

SCOP Novice 13

Round 4

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Tossups

- 1) **This body of water includes the Bay of Campeche, where the Ixtoc I [ish-tok “one”] disaster took place in 1979. Tarballs in this body of water washed ashore in towns like Panama City, (*) Biloxi, and Pensacola in 2010 after the Deepwater Horizon explosion. The Yucatan Channel and the Straits of Florida flank the island of Cuba and are entrances into, for ten points, what large gulf of water immediately south of Louisiana?**

ANSWER: Gulf of Mexico
- 2) **At the end of this literary work, the narrator’s father accidentally calls him “Richieu,” the name of his elder brother who had been poisoned to save him from enemy soldiers. The second part of this literary work is *My Father Bleeds History*, in which the author’s father, Vladek, wears a pig mask to hide among other (*) Polish people. For ten points, name this graphic novel by Art Spiegelman in which German Nazis are depicted as cats abusing and imprisoning Jewish people in the form of the title animals.**

ANSWER: Maus (accept Maus: A Survivor's Tale; accept Maus: My Father Bleeds History; accept Maus: A Survivor's Tale: My Father Bleeds History; accept The Complete Maus: A Survivor's Tale; accept Maus: And Here My Troubles Began)
- 3) **A spell used in this ritual is recorded in the *Book of Coming Forth by Day* and describes Ptah helping the subject of this ritual. Containers used in this ritual had decorated lids to show they were protected by the sons of (*) Horus. The “opening of the mouth” ceremony was performed during this process, and canopic jars guarded the internal organs removed during this process prior to wrapping. For ten points, name this process by which wealthy Egyptians were dehydrated and preserved for the afterlife.**

ANSWER: mummification (accept word forms like mummifying; accept descriptions like making a mummy; accept opening of the mouth before “containers” is read in the second sentence; prompt on “embalming;” prompt on descriptions of “burying” or “interring” someone)
- 4) **In the aftermath of Jorge Eliécer Gaitán's assassination, this country experienced a ten-year civil war called *La Violencia*. In 2016, a militant group in this country signed a ceasefire that earned (*) Juan Manuel Santos a Nobel Peace Prize, even though the public voted against the agreement. Small factions of FARC continue to traffic drugs in, for ten points, what South American country where fighting took place in Medellin and Bogota?**

ANSWER: Colombia (accept Republic of Colombia)

- 5) **One of these figures played by Jemaine Clement shouts, “leave me to do my dark bidding on the Internet!” at another of these creatures played by Taika Waititi. In the 2023 film *El Conde*, Augusto Pinochet is one of these creatures who has been terrorizing governments since the French Revolution. The phrase (*) “dream crusher” was used to sanitize the radio version of a song with this title. For ten points, name this type of monster exemplified by Olivia Rodrigo's ex and Count Chocula.**

ANSWER: vampire

- 6) **The G-protein coupled receptor that recognizes this molecule is also activated by beta-2 agonists to stimulate the uptake of glucose by muscle cells. A precursor to this molecule prefixed “nor-” regulates the body’s sympathetic (*) nervous system. To treat severe allergic reactions, this hormone can be delivered using an injectable “pen.” A set of glands over the kidneys secretes, for ten points, what hormone that regulates the fight-or-flight response?**

ANSWER: adrenaline (accept epinephrine)

- 7) **This is the main color of the gowns in *The Penitent Mary Magdalene* and one version of *Judith Beheading Holofernes* by Artemisia Gentileschi, who used a namesake tone of this color to highlight her main characters. This color covers a cloak in Gustav (*) Klimt's *The Kiss*. Vermeer and Hals painted during a Dutch age named for this color. For ten points, identify this color named for a warm-colored precious metal that can be applied to paintings using a twenty-two karat “leaf.”**

ANSWER: gold (accept Artemisia gold; accept Dutch Golden Age; accept gold leaf or gold foil; accept yellow)

- 8) **One man who advocated for this event justified it by claiming that its victims would “cast off their savage habits and become an interesting, civilized, and Christian community.” Many tribe leaders signed the Treaty of (*) New Echota in order to avoid this event. The “Five Civilized Tribes” were the main victims of this event, six thousand of whom died over its twelve thousand miles stretching from Tennessee to Oklahoma. For ten points, name this forced relocation of Native American tribes west of the Mississippi river.**

ANSWER: Trail of Tears (prompt on descriptions, such as “removal of Native Americans,” before “relocation” is read in the last sentence)

- 9) **Two of these astronomical objects, Messier 87-Star and Sagittarius A-Star, were imaged in 2019 and 2022 by the EHTC telescope array. Examples of these objects at (*) galactic centers are supermassive and likely emit less Hawking radiation than “micro” ones. Beyond these objects' Schwarzschild radius, spaghettification occurs as matter is sucked past the event horizon. For ten points, name this kind of astronomical object that pulls in everything around it so strongly that not even light can escape.**

ANSWER: black hole (accept supermassive black hole)

- 10) **This novel's protagonist is kidnapped from his life with Toots and Ysabel in the home of Judge Miller, and witnesses the death of Curly while under the care of Perrault and Francois. In this novel, the “man in the red sweater” trains the protagonist, who defeats (*) Spitz and is rescued from abusive gold-seekers by John Thornton after being taken to Alaska to become a sled dog. For ten points, name this novel by Jack London about Buck, a dog who becomes the leader of a wolf pack.**

ANSWER: The Call of the Wild

- 11) **This composer has the baritone soloist sing “Oh friends, not these tones!” to introduce vocal parts into the fourth movement of one work. Another work by this composer has an opening theme described as “fate knocking at the door.” The (*) “Ode to Joy” and a “short-short-short-long” motif are hallmarks of pieces by, for ten points, what composer of the *Moonlight Sonata* and nine symphonies who composed his later works while almost totally deaf?**

ANSWER: Ludwig van Beethoven

- 12) **This branch of mathematics was formalized by the Peano axioms. The fact that each integer greater than one has a unique prime factorization is the “Fundamental Theorem” of this field. Algebra can be considered an (*) expansion of this field into variables, as well as numbers. For ten points, name this basic field of mathematics that involves the four elementary operations: addition, subtraction, multiplication, and division.**

ANSWER: arithmetic

- 13) **This literary character agrees to race a man traveling from Sing Sing for the prize of a bowl of punch, and he is described by Brouwer as leaping into the tree-tops with a clap of thunder while in the form of a skeleton. This character was a (*) Hessian soldier during the Revolutionary War, but becomes known for chasing riders like Brom Bones through a small New England village. For ten points, name this character who, in a short story by Washington Irving, chases Ichabod Crane through Sleepy Hollow.**

ANSWER: Headless Horseman (accept the Gallopig Hessian of the Hollow before “Hessian” is read in the second sentence)

- 14) **This man incorrectly stated “Gentleman, this is my last press conference” after losing an election for Governor of California. This man allegedly ordered Anna Chennault to interfere with peace negotiations in Vietnam while running for president against (*) Hubert Humphrey. This politician gave the Checkers speech while running for vice president in 1952 under Eisenhower. For ten points, name this politician whose presidential re-election campaign in 1972 included the Watergate burglary.**

ANSWER: Richard Nixon (accept Richard Milhous Nixon)

- 15) **The ratio between the rate of diffusion and the activity of these substances, immobilized inside a porous solid support, is measured by the Thiele [THEE-lee] modulus. Noble metals like palladium or platinum are widely used as these substances to convert the carbon monoxide in (*) car exhaust. These chemicals are called heterogeneous if gas- or liquid-phase reactions happen on their solid surfaces. For ten points, what substances decrease activation energy and therefore speed up chemical reactions?**

ANSWER: catalyst

- 16) **A poet with this surname dedicated the poem “Adonais” to John Keats, and described the ruined statue of a “king of kings” with a “sneer of cold command” in another poem. In a novel by an author with this surname, (*) Henry Clerval and Elizabeth Lavenza are murdered by the title scientist's monstrous creation. For ten points, what last name is shared by a married couple including the poet of “Ozymandias,” Percy Bysshe, and the author of *Frankenstein*, Mary?**

ANSWER: Shelley (accept the Shelleys; accept Percy Bysshe Shelley and/or Mary Wollstonecraft Godwin Shelley)

- 17) **Electrons emit this type of radiation when they brake inside a Crookes tube. This type of radiation has sufficient energy required to emit an electron bound to a metal in the photoelectric effect. The discovery of this radiation won Wilhelm (*) Roentgen the first Nobel Prize in Physics. The “hard” type of this radiation has lower energy than a gamma ray, but the “soft” type of it is more energetic than ultraviolet. For ten points, name this type of radiation ubiquitous in medical imaging.**

ANSWER: X-ray

- 18) **This city's sites include the outlying Villa of the Mysteries, named for a series of frescoes depicting religious rituals, and the more central House of the Faun. The coastal resort town of (*) Stabiae [sta-bee-eye] was southwest of this city, which was rediscovered in 1748, decades after nearby Herculaneum. For ten points, name this Italian city that was buried in feet of ash from the 79 CE eruption of Mount Vesuvius.**

ANSWER: Pompeii

- 19) **A “Pink” one of these buildings in Shiraz is decorated with stained glass. One enters these buildings with the right foot first and then performs wudu, or “cleansing.” A hole or niche in a wall of these buildings is called a (*) mihrab, and points in the direction of the qibla to help worshipers face the Kaaba, which is enclosed by one of these buildings. Muezzins call the faithful to prayer from these buildings' minarets. For ten points, name these centers of worship where Imams lead prayers for Muslims.**

ANSWER: mosques (accept masjids; accept Pink Mosque of Shiraz or Masjed-e Surati; accept Great Mosque of Mecca or Great Mosque of Mecca or Masjid al-Haram)

- 20) **The first English translation of this work opens with the phrase “A frightful hobgoblin stalks throughout Europe.” The authors of this work plead guilty to wanting to end the practice of child labor. This work ends by noting that “the (*) proletarians have nothing to lose but their chains” and commanding, “workers of the world, unite!”** For ten points, name this 1848 treatise by Friedrich Engels and Karl Marx that advocates for the title form of socialist government.

ANSWER: The Communist Manifesto (accept Manifesto of the Communist Party; accept Manifest der Kommunistischen Partei)

Bonuses

- 1) American artist Meta Vaux Warrick Fuller sculpted Mary Turner, a Black woman with this status, cradling her infant in a sculpture that depicts her and her baby's gruesome murders at the hands of a white lynch mob. For ten points each,

Name this familial status. Michelangelo highlighted this aspect of the biblical Mary in *Pieta* by showing her cradling the body of her son, Jesus.

ANSWER: **mother** (accept synonyms like **mom** or **parent**; accept descriptions like “they **have children**,” accept **pregnant** people or synonyms like **expectant** mothers)

Note: the Fuller sculpture is titled *Mary Turner* or *In Memory of Mary Turner As A Silent Protest Against Mob Violence*

This Mexican artist depicted the loss of her pregnancy in her painting *Henry Ford Hospital*, one of the many self-portraits that she painted while living with her husband, Diego Rivera, in Detroit.

ANSWER: Frida **Kahlo** (accept Magdalena Carmen Frida **Kahlo** y Calderon)

This American Impressionist often painted happier scenes of mothers and children, including *The Child's Bath* and *The Boating Party*.

ANSWER: Mary **Cassatt** (accept Mary Stevenson **Cassatt**)

- 2) Isotypes of these proteins include “IgA” and “IgG” [I-G-A and I-G-G], which are primarily found in the mucous membranes and blood, respectively. For ten points each,

Name these proteins that target foreign pathogens so that the immune system can identify and attack them.

ANSWER: **antibody** (accept **antibodies**; accept **immunoglobulins**; prompt on “IGs”)

Antibody proteins are shaped like this letter. This letter signifies the sex-determining chromosome in humans.

ANSWER: **Y**

Monoclonal antibody therapy is being studied as a possible treatment for many diseases, including this most common cause of dementia.

ANSWER: **Alzheimer's** disease

- 3) The protagonist of this novel is deemed “not handsome enough to tempt” Fitzwilliam Darcy. For ten points each, Name this 1813 novel about Elizabeth Bennet, who eventually gets over the two title obstacles to fall in love with Mr. Darcy.

ANSWER: **Pride and Prejudice**

Pride and Prejudice was written by this author, whose other novels about wealthy English society at the turn of the nineteenth century include *Sense and Sensibility*.

ANSWER: Jane **Austen**

The opening line of *Pride and Prejudice* famously proclaims, “It is a truth universally acknowledged, that a single man in possession of a good fortune, must be in want of” one of these people. In another Austen novel, Emma Woodhouse decides to become a matchmaker after successfully finding one of these people for Mr. Weston.

ANSWER: **wife** (prompt on “spouse,” “partner,” or other generic terms)

- 4) Consider the equation “ y equals k times x ” for ten points each.

The letter k typically isn't used for variables; instead, it is used for this type of mathematical quantity whose value does not change in the problem.

ANSWER: mathematical **constant**

If k is constant and you increase the value of x , the value of y will also increase. Therefore, the equation is this type of variation or proportion, as opposed to an inverse variation or proportion.

ANSWER: **direct** variation (accept **direct** proportion)

The equation relating the diameter and circumference of a circle is an example of a direct variation. In this example, the diameter would be x , the circumference would be y , and the constant k would be this irrational number.

ANSWER: **pi** (do not accept or prompt on answers like “3.14”)

- 5) “Reapers” with this form often appear in modern folk religion. Because she takes this form, the modern deity Santa Muerte is sometimes called the “Thin Lady.” For ten points each,

Describe the appearance of Santa Muerte and the Mexican nationalist symbol La Catrina, who is celebrated on the Day of the Dead.

ANSWER: they are **skeletons** (accept descriptions like they are **skulls**; accept descriptions of a **lack of flesh**; accept extra information like **skeletons** wearing dresses and veils)

Although the Catholic church discourages worshipping her, the skeletal deity Santa Muerte is named “Santa” partly to indicate her status as one of these religious people who serve as intermediaries between humanity and the Catholic God.

ANSWER: **saints**

Note: “Santa” also indicates that she is “holy” in a sense that is separate from her sainthood.

In this Cuban religion, whose name means “way of the saints,” Catholic saints are combined with spirits of west African Yoruba religion as “orishas.”

ANSWER: **Santeria** (accept La Regla de **Ocha**-Ifa; accept La Regla de **Lukumi**)

- 6) Virginia Dare's birth in this location made her the first English child born in the New World. For ten points each,

Name this English colony in modern-day North Carolina. At some point between its founding in 1585 and the arrival of a resupply ship in 1590, its colonists completely disappeared.

ANSWER: **Roanoke** Colony (prompt on the “Lost Colony”)

The Roanoke Colony was founded by this English statesman who spent several stints imprisoned in the Tower of London. The capital of modern North Carolina is named in honor of this man.

ANSWER: Sir Walter **Raleigh**

After playing around in North America, Raleigh led an expedition to what is now Venezuela in search of this legendary South American city of gold.

ANSWER: **El Dorado**

- 7) Answer the following about setting things on fire in school in the one acceptable place to do so, the chemistry lab, for ten points each.

First, you'll need one of these devices, invented by a namesake German chemist. This lab tool has an adjustable collar that will make the flame burn hotter or colder.

ANSWER: **Bunsen burner** (prompt on “burner”)

The natural gas that fuels your Bunsen burner is mostly methane, a one-carbon alkane. Most other hydrocarbons, like this three-carbon alkane, are processed out of natural gas before delivery.

ANSWER: **propane** (prompt on “C₃H₈” by telling the team “We need the name of the compound.”) (After the bonus is done, feel free to mention that, in quizbowl, you *can* often answer with the formula, but we said “three-carbon” in the question this time.)

Complete combustion of a hydrocarbon, like methane or propane, will release water and this triatomic greenhouse gas.

ANSWER: **carbon dioxide** (accept **CO₂**)

- 8) This figure “cannot sleep upon his hillside now,” in a poem set “In Springfield, Illinois” about how he “Walks at Midnight” by Vachel Lindsay. For ten points each,

Name this U.S. President whose assassination was lamented with the repeated line “Fallen cold and dead” in the poem “O Captain! My Captain!”

ANSWER: Abraham **Lincoln** (accept “Abraham **Lincoln** Walks at Midnight”)

“O Captain! My Captain!” is by this American poet who described a child asking “What is the grass?” in his poem “Song of Myself,” the longest in his collection *Leaves of Grass*.

ANSWER: Walt **Whitman** (accept Walter **Whitman**)

In this other poem, Whitman described going to the slave-mart and seeing a “man’s body at auction.” Earlier in this poem, the speaker states, “The armies of those I love engirth me and I engirth them.”

ANSWER: **I Sing the Body Electric**

- 9) From 2014 to 2020, the Woodland Trust ran an “England's Tree of the Year” competition. For ten points each, The 2020 winner, the Happy Man Tree, stood in the Hackney district of this capital city of England until it was cleared for housing redevelopment in 2021.

ANSWER: **London**

In September 2023, a teenager in northern England cut down the 2016 winner, a sycamore tree that had stood next to this ancient seventy-mile-long barrier. This structure is named for the ruling Roman emperor at the time of its 122 CE construction.

ANSWER: **Hadrian's Wall** (accept **Vallum Hadriani**; accept **Vallum Aelium**; accept **Pict's Wall**)

A pear tree in Cubbington won the 2015 award, but was cut down in 2020 to make way for one of these infrastructure projects. The first of these systems, Japan's Shinkansen, has operated since 1964 and has never had a derailment.

ANSWER: **high speed rail** (accept **bullet train**; accept equivalents like **high speed train**; prompt on “train,” “railroad,” “railway,” etc.)

- 10) In 2010, this organization carried out over six-hundred-thousand Terry stops, or instances in which a person was briefly stopped, questioned, and potentially frisked on suspicion of being a criminal. For ten points each,

Name this law enforcement agency, the largest of its kind in the U.S.

ANSWER: **New York City Police Department** (accept **NYPD**)

The NYPD's heavy use of stop-and-frisk tactics is related to its adoption of this criminological theory in the 1990s. This theory argues that paying heavy attention to minor cosmetic crimes, like graffiti and a namesake type of vandalism, would discourage more serious crimes.

ANSWER: **broken windows** theory

NYPD officers carrying out stop-and-frisks have been criticized and sued for engaging in this form of prejudice, in which someone is deemed to be a suspect based just on their ethnic background, rather than evidence or reasonable suspicion.

ANSWER: racial **profiling** (accept ethnic **profiling**; accept word forms; prompt on “racism” alone)

- 11) The terms “stoss” and “lee” describe opposite sides of several things, including glaciers, rocky deposits, and these structures. For ten points each,

Name these landforms that, typically, have a longer side that is created when sand is pushed up the stoss side by the wind.

ANSWER: dunes

While sand dunes aren't a requirement for this biome, some of the largest sand dunes in the world are in the classic example, the Sahara.

ANSWER: deserts

This Arabic-derived term describes a large expanse of desert marked by rows of dunes. One of these named Issaouane [ih-sah-wan] covers nearly 15,000 square miles of southern Algeria.

ANSWER: ergs

- 12) While dying from a wound he sustained at the Battle of Camlann, this mythical figure was taken to the Isle of Avalon, from which he is destined to return to rule again. For ten points each,

Name this Once and Future King of England who gathered his knights at the Round Table in British legends.

ANSWER: King Arthur (accept Arthur Pendragon)

This man mortally wounded King Arthur at the Battle of Camlann. In some myths, this man is Arthur's son, born from an affair with his half-sister, Morgause.

ANSWER: Mordred (accept Modred; accept Modredus)

Arthur fought Mordred at Camlann when he returned to England from pursuing this one of his knights, who had run away with Arthur's wife, Guinevere.

ANSWER: Sir Lancelot du Lac

- 13) According to a hilarious and depressing 2021 story, the programmer behind one of these systems, Ethereum, once claimed that they were inspired to design it after getting angry about a simple change to warlocks in *World of Warcraft*. For ten points each,

Name this type of digital currency. The largest example, bitcoin, requires an annual electricity output comparable to the entire country of Argentina.

ANSWER: **crypto**currency

The developer of Ethereum was angry that Blizzard had updated its game balance and made his character weaker, a process typically described by this name. This term probably refers to the idea that a previously strong ability is now no stronger than a toy gun that fires foam darts or bullets.

ANSWER: **nerf** (accept word forms; accept descriptions like “getting **nerfed**” or “getting hit with the **nerf** bat/gun”)

One all-caps reaction to the story, “I PLAYED WARLOCK [...] FOR 17 YEARS AND IT DIDN'T MAKE ME WANT TO DELETE RAINFORESTS,” was posted on this website before Elon Musk set forty-four billion dollars on fire and rebranded it “X.”

ANSWER: **Twitter**.com

- 14) This country inspired a George Gershwin overture that was originally named *Rumba*, after one of its dance music styles. For ten points each,

Name this Caribbean island country, where Gershwin was inspired during a vacation in Havana.

ANSWER: **Cuba** (accept Republic of **Cuba**; accept República de **Cuba**)

Havana is the namesake of the “Habanera,” a Cuban dance that is performed by the seductive title woman of this Georges Bizet [zhorz h bee-ZAY] opera.

ANSWER: **Carmen**

The habanera also inspired a violin showpiece by this French composer, who is better known for pieces like “The Swan” from his *Carnival of the Animals*.

ANSWER: Camille **Saint-Saëns** [san sawn] (accept Charles-Camille **Saint-Saëns**)

- 15) This character, the brother of the aspiring violinist Grete, is wounded after his father hurls an apple at him and it gets lodged in his back. For ten points each,

Name this traveling salesman. The tenants of his family's apartment are frightened by the sight of this character, who “was especially fond of hanging from the ceiling.”

ANSWER: **Gregor** **Samsa** (accept either name)

Gregor Samsa undergoes a strange transformation in this short story by Franz Kafka.

ANSWER: The **Metamorphosis** (accept Die **Verwandlung**)

In *The Metamorphosis*, Kafka described Gregor Samsa transforming into what he calls “Ungeziefer” [OON-ge-zee-fah] in German. This term has been translated into English as “vermin,” although the story describes Gregor as having the six legs and carapace of one of these specific creatures.

ANSWER: **insect** (accept **bug**; accept **cockroach**)

- 16) Give the following about the career of American diplomat John Hay, for ten points each.

Hay provided his expertise in foreign diplomacy while serving as Secretary of this Cabinet department under William McKinley and Teddy Roosevelt.

ANSWER: **State** Department (accept Secretary of **State**)

As Secretary of State, John Hay signed a treaty with France to establish a “Canal Zone” in what is now this Central American country.

ANSWER: **Panama** (accept Republic of **Panama**)

In 1899, Hay issued a “Note” instead of a treaty, which he feared wouldn't be approved by the Senate; the Note called for this policy regarding foreign trade with China. This policy was essentially unenforceable, but many countries agreed to it because it promised equal access to trade with all of China.

ANSWER: **Open Door** Policy (accept **Open Door** Note)

- 17) In this novel, the servant Smerdyakov allows his half-sibling to be convicted of a crime he commits against their father. For ten points each,

Identify this novel that is named for the siblings Alyosha, Dmitri, and Ivan.

ANSWER: The **Brothers Karamazov** (accept **Brat'ya Karamazovy**)

The Brothers Karamazov is by this Russian author of *Crime and Punishment*.

ANSWER: Fyodor **Dostoevsky** (accept Fyodor Mikhailovich **Dostoevsky**)

Smerdyakov in *The Brothers Karamazov* and Raskolnikov in *Crime and Punishment* each commit this crime. Raskolnikov commits this crime against the pawnbroker Alyona and her visiting sister, Lizaveta, with a stolen axe.

ANSWER: **murder** (accept equivalent terms like **killing**; prompt on answers describing “theft” or “robbery” by asking, “What other crime do both characters commit during their robberies?”)

- 18) In the early twentieth century, the McMillan Plan called for revamping a green space in this city with new museums and memorials. For ten points each,

Name this US city where the National Mall is home to the Lincoln Memorial and numerous branches of the Smithsonian Institution.

ANSWER: **Washington**, D.C. (accept **D.C.**; accept **District of Columbia**)

The centerpiece of the National Mall is the Washington Monument, a 555-foot-tall example of this type of monument with a pyramid-shaped cap.

ANSWER: **obelisk**

There are eleven branches of the Smithsonian on the National Mall, including this museum, whose artifacts include the *Spirit of St. Louis* and John Glenn's *Friendship 7* capsule.

ANSWER: National **Air and Space** Museum (prompt on “National Air Museum”)

- 19) A semi-permeable membrane is used in this process, meaning that molecules of the solvent can cross the membrane, but the solute can't cross. For ten points each,

Name this process in which the solvent molecules diffuse across the membrane until the concentration of solute is the same on both sides.

ANSWER: osmosis

Osmosis takes place until it reaches this point, at which the concentration is balanced. This term is used in many different contexts in physics; for example, when opposing forces are balanced.

ANSWER: equilibrium

The solvent in most osmosis experiments is typically this “universal” solvent. Reverse osmosis is typically used in treatment plants that purify this substance for public use.

ANSWER: water (accept more specific answers, like wastewater, drinking water, etc.; accept H₂O)

- 20) In 1879, a force of ten thousand men from this empire defeated the British at Isandlwana [ees-on-dil-WAH-na] despite having only a few, outdated firearms. For ten points each,

Name this southern African empire that reached its peak in the early 19th century under Shaka.

ANSWER: amaZulu Empire (accept amaZulu Kingdom; accept Kingdom of Zululand)

The Zulu victory at Isandlwana was earned by soldiers wielding cowhide shields and iron assegais, a form of this weapon. Another form of this weapon, the iklwa [eek-uhl-wah], was named for the sound made when its tip was pulled out of a wounded enemy.

ANSWER: spears (accept javelins; accept polearms)

One of these astronomical events took place at 2:30 PM local time during the Battle of Isandlwana, inspiring the victorious Zulu soldiers and giving the battle its name.

ANSWER: solar eclipse (prompt on “eclipse”) (Isandlwana translates to “Day of the Dead Moon.”)