One stoichiometric unit is this amount equal to the number of atoms in 12 grams of carbon-12. You may give the unit or the related constant named for an Italian, which is approximately to 6.02 times 10 to the 23<sup>rd</sup> power.

answer: **mole** or **Avogadro's** constant (or **Avogadro's** number)