

ACF Fall 2017

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Packet by MSU A/Cambridge B/UConn A/Knox A

Tossups

1. Membrane proteins named for this molecule come in P-type, F-type, and V-type varieties. CFTR is an example of another type of membrane protein named for a cassette that binds this molecule. The gamma subunit of an enzyme that produces this molecule serves as a shaft that connects its F0 and F1 parts. This molecule is produced by protons passing through a concentration gradient in the chemiosmotic mechanism. 38 of these molecules can be produced per molecule of glucose used in cellular respiration through oxidative phosphorylation. This compound can be hydrolyzed to a phosphate ion and ADP. For 10 points, name this “energy currency” of the cell.

ANSWER: **ATP** [or **adenosine triphosphate**]

2. 19th-century critics of a composer from this country derided him as “Haydn’s wife,” but he has since gained recognition for his twelve cello concertos. In a work by a composer from this country, an offstage trumpet plays during a movement depicting catacombs. That composer wrote tone poems depicting the festivals and fountains of a city in this country. An overture by a composer from this country ends with a raucous galop that was borrowed for the *Lone Ranger* theme. A composer from this country wrote the opera *William Tell*. For 10 points, name this country home to Luigi Boccherini, Ottorino Respighi, and Gioachino (Joh-KEE-no) Rossini.

ANSWER: **Italy** [or **Italia**]

3. In a paper with Christos Papadimitriou, this man came up with an algorithm for pancake sorting that was the fastest such algorithm for thirty years. In his “Open Letter to Hobbyists,” this man angrily berated hobbyists who had used an early product he had developed without paying for it. He was accused of being “evasive and unresponsive” when he testified as a defendant in an antitrust case accusing his company’s bundling of two products as an attempt to gain a monopoly. With Paul Allen, this man founded a company that made its namesake DOS to run on its machines, which dominated the personal computer industry for years. For 10 points, name this founder of Microsoft.

ANSWER: Bill **Gates** [or William Henry **Gates III**]

4. A main character of a play named for one of these events takes a garland of orange blossoms from her maid and throws them on the floor. In that play, Leonardo runs off at the end of Act Two after one of these events, after which a woodcutter representing the Moon remarks that blood will soon be spilled. Edmund Spenser commemorated one of these events by writing “Epithalamion” for Elizabeth Boyle. In *Great Expectations*, Miss Havisham never removes the clothing she put on for one of these events, which traditionally occur at the end of comedies. For 10 points, name these ceremonies, one of which Rupa Mehra tries to arrange for her daughter Lata in *A Suitable Boy*.

ANSWER: a **wedding** [or a **marriage**; or obvious equivalents]

5. It’s not Spain, but a festival from this country includes bullfighting known as Jallikattu (JUL-lee-kat-tu), which was controversially banned in 2017. Some parts of this country celebrate the harvest festival of Pongal. In a festival from this country, colourful drawings made with rice flour are drawn around a grid of dots to make kolam (KO-lum) or rangoli (run-GO-lee) patterns. Prayers are offered during pujas (POO-jahs) to the goddess Lakshmi in another holiday from this country. A holiday from this country celebrates Rama’s return to Ayodhya with the lighting of diya (DEE-ya) lamps. For 10 points, name this country in which the Hindu festival of lights, Diwali, is celebrated.

ANSWER: **India**

6. 17-year-old Marcus Sarjeant attempted to become famous by firing six blanks from his revolver at this ruler. Using his powers as this ruler's appointed representative, John Kerr dismissed Gough Whitlam from his position in a constitutional crisis. This ruler's younger sister had a brief whirlwind romance with Peter Townsend which was unveiled to the media after this ruler's coronation. A series of unhappy events during the 40th anniversary year of this ruler's reign caused her to dub it her *annus horribilis*. This successor of George VI has reigned since 1952 and is the longest currently-reigning monarch in the world. For 10 points, name this current queen of the United Kingdom.

ANSWER: **Elizabeth II** [prompt on Elizabeth]

7. William Julius Wilson's book *When Work Disappears* argues that the disappearance of blue-collar jobs from this country's cities contributes to urban poverty. A 1956 article by Horace Miner discusses "body rituals" among the Nacirema people of this country. Robert Bellah established the study of this country's "civil religion." A Robert Putnam book traces the decline of civic engagement in this country to lack of participation in voluntary community organizations. A 19th-century book warns against a "tyranny of the majority" in this country's form of government. For 10 points, identify this country, the subject of *Bowling Alone* and an Alexis de Tocqueville book about its democracy.

ANSWER: **United States** of **America** [accept either; or USA; or Americans; or Democracy in America]

8. In this novella, the main character recalls being given a piece of bread by a French girl, and then seeing that same girl in the Paris Metro many years later. The main character in this novella awakens to find that a violinist who had been playing Beethoven's Concerto in D the night before, Julie, is dead. Later, its main character witnesses the hanging of a young boy after a power station blows up. The protagonist of this novella is mentored in Kabbalah by Moshe the Beadle before he is sent to Auschwitz. For 10 points, name this memoir which details Eliezer's experiences in concentration camps during the Holocaust, written by Elie Wiesel.

ANSWER: **Night** [or *La Nuit*]

9. Fauna unique to this region include the llama-like guanaco, the ostrich-like Darwin's rhea, and a rodent called the tuco-tuco. The Conquest of the Desert pacified native tribes of this region during the 1870s. Antonio Pigafetta wrote in his log that this region was inhabited by a race of namesake giant people ten feet tall. This native region of the Tehuelche and Yaghan peoples is also the site of Torres del Paine National Park and the cities of Rawson and Ushuaia. The Strait of Magellan offers a shortcut through this region, bypassing its southernmost tip, Cape Horn. For 10 points, name this famously cold and windy region of southern Argentina.

ANSWER: **Patagonia** [prompt on Tierra del Fuego; prompt on Argentina]

10. The first Damkohler number just equals this quantity times the residence time. Three of these quantities get the subscripts "cat," "1," and "minus 1" in the derivation of the Michaelis-Menten equation. The ratio between two of these quantities gives the kinetic isotope effect. The units for this quantity are inverse-seconds times inverse-molarity for a second-order reaction. If you plot the logarithm of this quantity against "negative one over RT," the graph's slope will be the activation energy. The Arrhenius equation shows how this quantity increases with temperature. For 10 points, name this constant symbolized lowercase k, which characterizes how fast a chemical reaction occurs.

ANSWER: reaction **rate** constant [prompt on k]

11. This artist deleted an alternative title that had "malign overtones" for a painting showing an empty room with an open door to the ocean. That alternative title, "The Jumping-Off Place," was for a piece this artist painted at Cape Cod. In a painting by this artist of *Rooms by the Sea*, shadows stretch the length of a street in which a fire hydrant and barber pole are substitutes for human figures. In another work by this painter, a woman wearing only one glove stares down into a cup of coffee. In his most famous painting, a woman in a red dress sits at a bar under an advertisement for Phillies cigars. For 10 points, name this American artist of *Early Sunday Morning*, *Automat* and *Nighthawks*.

ANSWER: Edward **Hopper**

12. The Amali and the Balti were ruling houses reigning over the two main branches of these people. Bishop Wulfila developed an alphabet for these people's language in order to translate the Bible into their language. The historian Jordanes wrote a chronicle of these people called the *Getica*. Theodoric I, a king of these people, was killed at the Battle of Chalons. An army of these people led by Fritigern killed emperor Valens at the Battle of Adrianople. In 410, the city of Rome was sacked by these people's leader Alaric. For 10 points, name these barbarians whose invasions led to the fall of the Roman Empire and were divided into Eastern "Ostro" and Western "Visi" branches.
ANSWER: **Goths** [or Visigoths or Ostrogoths before mentioned]

13. A poem by this author ends "shake your chains to earth like dew...ye are many – they are few." That poem by this author declares "I met Murder on the way / He had a mask like Castlereagh" and was written in response to the Peterloo Massacre. This author wrote of a "destroyer and preserver" from whose presence "leaves dead are driven" in an ode which asks "If Winter comes, can Spring be far behind?" In a sonnet by this poet, "a traveller from an antique land," describes the ironic inscription "look upon my works, ye mighty, and despair!" For 10 points, name this English Romantic poet of "The Masque of Anarchy," "Ode to the West Wind" and "Ozymandias."
ANSWER: Percy Bysshe **Shelley**

14. The Drude model gives an equation of motion for these particles through a specific material. The interaction between these particles and phonons is described by BCS theory. These particles can be coupled together at low energies to form Cooper pairs in superconductors. This fermion and an antineutrino are released from a nucleus in beta minus decay. The antimatter counterpart of this particle was discovered by Carl Anderson and is known as the positron. This particle was discovered by J. J. Thomson as he examined the composition of cathode ray tubes. For 10 points, name these negatively charged elementary particles that are bound to a nucleus in an atom.
ANSWER: **electrons**

15. In one essay, a writer from this country examined Oedipus's words, "I conclude that all is well." Another thinker from this country showed how techniques such as examination subject people to the concept of "power-knowledge," and compared the measures taken by a plague-stricken city to Bentham's Panopticon. A thinker from this country described the transition from public torture to modern prisons in his work *Discipline and Punish*. Another man from this country discussed the happiness of a character who rolls a boulder up a hill in his existentialist essay *The Myth of Sisyphus*. For 10 points, name this colonial power, the country of Michel Foucault and Albert Camus.
ANSWER: **France** [or **French Republic**, or **République française**, prompt on Algeria until "colonial power" is read]

16. One of this artist's sculptures, set in the Mada Tower, depicts an emaciated man and his children sprawled on the ground. This artist of a version of *Ugolino and his Sons* sculpted a man wearing a bathrobe for a commission, but the commissioners rejected that *Monument to Balzac*. This artist sculpted several portraits of his student and lover Camille Claudel. Some critics claimed that this artist cast one of his sculptures from a live model. Another work by this sculptor of *The Age of Bronze* shows six men with nooses around their necks. For 10 points, name this French sculptor of *The Burghers of Calais* and *The Thinker*.
ANSWER: Auguste **Rodin** [or Francois Auguste René **Rodin**]

17. A god in this form named Dengei served as the judge of the dead and created both humans and the Fiji Islands. Many small figurines of a household goddess holding two of these animals were excavated from Minoan ruins. One of these animals presides over waterholes and billabongs and emerged from the ground to shape the landscape during the Dreamtime. A god in this form resides in the underworld and was born from the umbilical cord of a sun god. The Coffin Texts describe the deadly gaze of a god of chaos who took this form and attacked a solar barge defended by Ra every night. For 10 points, Apep is what kind of animal, exemplified by Medusa's hair?
ANSWER: **snakes** [or equivalent such as **serpents**]

18. After the final defeat in the Sepoy Mutiny, the last Mughal emperor, Bahadur Shah II, was exiled to this country. Alaungpaya founded this country's last ruling house, the Konbaung Dynasty, which ended after this country lost three wars against the British. This country destroyed the neighboring kingdom of Ayutthaya in 1767. In 1886, this country was annexed into the British Indian Empire. Thailand maintained its independence by becoming a buffer state between this modern-day country and French Indochina. Aung San led the independence movement of—for 10 points—what Southeast Asian country whose capital moved to Naypyidaw from Rangoon?

ANSWER: **Burma** [or **Myanmar**]

19. A character created by this author defines happiness as being “dissolved into something complete and great” while lying in the fields of his grandparents’ farm. One of this author’s protagonists is caught kissing a boy at a Saturday night dance, causing her to be fired by the Harling family. This author wrote a novel whose title character is assaulted by Wick Cutter before enjoying a happy marriage with Anton Cuzak. In that novel by this author, Jim Burden remembers growing up with the title Bohemian immigrant, a member of the Shimerda family. For 10 points, name this American author from Nebraska who wrote *My Antonía*.

ANSWER: Willa **Cather**

20. Newton’s identities relate two types of the “symmetric” kinds of these entities. In a technique useful for integration, fractions with these entities in the numerator and denominator can be expressed as a sum of simpler fractions. Applying Vieta’s formulas to these entities involves taking ratios of numbers found in them. One can find a matrix’s eigenvalues by using these things’ “characteristic” type. Abel and Ruffini found that these entities have no algebraic solutions when their degree is greater than four. Setting these expressions equal to zero is used to find their roots through synthetic division or factoring. For 10 points, name these entities made of powers of a variable.

ANSWER: **polynomial**s [prompt on algebraic expressions]

Tiebreaker. This state is home to the second-most densely concentrated surname in the US, Locklear, which comes from the Lumbee people in Robeson County. Two of the three oldest rivers in the United States have their headwaters in this state; those are the French Broad and New Rivers. This state was home to the “I-85 District,” a congressional district that ran along its namesake highway to include heavily African-American parts of this state’s cities. The highest point east of the Mississippi, Mount Mitchell, is located in Pisgah National Forest outside this state’s city of Asheville. For 10 points, name this state whose “research triangle” includes its cities of Chapel Hill and Raleigh.

ANSWER: **North Carolina**

Bonuses

1. This composer wrote his *Sérénade mélancolique* for Leopold Auer, who was also the original dedicatee of his violin concerto. For 10 points each:

[10] Name this Russian composer of an oft-performed Violin Concerto in D major and the *1812 Overture*.

ANSWER: Peter Ilyich **Tchaikovsky**

[10] This final Tchaikovsky symphony in B minor includes an unusually slow finale movement. Tchaikovsky dedicated this symphony to his nephew, whom Tchaikovsky was allegedly infatuated with.

ANSWER: Symphony No. **6** in B minor **Pathétique, Op. 74** [accept any underlined part.]

[10] This Russian pianist, the intended soloist for Tchaikovsky's Piano Concerto No. 1, initially criticized it but became a champion of its later revisions. Tchaikovsky wrote a Piano Trio in A minor in this pianist's memory.

ANSWER: Nikolai **Rubinstein** [prompt on **Rubinstein**]

2. This man developed a methodology later used by his student Penelope Eckert in her study of "jocks" and "burnouts" in Detroit. For 10 points each:

[10] Name this "father of sociolinguistics." He conducted an experiment in which New York department store clerks were asked for directions to the "fourth floor."

ANSWER: William **Labov**

[10] Labov's research into language use in New York focused on this dialect of English. Speakers of this dialect use the habitual "be" and may use code switching to flip between this dialect and standard English.

ANSWER: **AAVE** [or **African American Vernacular English** or **ebonics** or **Black English Vernacular** or **Vernacular Black English**]

[10] Another area of Labov's research looks at changes in values of these sounds, which underwent a "Great Shift" in England during the 15th to 18th centuries. They are produced with an open vocal tract in contrast to consonants.

ANSWER: **vowels**

3. For 10 points each, name some Shakespearean villains:

[10] This advisor to Othello tells him that he has seen Desdemona's handkerchief in Cassio's possession. He also warns Othello that jealousy is "the green-eyed monster."

ANSWER: **Iago**

[10] In a soliloquy, this illegitimate son of the Earl of Gloucester cries "Now, gods, stand up for bastards!" His courtship of Regan causes Goneril to poison her, and he is too late to rescind his order for Cordelia's execution.

ANSWER: **Edmund**

[10] This villain murders his own brother by pouring poison into his ear while he sleeps. This character declares "Give me some light, away!" after being stricken by conscience during a performance of *The Murder of Gonzago*.

ANSWER: King **Claudius**

4. This object, which contains features with such wonderful names as "Oz Terra" and "Mordor Macula," shares its name with the ferryman of the dead in Greek mythology. For 10 points each:

[10] Name this largest moon of Pluto, with which it is sometimes considered to be a binary system.

ANSWER: **Charon**

[10] In 2015, this spacecraft became the first to fly by Pluto, sending back detailed images and information about the dwarf planet's atmosphere and magnetosphere, as well as observations of its moons.

ANSWER: **New Horizons**

[10] The flight of the *New Horizons* spacecraft allowed many new features to be named. The largest bright region on the surface of Pluto, nicknamed "The Heart," is named after this American astronomer who discovered Pluto.

ANSWER: Clyde **Tombaugh** [or **Tombaugh** Regio]

5. You are a slave in Ancient Rome. Answer some questions about your life, for 10 points each:

[10] You work on one of these large agricultural plantations, which produced grapes, olive oil, and grain in large quantities. The owner of these estates would live in a villa at the center of them.

ANSWER: latifundia

[10] You are dissatisfied with your life and decide to join the slave revolt led by this former Thracian gladiator. His forces rappelled down the slopes of Mount Vesuvius to defeat a Roman army led by Gaius Claudius Glaber.

ANSWER: Spartacus

[10] After Spartacus's army was defeated by Marcus Licinius Crassus, thousands of slaves, including you, were crucified along this most important Roman road, which connected Rome to Brindisi.

ANSWER: Appian Way [or the Via Appia]

6. Answer the following about the use of the color black in art, for 10 points each.

[10] This Spanish artist and court painter to Charles IV created the "Black Paintings" in the Quinta del Sordo, including one of *Saturn Devouring His Son*.

ANSWER: Francisco de Goya

[10] This Russian Suprematist artist created what is widely viewed as the first purely abstract painting when he created his *Black Square*. He also painted two offset squares in *White on White*.

ANSWER: Kazimir Malevich

[10] *Arrangement in Grey and Black, No. 1* is the alternative title of a painting by James McNeill Whistler depicting which of his relatives?

ANSWER: mother [or synonyms; or Whistler's Mother]

7. Eriphyle uses this object in order to convince her husband to join a rebellion, leading to her death. For 10 points each:

[10] Identify this object which brought misfortune to all of its owners, including Semele and a woman who kills herself while her second husband tears out his own eyes.

ANSWER: necklace of Harmonia [prompt on necklace]

[10] Harmonia was the wife of the founder of this city, who slew a dragon and sowed its seeds into the ground to create the Spartoi. Most of the unfortunate members of the necklace of Harmonia were royalty of this city.

ANSWER: Thebes

[10] The necklace of Harmonia was crafted by this god of forges and blacksmiths in order to curse the lineage of the offspring born from the affair between Ares and this god's wife Aphrodite.

ANSWER: Hephaestus

8. These animals are especially well known for having the ability to regenerate lost limbs. For 10 points each:

[10] Name these animals that are classified in the order Urodela. Types of these animals include axolotls and newts.

ANSWER: salamanders

[10] Salamanders are found in this class. Animals in this class, such as frogs and caecilians, first live in water as larvae and then move on to dry land.

ANSWER: amphibians [or Amphibia]

[10] Some salamanders and amphibians exhibit warning coloration to predators, which is known by this term. Two or more species mimic this type of coloration in Müllerian mimicry.

ANSWER: aposematic coloration [or aposematism; or other word forms]

9. The protagonist of a novel by this author is assisted in his schemes by his elderly neighbor Hominy Jenkins, the last surviving member of the Little Rascals. For 10 points each:

[10] Name this Man Booker Prize-winning author, an African-American novelist who wrote *The White Boy Shuffle* and *The Sellout*.

ANSWER: Paul **Beatty**

[10] *The Sellout* is set in the “agrarian ghetto” of Dickens, a fictional suburb of this largest city in California. It’s also the setting for James Ellroy’s *The Black Dahlia* and Raymond Chandler’s *The Big Sleep*.

ANSWER: **Los Angeles**

[10] The main character of this novel, Tod Hackett, plans to paint “The Burning of Los Angeles” while living in Hollywood. This Nathanael West novel ends after a riot outside a movie premiere at Kahn’s Persian Palace theater.

ANSWER: *The **Day of the Locust***

10. The Fawcett Commission investigated conditions in concentration camps during this war. For 10 points each:

[10] Name this war fought between the British and the namesake Afrikaans-speaking group, who fought to maintain the independence of the Transvaal Republic and the Orange Free State.

ANSWER: Second Anglo-**Boer** War [do not accept or prompt on the First Boer War]

[10] This future prime minister escaped from Boer captivity during the war. He would later give speeches such as his “finest hour” speech during the Battle of Britain as the leader of Britain during World War II.

ANSWER: Winston **Churchill**

[10] A key turning point in the war was this 217-day siege, which turned Robert Baden-Powell into a national hero for holding off the advances of General Cronje’s forces from the namesake town.

ANSWER: Siege of **Mafeking**

11. The reciprocal of the square root of the product of this constant and the vacuum permeability is theoretically equal to the speed of light in a vacuum. For 10 points each:

[10] Name this value, which is equal to around 8.85 farads per meter. This constant is denoted by epsilon naught.

ANSWER: **permittivity** of free space [or vacuum **permittivity**; do not accept or prompt on “relative permittivity”]

[10] Relative permittivity, on the other hand, is equal to this property plus one. This dimensionless constant, denoted by “chi sub E,” describes the material’s degree of polarization when an electric field is applied to it.

ANSWER: electric **susceptibility** [do not accept or prompt on “magnetic susceptibility”]

[10] *Magnetic* susceptibility, on the other hand, is found by a law named for Weiss and this scientist. Materials can lose their ferromagnetism past a temperature named for this scientist, who also co-discovered radium with his wife.

ANSWER: Pierre **Curie** [do not accept or prompt on “Marie Curie”]

12. Answer the following about operas set in the Middle East, for 10 points each.

[10] In this Verdi opera set in Ancient Egypt, the Egyptian military officer Radames conducts an illicit love affair and gets buried alive with the title Ethiopian princess.

ANSWER: **Aida**

[10] In this composer’s opera *The Abduction from the Seraglio*, Belmonte rescues his wife Konstanze from the harem of Pasha Selim. This composer also wrote the operas *Idomeneo* and *Così fan Tutte*.

ANSWER: Wolfgang Amadeus **Mozart** [or Johannes Chrysostomus Wolfgangus Theophilus **Mozart**]

[10] Philip Glass pieced together the libretto for this opera from texts in Akkadian, Biblical Hebrew, and Ancient Egyptian, including *The Book of the Dead*. This opera is part of the *Portrait Trilogy*.

ANSWER: **Akhmaten** [or **Akhenaten**]

13. For 10 points each, answer the following about people who were executed by being burned at the stake.

[10] This teenage girl was burned at the stake in 1431 after she was captured and handed over to the English. This “Maid of Orleans” fought for France in the Hundred Years’ War.

ANSWER: **Joan of Arc** [or **Jeanne d’Arc**; prompt on **Joan**; prompt on **Jeanne**]

[10] Michael Servetus was burned in 1553 for spreading heresy in Geneva, which was then controlled by this Protestant thinker.

ANSWER: John **Calvin**

[10] Hugh Latimer, Nicholas Ridley, and Thomas Cranmer were all burned at the stake in this city by Mary I. This city was the site of a later debate between Thomas Huxley and Samuel Wilberforce about Darwin’s theory of evolution.

ANSWER: **Oxford** [or **Oxford** Martyrs; or **Oxford** evolution debate]

14. For 10 points each, answer the following about Renaissance literature:

[10] In this only play by Niccolo Machiavelli, Callimaco disguises himself as a doctor and drugs Lucrezia with the title substance in hopes that it will make her sleep with him.

ANSWER: *The **Mandrake*** [or *La **Mandragola***]

[10] This Petrarch collection gave rise to the Italian sonnet format. It consists of a series of several hundred poems about his beloved Laura.

ANSWER: *Il **Canzoniere*** [or ***Rime Sparse***; or ***Scattered Rhymes***; or ***Rerum vulgarium fragmenta***]

[10] The modern version of this language was based in large part on the works of Petrarch and Dante. It succeeded Latin as the main language used in Rome.

ANSWER: **Italian** language [or **Italiano**; or **lingua italiana**]

15. This man took over as the campaign manager of Donald Trump’s 2016 presidential campaign after Corey Lewandowski was fired. For 10 points each:

[10] Name this man, who was indicted in late October 2017 on charges related to Robert Mueller’s investigation of connections between the Trump campaign and the Russian government.

ANSWER: Paul **Manafort**

[10] Manafort’s indictment accuses him of laundering money from this country, whose then-leader Viktor Yanukovich fled as part of the 2014 unrest that led to Russia annexing this country’s Crimean peninsula.

ANSWER: **Ukraine**

[10] Manafort’s debt to pro-Russian interests was revealed by the records of this country where his shell companies filed taxes. This country is divided in two by a “Green Line” enforced by the UN.

ANSWER: **Cyprus** [or **Kibris** or **Kypriaki**]

16. This book uses the example of a ball of wax to explain how some things cannot be recognised by sensory perception alone. For 10 points each:

[10] Name this treatise whose six parts seek to establish what we can know for sure and what we must call into doubt. It proposes an “evil demon” that makes all possible sensory input deceptive by nature.

ANSWER: ***Meditations** on First Philosophy*

[10] This author of *Meditations on First Philosophy* also wrote *Discourse on Method*, which includes his famous statement “cogito, ergo sum,” meaning, “I think, therefore I am.”

ANSWER: René **Descartes**

[10] In the Fifth Meditation, Descartes presents a version of this argument for God’s existence. This argument, which concerns the nature of being and existence, was first articulated by St. Anselm in his *Proslogion*.

ANSWER: **ontological** argument

17. Constantine the Great called for this event, which was preceded over by Hosius of Cordoba. For 10 points each:
[10] Name this ecumenical council that took place in 325 CE. This event names a creed that forms a notable part of the modern Christian liturgy.

ANSWER: First Council of **Nicaea**

[10] The First Council of Nicaea notably set a uniform date for the observance of this holiday, instead of being linked to the date of Passover. This holiday, always on a Sunday, celebrates the resurrection of Jesus from the dead.

ANSWER: **Easter** Sunday [or **Pascha**]

[10] The First Council of Nicaea and the later First Council of Constantinople denounced this Christian heresy. Unlike Catholicism, this heresy claimed that Christ is distinct from, and subordinate to, the Holy Father.

ANSWER: **Arianism**

18. Answer the following about the early history of the Southwest, for 10 points each:

[10] This leader of the Pueblo revolt successfully overthrew the Spanish colonial government of New Mexico in 1680. In the aftermath of his revolt, churches were destroyed and traditional kivas were built atop them.

ANSWER: **Popé** [or **Po'pay**]

[10] This Native American tribe arrived in the Southwest around 1200 CE. These people, who live in hogans, were forced to go on the Long March and were recruited as "code-talkers" by the Marines during World War II.

ANSWER: **Navajo** [or **Diné**]

[10] The Navajo nation in this state is the largest Indian tribe in the United States. Ancient Pueblo and Anasazi people inhabited the Grand Canyon in this state.

ANSWER: **Arizona**

19. In this novel, a former slave laborer on Shikoku becomes the richest man in his village. For 10 points each:

[10] Name this novel, in which the Emperor gets his supermarket looted, partially because he's ethnically Korean. In this novel, Mitsusaburo and his wife leave Tokyo to go live in a remote village with his brother Takashi.

ANSWER: *The **Silent Cry***

[10] *The Silent Cry* is a novel by this Japanese author of *Nip the Buds, Shoot the Kids*. He wrote the semi-autobiographical *A Personal Matter* about the birth of his mentally disabled son.

ANSWER: Kenzaburo **Oe**

[10] In *The Silent Cry*, Takashi organizes villagers by having them play this sport. Buzz Bissinger traveled to Odessa, Texas and spent a year documenting the Permian team that plays this sport in his book *Friday Night Lights*.

ANSWER: American **football**

20. The *endo* transition state in this reaction is more stable due to secondary orbital effects. For 10 points each:

[10] Name this pericyclic reaction which takes a diene and a dienophile and combines them to produce a cyclohexene.

ANSWER: **Diels-Alder** reaction

[10] The Diels-Alder reaction can be catalysed using a type of these compounds named for Lewis defined as an electron pair acceptor. Brønsted and Lowry defined these compounds as proton donors, and they have a pH below 7.

ANSWER: **acids**

[10] This chemist, with Roald Hoffmann, names a set of rules that can be used to predict the stereochemistry of pericyclic reactions such as the Diels-Alder reaction. He also synthesised vitamin B12 with Albert Eschenmoser.

ANSWER: Robert Burns **Woodward** [or **Woodward**-Hoffmann rules]