

Round 2 1st Section Toss-up Questions

Question #1: Literature – Mythology

10 points

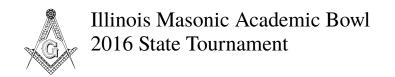
This goddess helped her husband gain control of the	<u>Rhea</u>
world by throwing Eurynome [yur-IH-nuh-mee] into	
Tartarus. This character caught her husband with	
Philyra [FIL-ur-uh], but not before Chiron [KYE-rahn]	
was conceived. Following the kidnapping of	
Persephone [pur-SEH-fuh-nee], this character	
convinced Demeter to return to Olympus. She hid her	
youngest child on Mount Dicti on Crete after fooling	
her husband by giving him a stone wrapped in baby	
clothes because he had swallowed their first five	
children. Name this mother of Zeus and wife of Cronos	
[KROH-nohss].	

Question #2: Miscellaneous – Popular Culture

10 points

Walter Penney invented a game based around doing this three times. In *Final Fantasy Six*, Edgar gained control of his father's castle by rigging this act. Anton Chigurh [chi-GUR] performed this action to decide the fate of his victims in *No Country for Old Men*. In the movie *Friday Night Lights*, this act was used to eliminate one team from the playoffs. This action is performed by Batman villain Two-Face to determine whether he should be good or evil. In a Tom Stoppard play, Rosencrantz repeatedly wins bets based on this action. Name this act used to determine which team can elect to receive the ball at the beginning of a football game.

flipping a coin [or tossing a coin; accept variations like coin toss or coin flip; prompt on answers mentioning heads or tails]



Round 2 1st Section Toss-up Questions

Question #3: Science – Biology

10 points

These cells are combined with cancer cells to form hybridomas ["hybrid"-OH-muz]. These cells undergo clonal selection without positive selection. The marker CD20 [C-D-"twenty"] is found on the surface of these cells. Memory cells and plasma cells are derived from these cells. In birds, these cells mature in the bursa of Fabricius [fuh-BRISH-ee-us], while in humans they mature in the bone marrow. These cells secrete y-shaped proteins that bind to antigens. Name these immune cells which secrete antibodies, and are helped by T cells.

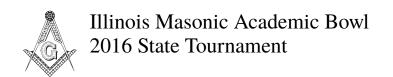
B cells or **B** lymphocytes [prompt on **white** blood cells or **lymphocyte**s]

Question #4: Social Studies – U.S. History

10 points

This person recited oyster recipes in a 15-hour filibuster of the Glass-Steagall Act. This person was accused of arranging the murder of J. Y. Sanders by the Dynamite Squad, which tried to impeach him as governor. This politician won a Supreme Court case against the Cumberland Telephone company over rate hikes. Shortly after announcing he would run for president, this man was shot in the State Capitol building by Carl Weiss. This politician's "Share Our Wealth" program promised "Every Man a King." Identify this Louisiana politician nicknamed The Kingfish.

Huey (Pierce) Long (Jr.)



Round 2 1st Section Toss-up Questions

Question #5: Literature – British Literature

10 points

This author wrote about a colonel [KER-nul] who was			
mentored by Joseph Addison and Richard Steele.			
Jonathan Swift is portrayed as a bully in this author's			
novel The History of Henry Esmond. In another novel,			
this author of <i>The Book of Snobs</i> wrote of Sir Pitt's			
desire to marry his children's governess, who is already			
secretly married. That novel by this author, set initially			
at Miss Pinkerton's Academy for Young Ladies,			
describes the marriages of George Osborne to Amelia			
Sedley and Rawdon Crawley to Becky Sharp. Name			
this author of Vanity Fair.			

William Makepeace **Thackeray**

Question #6: Science – Astronomy

10 points

These objects are found in the Clowes-Campusano			
Group and the Huge Group. Comparing the luminosity			
of one of these objects to its mass gives the Eddington			
ratio. The spectra of these objects features the			
Gunn-Peterson trough [trawff]. These objects are more			
luminous than Seyfert [SEE-fert] galaxies, which are,			
like these objects, active galactic nuclei. Some			
astronomers believe that these objects are blazars			
[BLAY-zahrs] observed from a different angle. These			
objects are believed to surround supermassive black			
holes at the centers of galaxies, and they are very			
distant and bright. Identify these objects whose name is			
based on the fact that they are sources of radio waves.			

quasars [prompt on blazars
before they are mentioned]



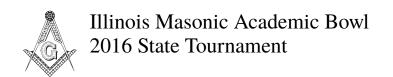
Question #7: Mathematics – Probability

10 points per part

This	experiment is named for an 18th-century	
Fren	chman.	
1	Name this experiment that involves dropping an object onto a floor that is divided into strips, and counting the number of objects that land in such a way that they touch more than one strip.	Buffon 's needle experiment [accept other words in place of "experiment"; prompt on partial answers]
2	The Buffon's needle experiment can be used to approximate this irrational number between 3 and 4.	<u>pi</u>
3	If the length of the needle equals the space between lines on the floor, what is the probability that the needle will cross a line?	<u>2/pi</u>

Question #8: Mathematics – Probability

gene [SO	orate these numbers are given the prefix "pseudo-" O-doh] because there generally is some degree of lictability.	
1	Name these types of numbers that are supposed to be chosen by pure chance and are not supposed to contain patterns.	random numbers [accept pseudorandom numbers]
2	This pseudorandom number generator works by squaring the previous result and dividing by the product of two prime numbers.	Blum Blum Shub
3	If two digits are chosen at random, and zeroes and repeats are possible, what is the probability that neither of the digits is a seven?	<u>81/100</u> [or 0 <u>.81</u> or <u>81%</u>]



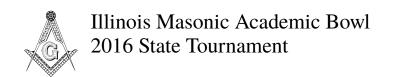
Question #9: Social Studies – Psychology

10 points per part

	zafer Sherif [MOO-zah-fur shuh-REEF] tested this	
	avior in an experiment involving a white light that	
app	eared to move.	
1	Name this phenomenon in which people adjust	conformity [accept word
	their behavior to comply with group norms.	forms]
2	This psychologist tested conformity during the 1950s in an experiment involving lines of different lengths in which actors would occasionally give incorrect answers, causing subjects to also give incorrect answers.	Solomon Asch ["ash"]
3	Sherif also led this experiment, in which the "Rattlers" and "Eagles" competed against each other in various tasks.	Robbers Cave Experiment

Question #10: Social Studies – Psychology

Dav	vid Wechsler [WEK-slur] created tests for	
cal	culating this quantity based on four distinct	
clu	sters.	
1	Name this quantity which can be measured by the	intelligence quotient or IQ
	Stanford-Binet [buh-NAY], which features different	[prompt on answers
	tasks based on the test-taker's age, including	mentioning intelligence]
	solving reasoning problems and reversing six-digit	
	numbers.	
2	The normal distribution for IQ scores uses 100 as	<u>15</u>
	the mean, and this value for the standard deviation.	
3	The Flynn effect describes how the average IQ rises	time [accept years,
	with respect to this value.	generations, or similar
		answers; do not accept
		"age"]



Question #11: Science – Physics

10 points per part

-	on observation, one of these functions can lapse".	
1	Name these functions, symbolized with the Greek letter psi ["sigh"], that describe the quantum state of a system.	wave functions
2	The wave function is the eigenfunction ["EYE-gun-function"] of the time-independent form of this equation. This equation and a cat in a thought experiment are named for the same person.	Schrödinger's [SHRAY-ding-ur'z] equation
3	The Aharonov-Bohm [ah-hah-ROH-nawf BOHM] effect, in which a charged particle in areas with zero vector potential is affected by the potential, is explained using this quantity, which shifts the graph of a sine wave horizontally.	<pre>phase shift [or Berry phase; or geometric phase; or Pancharatnam-Berry phase]</pre>

Question #12: Science – Physics

	loss of atmospheric gas via Jeans escape can be	
1	Name this distribution, a model for particle speeds in an ideal gas.	Maxwell-Boltzmann distribution [prompt on partial answers]
2	Adding a one to the denominator of the Maxwell-Boltzmann distribution gives a distribution that models these particles. The function allows between zero and one particles in any state.	fermions [prompt on electrons, leptons, or quarks]
3	Two fermions cannot occupy the same quantum state according to this principle.	Pauli exclusion principle [accept either underlined term]



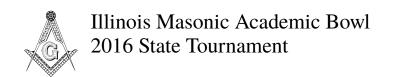
Question #13: Literature – World Literature

10 points per part

	s member of the 104th claimed that God made s from the Moon's broken pieces.	
1	Name this title character and friend of the Baptist Alyoshka [al-YOSH-kuh], who despised the scrounging Fetyukov [FET-yoo-kawf].	Ivan Denisovich [accept either; accept Ivana, Denisovicha, Shukov, or One Day in the Life of Ivan Denisovich]
2	This author of <i>One Day in the Life of Ivan</i> Denisovich [EE-vahn deh-NEE-soh-vich] also wrote The Gulag Archipelago [GOO-lahg ar-kih-PEL-uh-goh].	Aleksandr (Isayevich) Solzhenitsyn
3	This other Solzhenitsyn novel focuses on a group of intellectuals tasked with identifying the voice on a taped phone call made by Volodin [vuh-LOH-din].	The First Circle [or V kruge pervom or In the First Circle]

Question #14: Literature – World Literature

The	central group in this story journeyed from Rouen	
[roo	-en] to Le Havre [hahv-ruh].	
1	Name this story in which the protagonist shares her emergency rations with those who deemed themselves above her, only to be shunned once the trip resumes from Tôtes ["tote"].	"Boule de Suif" [or "Ball of Fat" or "Ball of Lard" or "Dumpling" or "Butterball"]
2	"Boule de Suif" was written by this Frenchman, who also wrote "The Necklace."	Guy de Maupassant [maw-pah-sahn]
3	This is the name of the title dog left to die in a Maupassant story. This same name is used for a stock character who loves Columbine, who in turn loves Harlequin.	Pierrot [pyair-oh]



Round 2 3rd Section Toss-up Questions

Question #15: Fine Arts – Art History

10 points

This painter showed a chandelier with candles whose flames are being blown strongly to the side at the top of his painting *Witching Hour*. He painted a white dog sleeping comfortably on a bed covered with a white blanket in *Master Bedroom*. Without telling his wife or his subject's husband, he made over 200 pictures of one of his neighbors in Pennsylvania during the 1970s and '80s. Name this painter of Helga Testorf, who showed a different neighbor who suffered from polio trying to make it across a farm in *Christina's World*.

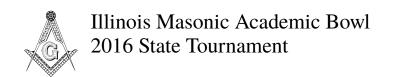
Andrew (Newell) Wyeth ["WHY"-eth]

Question #16: Mathematics – Math Concepts

10 points

The Weierstrass [VYE-ur-shtrass] substitution uses both division by two and this function to simplify integration problems. The law of this function gives an expression for the ratio of the difference of two lengths divided by the sum of two lengths. Its Taylor series begins x plus x cubed over 3 plus 2x to the fifth over 15. When the line x equals 1 intersects the terminal side of an angle in standard position, this function gives the y-coordinate of the point of intersection. This function is undefined precisely when the secant function is undefined, that is, when cosine is zero, since it equals sine divided by cosine. Name this function that, for an acute angle in a right triangle, is the ratio of the opposite side to the adjacent side.

tangent function [accept answers that additionally mention a variable; do not accept "cotangent"]



Round 2 3rd Section Toss-up Questions

Question #17: Social Studies – World History

10 points

This ruler bet that the Château de Bagatelle could *not* be constructed in three months. Nicole Lequay pretended to be this monarch in a scam involving a valuable piece of jewelry, which led to severe sentences for the Cardinal de Rohan and Jeanne de la Motte. This queen was the sister of Leopold II [2], Holy Roman Emperor, which divided her loyalties. People who disliked this ruler referred to her as "the Austrian woman". Name this woman who was sent to the guillotine a few months after her husband Louis XVI [16].

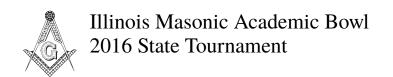
Marie Antoinette [or Maria Antonia Josepha Johanna or Maria Antonia Josephina Johanna; prompt on partial answer]

Question #18: Science – Chemistry

10 points

A form of this functional group bound to a carbon-carbon double bond can be protected by a silyl ether [SIL-il EE-thur], and is central to the mechanisms of the Michael addition and the aldol condensation. That form of this functional group is the tautomer ["TAUT"-oh-mur] of a ketone ["KEY-tone"]. A molecule with two of this functional group is used to protect carbonyls [KAR-buh-NEELZ] by forming a 1,3 dioxolane ["die-OX-uh-lane"]. The Jones oxidation forms a secondary one of these compounds from a ketone, while Grignard [GREEN-yard] reagents will form these compounds when attacking a carbonyl. A compound with two of these functional groups is called a diol ["DIE-awl"]. Name this functional group found in ethanol.

alcohol group [or hydroxyl group]



Round 2 3rd Section Toss-up Questions

Question #19: Literature – U.S. Literature

10 points

This was the 22nd poem in the collection <i>Spring and</i>	"The Red Wheelbarrow "
All. Its four stanzas together form one sentence, though	
its first word is not capitalized. The last stanza of this	
poem places the title object near farm animals, and the	
third stanza describes the title object's wet texture. The	
name of that object is broken up between the third and	
fourth lines. The title object probably has one wheel,	
and it is "glazed with rain water". Name this poem	
about an object that "so much depends upon", written	
by William Carlos Williams.	

Question #20: Social Studies – Economics

10 points

In General Theory, Keynes ["canes"] argued that the	interest rate [or lending
"marginal efficiency of capital" determined this	rate]
economic value. The Keynes effect states that this	
value falls when prices fall. The Hicks-Hansen model	
compares this quantity to real output, and the Fisher	
equation compares two versions of this calculation to	
the rate of inflation. This value is divided into 72 to	
approximate the doubling period. The federal funds	
rate and the prime rate are both specific examples of	
this kind of value. Name this value used to calculate the	
extra amount paid when borrowing money.	



Question #21: Fine Arts – Classical Music & Opera

10 points per part

This	s work in E-flat major was composed in 1850.	
1	Give this symphony's nickname, which is based on a river going through Düsseldorf [DOOS-sel-dorf].	Rhenish [REN-ish] Symphony [prompt on Rhine River]
2	The "Rhenish" is the third symphony by this composer, who married Clara Wieck [veek] against her father's wishes.	Robert Schumann
3	Schumann also wrote this eight-movement piano piece named for an E. T. A. Hoffmann character.	Kreisleriana ["Chrysler"-ee-ah-nah]

Question #22: Fine Arts – Classical Music & Opera

	s symphony, Burghauser number 178, is in E	
mino 1	Give the nickname of this Antonín Dvořák	From the New World
	[d'VOR-zhahk] piece that is believed to have been influenced by his study of African-American and Native American music.	Symphony [prompt on Symphony No. 9 or Ninth Symphony]
2	Dvorak also wrote these 16 nationalist pieces in two groups of eight. These pieces are influenced by Bohemian and Moravian music.	Slavonic Dances [or Slovanske tances; prompt on Slavonic]
3	In the first set of <i>Slavonic Dances</i> , the first and last pieces are classified as this type of lively dance that often follows a dumka [DOOM-kah].	furiant s



Question #23: Mathematics – Algebra

10 points per part

	uared minus 36 is an example of this kind of	
expi	ression.	
1	Name these binomials that can be factored into the	difference of (two) squares
	form quantity $a + b$, end quantity, times the	
	quantity $a-b$.	
2	Factor <i>x</i> to the sixth power minus twenty-five	$(x^3+5)(x^3-5)$ [or
	according to the difference-of-squares formula.	$(x^3-5)(x^3+5)$
3	The difference of squares can simplify certain	899
	multiplication problems. Find the product of 29	
	times 31.	

Question #24: Mathematics – Algebra

This	s arrangement of numbers includes all the possible	
outc	comes of the "binomial choose" operation, which	
is so	ometimes written "n C R".	
1	Name this arrangement used to find the coefficients	Pascal's triangle
	when you expand a binomial raised to a positive	
	integer power.	
2	Find the coefficient of the x squared y squared term	$\underline{6}$ [accept $6x^2y^2$]
	in the expansion of the quantity x plus y , quantity	
	closed, raised to the fourth power.	
3	Find the coefficient of the x squared y squared term	600 [accept $600x^2y^2$]
	in the expansion of the quantity $2x$ plus $5y$, quantity	
	closed, raised to the fourth power.	



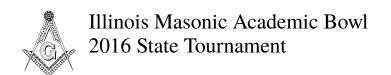
Question #25: Social Studies – World History

10 points per part

The	leader of this movement claimed that it "enticed	
the	snakes out of their lairs".	
1	Name this movement followed by the Anti-Rightist Campaign. It was introduced in a speech entitled "On the Correct Handling of Contradictions Among the People".	Hundred Flowers Campaign [or Hundred Flowers Movement or Baihua yundong]
2	The Hundred Flowers Movement occurred in 1956 under this Chinese premier.	Mao Zedong [or Mao Tse-tung; prompt on Zedong or Tse-tung]
3	Shortly after the crackdown on open speech, Mao instituted this set of economic reforms. The second of the Five-Year Plans, it tried to force through rapid industrialization but resulted in a famine.	Great Leap Forward [or Dà yuè jù]

Question #26: Social Studies – World History

Afte	er defeating a group of Sherden pirates in the Nile	
Delt	ta, he incorporated them into his forces.	
1	Name this pharaoh sometimes called Ozymandias	Ramses II [accept Ramses
	[ah-zee-MAN-dee-us]. This husband of Nefertari	the Great; prompt on
	[neh-fur-TAHR-ee] commissioned the temples at	Ramses]
	Abu Simbel [AH-boo "symbol"].	
2	Ramses signed the oldest known international	Battle of Kadesh
	treaty with the leader Muwatallis II	[KAY-desh]
	[moo-wah-TAH-lis "the second"] following this	
	massive chariot battle.	
3	After defeating a group of these people known as	Sea Peoples [accept People
	Sherden, Ramses II incorporated them into his	of the Sea]
	forces at Kadesh. These mysterious people mostly	
	raided towns on the Mediterranean coast.	



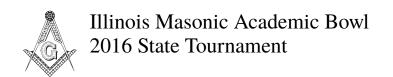
Question #27: Literature – British Literature

10 points per part

In a	20th-century novel, this character was	
re-in	nagined as Antoinettte Cosway.	
1	Name this Creole woman who occasionally escaped when her caretaker Grace Poole consumed whiskey.	Bertha Mason [accept either; accept, but do not otherwise reveal, Bertha Rochester; prompt on the Madwoman in the attic]
2	This man, Bertha's husband, kept Bertha locked up in an attic. He broke off an affair with Celine Varens, only to take in her abandoned daughter Adele.	Edward Rochester [accept either]
3	Edward Rochester's initial attempt to marry this Charlotte Brontë protagonist was interrupted by Bertha's brother, Richard.	Jane Eyre [accept either]

Question #28: Literature – British Literature

The	se twins are part of the "bigguns", and were	
task	ed with maintaining the signal fire.	
1	Name these twins who thought that a dead	Samneric [or Sam and Eric]
	parachutist was a deformed ape. Initially loyal to	
	Ralph, they end up joining Jack Merridew's tribe.	
2	Samneric appear in this William Golding novel, in	Lord of the Flies
	which a boulder crushes both Piggy and a conch	
	[kahnk] shell.	
3	The title figure in <i>Lord of the Flies</i> is symbolized	pig [or hog or swine]
	by the impaled head of one of these animals.	



Round 2 5th Section Toss-up Questions

Question #29: Mathematics – Math Concepts

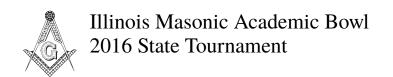
10 points

A perfect set has this property without having any	closure or closed
isolated points. A space is regular if all sets with this	
property are separated from points not in those sets. An	
operator has this property if that operator acting on a	
converging sequence in the domain always maps to a	
converging sequence in the range, and the limit is in the	
range. Intervals with this property include their limit	
points and are expressed in interval notation with	
square brackets. Name this property which exists in	
sets under an operation if that operation on elements of	
the set always results in another element from the set,	
and which is therefore possessed for the integers under	
addition, subtraction, and multiplication, but not under	
division.	

Question #30: Social Studies – U.S. History

10 points

The buildup to this action began with an argument over	Boston Massacre
whether John Goldfinch had paid for his wig. An	
exchange of words was followed by Hugh White	
striking Edward Garrick. Patrick Carr's dying	
declaration was given by Samuel Hemmingway at the	
trial stemming from this act on King Street. An	
engraving of this action showed a superior appearing to	
give an order to soldiers lined up. Governor Thomas	
Hutchinson restored order after this event, which was	
used to stir up anger against the British by Samuel	
Adams. Name this incident in which Crispus Attucks	
was among the colonists killed by British soldiers.	



Round 2 5th Section Toss-up Questions

Question #31: Literature – World Literature

10 points

In a novel by this author, Vaska says he is afraid of frogs after a doctor explains why to experiment on them. One of this author's collections opens with a tale of a pair of peasants, one thrifty and the other an idealist. In another tale by this writer, the loss of the horse Malek Adel sends a nobleman off the deep end. This author of *Diary of a Superfluous Man* and *A Sportsman's Sketches* wrote a novel focusing on a physician who denies all laws except those of the natural sciences, the nihilist [NYE-hil-ist] physician Bazarov. Name this author of *Fathers and Sons*.

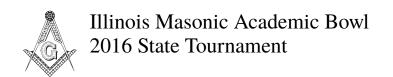
Ivan (Sergeyevich) **Turgenev** [tur-"GAIN"-yeff]

Question #32: Science – Physics

10 points

One type of these materials contains edge states with	<u>insulate</u>
carriers whose spin is locked at a right angle to their	<u>dielectr</u>
momentum. A type of these materials that do not act as	
calculated by conventional calculations are named for	
Nevill Mott. Nickel oxide acts as one of these	
compounds, which must have a large band gap. These	
materials lose their namesake property at their	
breakdown voltage. Examples of these materials	
capable of undergoing dielectric polarization are used	
between the two plate of a capacitor. Name these	
materials that do not conduct electricity.	
materials that do not conduct electricity.	

insulators [prompt on dielectrics]



Round 2 Extra Section Toss-up Questions

Extra Question #1: Fine Arts - Classical Music & Opera

10 points

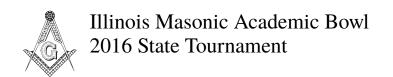
This composer's use of Mademoiselle de Lafontaine in Le triomphe de l'amour [lay tree-awmf day lah-mor] was unusual since almost all ballet dancers before then were men. Using a Thomas Corneille [toh-mah kor-nay] libretto based on a Molière [mole-yair] play, this composer wrote the opera Psyche [SY-kee]. This composer started the Paris Opera Ballet in 1669, and it is now the oldest national ballet company in the world. This composer's career took off after he danced with Louis XIV [14] in Benserade's [bens-rahd'z] Ballet de la nuit [nwee]. Name this French composer who died after stabbing himself in the foot during a concert.

Extra Question #2: Social Studies – World History

10 points

Adventurer Jørgen Jorgensen [YOR-gin YOR-gin-sen]
briefly seized power in this nation, but he was not
backed by locals. The last hunt of the great auk
occurred in this country, which formed the Old
Covenant with Norway. It came out ahead following a
series of Cod Wars with Great Britain. A volcano
eruption in this country in 2010 disrupted northern
European air traffic. Though Erik the Red was born in
what is now Norway, his son Leif Erikson was born in
what is now this country. Its parliament is the Althing
["ALL-thing"]. Name this nation on an island between
Great Britain and Greenland.

(Republic of) <u>Iceland</u> [or Lydveldid <u>Ísland</u>]



Round 2 Extra Section Toss-up Questions

Extra Question #3: Mathematics – Math Concepts

10 points

Hypergeometric functions are used in the continued	Carl Fri
fractions named for this person. This person's Theorema	[prompt
Egregium [tay-oh-RAY-mah eh-GRAY-jee-um] states	
that the embedding of a surface in space does not affect	
its curvature. The so-called "integers" [IN-teh-jers]	
named for this mathematician are actually complex	
numbers whose real and imaginary parts are each	
integers. This person is the namesake of a method of	
reducing matrices into row-echelon [ESH-uh-lahn]	
form, and Wilhelm Jordan's [YOR-dahn'z] name is	
added to this person's name when that process leads to	
reduced row-echelon form. Name this German	
mathematician and physicist.	

Carl Friedrich <u>Gauss</u> [prompt on <u>Gaussian</u>]

Extra Question #4: Literature – U.S. Literature

10 points

This author wrote about a man who would have awed	Kurt Vonnegut (Jr.)
Thor, and a woman that was "blindingly beautiful";	
they kissed the ceiling before Diana Moon Glampers	
shot them both. This author also wrote about a	
substance devised to deal with mud but used by Papa	
Monzano to commit suicide, ice-nine. This author	
created a character who became part of a zoo exhibit on	
Tralfamadore after surviving the fire-bombing of	
Dresden. Name this author of "Harrison Bergeron",	
Cat's Cradle, and Slaughterhouse-Five.	



Round 2 Extra Section Toss-up Questions

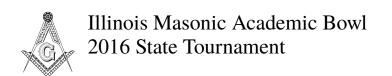
Extra Question #5: Science - Biology

10 points

VEGF [vej-"F"] is a growth factor that contributes to the formation of these structures. A factor said to be derived from this tissue turned out to be nitric oxide, which increases the permeability of these structures. Malignant tumors can cause the formation of these structures to increase their growth. These structures are formed through vasculogenesis

[VASS-kyoo-loh-"genesis"] and angiogenesis
[AN-jee-oh-"genesis"]. Some of these structures
contain valves to prevent backflow, while the formation
of cholesterol plaques in some of these structures
causes atherosclerosis [uh-THAIR-oh-skluh-ROH-siss].
Name these structures that can be classified as arteries
and veins.

blood vessels [prompt on endothelium; ask for a less specific answer upon a response of artery/ies or arterioles or venules or veins or capillary/ies]



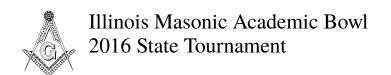
Extra Question #6: Social Studies – U.S. History

10 points per part

This	tragedy was planned to take place on Patriots'	
Day	, and its main perpetrator was later caught driving	
with	out a license plate.	
1	Name this event that destroyed the Alfred P.	Oklahoma City bombing
	Murrah building, and resulted in the arrests of	[accept other words in place
	Michael Fortier and Terry Nichols.	of bombing]
2	This man was sentenced to death by lethal injection	Timothy (James) McVeigh
	for masterminding the Oklahoma City bombing.	
3	McVeigh launched the attack to avenge the civilian	Waco, Texas
	deaths that occurred during the standoff between	
	federal agents and the Branch Davidians	
	[duh-VID-ee-uns] in this city.	

Extra Question #7: Social Studies – U.S. History

The	Webster-Ashburton Treaty settled the eastern	
loca	tion of this line.	
1	Name this concept whose then-nebulous western end inspired the slogan "fifty-four forty or fight" before being set at the 49th parallel.	the <u>U.SCanadian border</u> [accept equivalents; prompt on <u>border</u>]
2	Before he could cross the border, this Nez Perce leader was captured at Bear Paw Mountain. In surrendering, he declared "I will fight no more forever."	Chief Joseph [accept Young Joseph or Hin-mah-too-yah-lat-kekt; prompt on Joseph]
3	The International Boundary Commission responsible for the border was created by this 1794 treaty, negotiated by a Supreme Court Justice.	Jay's Treaty [accept London Treaty of 1794 or Treaty of Amity, Commerce, and Navigation]



Extra Question #8: Science - Chemistry

10 points per part

	hballs tend to undergo this phase transition,	
who	se opposite is deposition.	
1	Name this phase transition in which a solid	sublimation [or subliming]
	becomes a gas.	
2	This solid commonly sublimates to its gaseous	dry ice
	form, carbon dioxide.	
3	A common lab technique for purification involves	cold fingers
	sublimating a sample onto one of these apparatuses.	
	One of these pieces of glassware is sometimes	
	found on a rotary evaporator in place of a	
	condenser.	

Extra Question #9: Science - Chemistry

In th	nis technique, a sample is ionized through a	
metl	nod like E.S.I. or MALDI [MAHL-dee].	
1	Name this technique whose peaks are separated by how heavy they are.	mass spectrometry [accept mass spectroscopy; prompt on spectrometry or spectroscopy]
2	In mass spectrometry, peaks are given by their ratio of mass to this quantity, which is typically one for analytes after ionization.	charge
3	Time-of-flight mass spectrometry determines mass by setting this quantity for particles equal, and then viewing their time-of-flight through a chamber.	kinetic energy [accept KE; prompt on energy]