

Round 5 1st Section Toss-up Questions

Question #1: Literature – Mythology

10 points

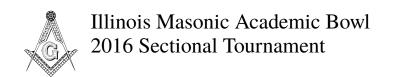
This character forced Helios [HEE-lee-ohss] into
lending a golden goblet by aiming an arrow at the sun
god. Hera forced Eileithyia [ih-lih-"THIGH"-uh] to
make sure this figure was born after his cousin to
prevent this person from becoming the king of
Mycenae [MIE-suh-nay]. After stealing the Delphic
tripod, this character was forced to don women's
clothes in the service of Omphale [ohm-FAH-lee]. This
character obtained the Golden Hind of Artemis
[AHR-teh-mis] and the girdle of Hippolyta
[hih-poh-"LIE"-tuh] after killing the Nemean
[NEE-mee-un] Lion and the Hydra. Name this Greek
mythical hero who was forced to perform 12 labors.

Question #2: Science - Health

10 points

In 2015, Canadian researchers found that high levels of this vitamin in children are associated with low levels of bad cholesterol. One type of this vitamin is synthesized in the body from cholesterol. This vitamin is given to patients with low levels of phosphorus and calcium because it helps regulate those nutrients. A deficiency of this vitamin causes adults to experience osteomalacia [AHSS-tee-oh-muh-LAY-shuh], which is a softening of the bones. This vitamin is often added to milk to lower the incidence of rickets. Name this vitamin that can be synthesized in people's skin if they are exposed to sunlight.

Vitamin <u>D</u> [or <u>cholecalciferol</u> or Vitamin **D3**]



Round 5 1st Section Toss-up Questions

Question #3: Fine Arts – Composers of the Modern Era

10 points

This composer wrote Fireworks for Nikolai
Rimsky-Korsakov's daughter. A performance of that
piece with Scherzo fantastique ["SCARE"-tsoh
fahn-tahs-teek] led to this composer getting a
commission from Sergei Diaghilev [SAIR-gay
dee-AH-guh-lef]. Before collaborating on <i>Pulcinella</i>
[pull-chee-NAY-lah], Diaghilev and this composer
produced a ballet featuring Prince Ivan Tsarevich and a
sorceror named Kashchei [kash-CHAY], about a
creature with magic feathers. This composer wrote
another piece that caused a riot at its 1913 premiere and
features a woman dancing herself to death. Name this
Russian composer of The Firebird and The Rite of
Spring.

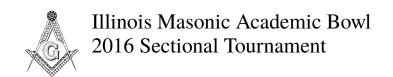
Igor (Fyodorovich) **Stravinsky**

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

10 points

This event, which took place next to Clara Harris and Henry Rathbone, led to the summoning of Charles Leale. Mary Surratt was executed for her role in this event. During the manhunt that followed, Dr. Samuel Mudd set a broken leg and Richard Garrett's barn was burned down. At the same time this event happened, Lewis Powell failed to stab William Seward. It took place during a performance of *Our American Cousin*, and its perpetrator said, "Sic semper tyrannis!" Name this act perpetrated at Ford's Theater by John Wilkes Booth.

assassination of Abraham **Lincoln** [accept similar answers that include **Lincoln** and the notion of killing or shooting]



Round 5 1st Section Toss-up Questions

Question #5: Literature – World Literature

10 points

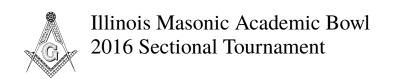
Melantho uncovered this character's scheme regarding	Penelope
a burial shroud. This character's order to Euryclea	
[yur-ih-KLEE-uh] to move their bed was used to	
determine whether a beggar was actually her husband.	
She also mandated that one must fire an arrow through	
a series of axe-heads using the bow of her absent	
husband; while waiting for that husband to return from	
war, she turned down 108 suitors. This woman was the	
daughter-in-law of Laertes [lay-AIR-teez] and the	
mother of Telemachus [teh-LEM-uh-kuss]. Name this	
faithful wife from Homer's Odyssey.	

Question #6: Science – Physics

10 points

The energy of these particles can be calculated using the Geiger-Nuttall law. George Gamow [GAM-awf] modeled the formation of these particles as a tunneling process. Ernest Marsden and Hans Geiger performed an experiment using these particles that disproved the plum pudding model and suggested that atoms have a distinct nucleus. That experiment, conducted in the lab of Ernest Rutherford, involved shooting these particles at a sheet of gold foil. Name these particles equivalent to helium nuclei.

alpha particles [before
"helium", accept helium(-4)
nucleus or helium(-4)
nuclei]



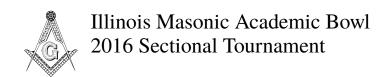
Question #7: Social Studies – World History

10 points per part

This	s son of Jahangir [jah-HAHN-geer] ordered the	
crea	tion of the Peacock Throne.	
1	Name this leader who was frequently advised by	Shah Jahan [accept Prince
	his father-in-law, Asaf Khan. This man's eldest son,	<u>Khurram</u>]
	Dara Shikoh [SHEE-koh], lost the struggle to	
	replace him.	
2	Shah Jahan was the penultimate ruler of this south	Mughal dynasty
	Asian dynasty, founded by Babur.	
3	Shah Jahan's son Aurangzeb [or-ang-ZEB] placed	Taj Mahal
	the former ruler under house arrest in this structure	
	built for Mumtaz, Shah Jahan's wife. This	
	mausoleum [maw-suh-LEE-um] is located in Agra.	

Question #8: Social Studies – World History

	Zimmerman telegram was an attempt to persuade	
this	country to enter World War One.	
1	Name this country where Agustín de Iturbide [ah-goo-STEEN day ee-toor-BEE-day] and Maximilian both claimed the title "Emperor". This country is now headed by Enrique Peña Nieto [en-REE-kay "PAIN"-yah nee-AY-toh].	Mexico [or México [MAY-hee-koh]]
2	Maximilian was urged to take over Mexico by this French ruler, who led an 1851 coup. He fled shortly after being captured during the Battle of Sedan [say-daw] in 1870.	Napoleon III [or Louis-Napoleon Bonaparte; prompt on Bonaparte; do not accept "Napoleon" or "Napoleon Bonaparte"]
3	Maximilian was overthrown by this Mexican president, who served terms before and after Maximilian's rule.	Benito (Pablo) Juárez [bay-NEE-toh WAH-rez] (García)



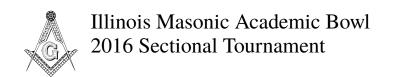
Question #9: Literature – U.S. Literature

10 points per part

This	s poem is set during "the darkest evening of the	
year	,,	
1	Name this poem in which the narrator's horse	"Stopping by Woods on a
	shakes his harness bells, as he "thinks it queer / to	Snowy Evening"
	stop without a farmhouse near".	
2	This author of "Stopping by Woods on a Snowy	Robert (Lee) Frost
	Evening" read his poem "The Gift Outright" at the	
	inauguration of John F. Kennedy.	
3	In this Frost poem, the narrator and his neighbor	"Mending Wall"
	utter the phrase "stay where you are until our backs	
	are turned", a spell used to balance the boulders of	
	the title dividing structure.	

Question #10: Literature – U.S. Literature

Foll	owing a vision of Jesus that restored his faith, he	
refu	sed to divulge information regarding Cassy and	
Emr	meline's escape.	
1	Name this character who kept a silver dollar and	Uncle Tom
	lock of hair around his neck that Sambo said were a	
	gift from a witch. Those objects were chucked into	
	a fire.	
2	Uncle Tom was created by this author, whom	Harriet Beecher Stowe
	Abraham Lincoln allegedly described as "the little	
	woman who wrote the book that made this great	
	war".	
3	George Selby was unable to prevent Uncle Tom's	Simon Legree [accept
	death at the hands of this plantation owner.	either]



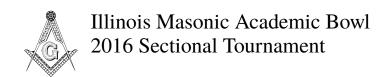
Question #11: Science – Biology

10 points per part

In b	acteria, this structure is primarily made of	
pept	tidoglycan [PEP-tih-doh-GLY-kan].	
1	Name this structure that surrounds the plasma	cell wall(s) [do not accept
	membrane in some species. It is found in plants	"cell(ular) membrane(s)"]
	and fungi, but not in animals.	
2	In plants, much of the cell wall is composed of this	cellulose
	polysaccharide ["poly-SACK-uh-ride"], which	
	consists of glucose [GLOO-kohss] monomers	
	[MAH-noh-murz] connected by beta-1,4 glycosidic	
	[BAY-tuh "one four" GLY-koh-SID-ik] bonds.	
	Humans cannot digest this compound.	
3	The amount of peptidoglycan in the cell wall	Gram stain(ing) [prompt on
	determines whether or not a bacterium will retain	staining]
	crystal violet in this technique, which uses safranin	
	[SAF-ruh-nin] or fuchsin [FOOK-sin] as	
	counter-stains.	

Question #12: Science – Biology

The	most common form of this hormone is	
indo	le-3-acetic [IN-dohl "three" uh-SEE-tik] acid.	
1	Name this class of hormones that promote growth	<u>auxin</u> s
	in plants by causing cells to expand.	
2	A hypothesis proposes that auxins release	acidic conditions [or low-pH
	expansins ["expanse-ins"] under this sort of	conditions]
	condition, which occurs when there is a high	
	concentration of protons.	
3	This other sort of plant hormone promotes stem	gibberellin s
	elongation. It was discovered in rice with "foolish	[gib-ur-EL-in(z)] [or
	seedling" disease.	gibberellic acid]



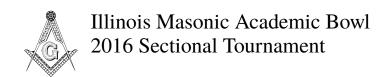
Question #13: Fine Arts – Art History

10 points per part

It ru	lled China from 1368 to 1644.	
1	Name this dynasty during which famous ceramics, especially vases, were created.	Ming [or Great Ming]
2	During the Ming Dynasty, artists developed better ways to use cobalt to create this color.	(cobalt) blue
3	This type of enamelwork using metal filaments became popular during the Ming Dynasty. This style was imported from Europe and is similar to champlevé [sham-plah-vay].	cloisonne [klwah-sawn]

Question #14: Fine Arts – Art History

It is	considered the largest religious structure in the	
worl	d.	
1	Name this building constructed under King	Angkor Wat [or Prasat
	Suryavarman II [sur-yah-VAR-mahhn "the	Angkor Wat or Nokor Wat]
	second"] of the Khmer [k'MAIR] Empire.	
2	Angkor Wat is in this modern-day nation, which	Cambodia [or Kingdom of
	displays the building prominently on its flag.	<u>Cambodia</u> or
		Preahreacheanachakr
		Kampuchea]
3	This temple in Angkor Thom, Cambodia built	Prasat Bayon
	under King Jayavarman VII [jai-yah-VAR-mahn	
	"the seventh"] features over 200 large stone faces.	



Round 5 3rd Section Toss-up Questions

Question #15: Miscellaneous – Journalism

10 points

One publisher of this newspaper, who started its Neediest Cases Fund after seeing somebody dressed shabbily on Christmas, was Adolph Ochs [rhymes with "fox"]. This newspaper published the ad "Heed Their Rising Voices", which led to a lawsuit by Montgomery Public Safety Commissioner L. B. Sullivan. Neil Sheehan published the *Pentagon Papers* in this newspaper. Will Shortz edits the crosswords for this paper. It is known as "the Grey Lady" and its motto is "All the news that's fit to print." Name this newspaper headquartered in New York.

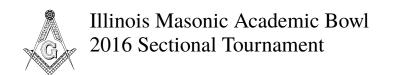
The New York Times
[prompt on Times before
"New York"; accept it
thereafter]

Question #16: Mathematics – Math Concepts

10 points

Euler's [OY-ler's] theorem in geometry uses two different values of this quantity to find the distance between two triangle centers. One of these quantities is calculated by dividing half of a triangle side length by the sine of the opposite angle in the law of sines. In a different context, this value equals the reciprocal of curvature. In a regular polygon, this value is the distance from the center to any vertex, while for a circle, it equals the square root of the quantity area divided by pi, or the circumference divided by two pi. Name this value equal to half the diameter of a circle.

radius [or radii; accept
inradius or circumradius]



Round 5 3rd Section Toss-up Questions

Question #17: Social Studies – U.S. History

10 points

This state was the site of the robbery at the center of the	<u>Florida</u>
case Gideon vs. Wainwright. Most of its territory was	
obtained by the US in the Adams-Onís [oh-NEES]	
treaty. Juan Ponce de León [WAHN POHN-say day	
lay-OHN] explored most of this state on behalf of	
Spain. Andrew Jackson invaded what is now this state	
in 1818, provoking the First Seminole War. This state	
contains the oldest continuously occupied European	
settlement in the U.S., St. Augustine, which is south of	
Jacksonville. Name this southeasternmost state in the	
U.S.	

Question #18: Science – Chemistry

An allotrope [AAL-oh-"trope"] of this element is the	<u>carbon</u>
largest compound that has been used in the double-slit	
experiment. Another allotrope of this compound was	
believed to be extremely difficult to isolate until Andre	
Geim [gaym] and Konstantin Novoselov	
[KOHN-stahn-teen noh-voh-SEL-awf] isolated it using	
Scotch tape. This element can exist in a form where 60	
atoms of it form a soccer-ball shape, or as a stack of	
hexagonal sheets. A valuable allotrope of this element	
defines 10 on the Mohs hardness scale. Name this	
element that makes up buckyballs, graphene, and	
diamonds.	



Round 5 3rd Section Toss-up Questions

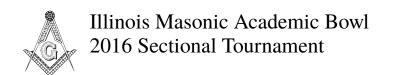
Question #19: Literature – Grammar/Usage

10 points

Carl Meissner's <i>Phrasebook</i> is a common text for	<u>Latin</u>
people learning this language. Immanuel Kant used	
phrases in this language to differentiate whether or not	
knowledge is based on experience. This language is	
inscribed on the <i>Lapis Niger [LA-pis NEE-gehr]</i> . St.	
Jerome's Biblical commentaries were written in the	
vernacular form of this language, also called Vulgar. It	
is the official language of the Holy See, and the ancestor	
of the Romance languages. Name this "dead" language	
used by Virgil and other residents of ancient Rome.	

Question #20: Social Studies – Religion

Protected by Muchalinda [MOO-kah-LIN-dah] during	the Buddha [accept
a tempest, this person turned a flaming discus into a	Siddhartha or Gautama
carpet of flowers. The birth of this man was foretold	before "Siddhartha"]
when Queen Maya had a vision of a white elephant	
entering her womb. After Channa exposed this person	
to an old man, a sick man, a dead body, and an ascetic	
[uh-SET-ik], this person gave up his privileged	
upbringing. He attained enlightenment under a Bo tree,	
and espoused the Four Noble Truths and the Eightfold	
Path. Name this founder of an eastern religion, who	
was born Siddhartha Gautama.	



Question #21: Mathematics – Algebra

10 points per part

	en it is applied to complex numbers, this function	
is c	alled the modulus [MAHD-joo-lus].	
1	Name this function which gives the distance from	absolute value
	its input to zero on a number line. Its output is	
	never negative.	
2	Find both solutions to the equation ten equals the absolute value of the quantity three minus x .	<u>-7</u> and <u>13</u> [either order; "or" may be substituted for "and"; do not accept "7" in place of <u>-7</u>]
3	Find the <i>y</i> -intercept on the graph of <i>y</i> equals six	y = 9 or (0,9)
	plus the absolute value of the quantity x minus 3.	

Question #22: Mathematics – Algebra

For	a system of two linear equations, this adjective is	
used	I if the number of solutions is finite.	
1	Give this term used to describe a system when each equation gives information that cannot be taken from the rest of the system.	<pre>independent system [or independence; do not accept "dependent"]</pre>
2	Find the value of x in the system with equations 2 x minus 3 y equals 6, and, x plus 3 y equals 9.	$x = \underline{5} \text{ (and } y = \frac{4}{3} \text{) [accept}$ $(x, y) = \underline{(5, \frac{4}{3})}$
3	Find the value of k if the system 2 x plus 8 y equals 12, and, 3 x plus k y = 18, is <i>dependent</i> .	$k = \underline{12}$



Question #23: Literature – Mythology

10 points per part

This	s god bested Hymir ["HIGH"-mir] in a contest by	
thro	wing a glass goblet at the giant's head.	
1	Name this Norse god of thunder, the owner of	<u>Thor</u>
	Mjollnir [mee-YOHL-neer].	
2	Hymir cut the line Thor used to catch this beast.	Jormungandr or the
		Midgard Serpent
3	According to the <i>Hymiskvidha</i>	Tyr [teer]
	[HEE-miss-kuh-VEE-duh], Hymir was the father of	
	this Norse god of war.	

Question #24: Literature – Mythology

This	god owns an ebony throne and a hat that makes	
the v	wearer invisible.	
1	Name this brother of Zeus and Poseidon to whom	Hades [HAY-dees] [accept
	people sacrificed black sheep. His realm is	Pluto]
	separated from Earth by the River Styx.	
2	When Hades wanted a wife, he kidnapped this	Persephone
	daughter of Demeter [duh-MEET-ur]. As a result	[pur-SEF-uh-nee] [accept
	of eating pomegranates offered to her, Zeus	Proserpine or Kore]
	declared that she must spend part of the year with	
	Hades.	
3	After aiding in the kidnapping of Helen of Troy,	<u>Pirithous</u>
	this friend of Theseus sought to nab Persephone.	["pie"-RITH-oh-us]
	Hades tricked this king and Theseus into sitting on	
	a bench from which they could not rise of their own	
	volition.	



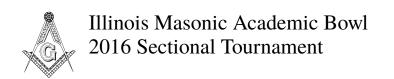
Question #25: Science – Physics

10 points per part

This	scientist names a "golden rule" used to calculate	
tran	sition rates for quantum systems.	
1	Name this Italian physicist who created the world's	Enrico Fermi
	first nuclear reactor, Chicago Pile-1.	
2	Wolfgang Pauli and Enrico Fermi predicted the	neutrinos [do not accept
	existence of these leptons to account for the	"neutron(s)"]
	apparent violation of conservation laws during beta	
	decay. These very light, neutral particles come in	
	electron, muon, and tau flavors, which they can	
	oscillate between.	
3	Fermi and this scientist name a set of statistics that	Paul (Adrien Maurice) Dirac
	model fermions [FUR-mee-ahnz]. He proposed the	
	existence of antimatter, and his name is given to the	
	unit impulse delta function.	

Question #26: Science – Physics

The	name for these particles was taken from a line in	
Jam	es Joyce's Finnegans Wake.	
1	Name these subatomic particles that make up	quark s
	protons and neutrons. Like leptons, they come in	
	six flavors.	
2	These two quark flavors have the least mass. The	up and down quarks [either
	other four flavors are top, bottom, charm, and	order]
	strange.	
3	Both George Zweig and this physicist proposed the	Murray Gell-Mann
	current model of quarks. This physicist introduced	
	the Eightfold Way to classify baryons.	



Question #27: Social Studies - U.S. Government

10 points per part

Pub	lic pressure for what would become this	
ame	ndment was greatly increased by David Graham	
Phil	lips' series "The Treason of the Senate".	
1	Name this constitutional amendment that allowed	17th amendment
	for the direct election of U.S. senators.	
2	Prior to the 17th amendment, senators were chosen	Article 1 [1] [or first article]
	by state legislators, as specified in section 3 of this	
	article of the U.S. Constitution.	
3	The proposal that would become the 17th	Kansas
	amendment was introduced in Congress by Joseph	
	Bristow, a senator from this state. Bob Dole	
	represented this state before resigning to run for	
	president in 1996.	

Question #28: Social Studies - U.S. Government

	tt Walker is the only U.S. state governor to remain ffice following this process.	
1	Name this procedure by which voters can remove an elected official before the end of his or her term.	recall election [accept recall referendum; accept recalling]
2	In 2003, Gray Davis was successfully recalled as the governor of this state due to a dispute over the state budget.	<u>California</u>
3	In the special election that followed Davis' removal, this native Austrian was elected Governor of California. Like earlier California Governor Ronald Reagan, this governor had been in several Hollywood movies.	Arnold (Alois) Schwarzenegger



Round 5 5th Section Toss-up Questions

Question #29: Mathematics – Math Concepts

10 points

When direction is taken into account, the product of three ratios is set equal to this number in Menelaus' [meh-nuh-LAY-us's] theorem. In cis [sis] form, this number can be expressed as "one cis pi". One version of Euler's [OY-lur'z] identity is that the natural log of this number equals pi times *i*, or equivalently, *e* to the *i* pi equals this number. Raising a number to this power is equivalent to taking a reciprocal [reh-SIP-ruh-kul]. Name this number that can be multiplied by any number to find its additive inverse.

negative one or minus one
[do not prompt on "one"]

Question #30: Literature – U.S. Literature

10 points

This poet mentioned a "rhyming tarantula" at the end	Oliver We
of "A Familiar Letter". He wrote of an object that	
should be "given to the god of storms, the lightning and	
the gale". In another poem by this writer, the narrator	
instructs his soul to "leave thy low-vaulted past" until it	
leaves its "outgrown shell by life's unresting sea". That	
same soul was told to "build thee more stately	
mansions." He wrote another poem to prevent the	
scuttling of the USS Constitution. Name this author of	
"The Chambered Nautilus" and "Old Ironsides".	

Oliver Wendell Holmes, Sr.



Round 5 5th Section Toss-up Questions

Question #31: Social Studies – World History

10 points

Forces from the Esperanza Base on this landmass	<u>Antarctica</u>
caused a diplomatic incident by firing on suppliers	
from the John Biscoe. This landmass was first sighted	
by Fabian von Bellingshausen. Over 50 countries have	
signed a treaty setting aside this landmass for scientific	
study and forbidding military action on it. James Clark	
Ross was the first person to cross a sea, now named for	
him, that borders it. Roald Amundsen was the first to	
reach its southernmost point. Name this continent that	
contains the South Pole.	

Question #32: Science – Biology

These organisms are the namesake of a compound that	sharks [or selachimorphia;
forms lanosterol [lan-oh-"STAIR"-awl], which	prompt on cartilaginous fish
becomes cholesterol and other steroids. Like rays, these	before mentioned]
animals contain electroreceptors	
[eh-LEK-troh-rih-SEP-turz] in their heads, called the	
ampullae of Lorenzini [AM-pyoo-lay "of"	
lor-en-ZEE-nee]. Because they do not have swim	
bladders, these animals must constantly swim to	
prevent themselves from sinking. These cartilaginous	
[kar-til-AJ-ih-nus] fish contain many rows of teeth.	
Name this group of predatory fish that includes the	
hammerhead and the great white.	



Round 5 Extra Section Toss-up Questions

Extra Question #1: Mathematics – Math Concepts

10 points

This is the simplest shape beyond a triangle constructed using a Carlyle circle, which is possible because its number of sides is a Fermat [fair-mah] prime. This shape has the fewest sides of any regular polygon that does *not* tessellate the plane. Each face of a dodecahedron has this shape. In this shape, the ratio of a diagonal length to a side length equals the golden ratio, and this shape has the same number of diagonals as sides. Each of its internal angles is 108 degrees, and each of its central angles is 72 degrees. Name this polygon with five sides.

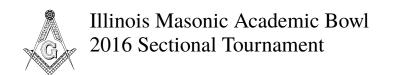
regular **pentagon** [prompt on **5**-gon]

Extra Question #2: Fine Arts – Classical Music & Opera

10 points

In one opera by this composer, the aria "Caro nome [KAR-oh NOH-may]" is sung after a character pretends to be a student named Gualtier Malde [GWAHL-tee-air MAHL-day]. In another opera by this composer, the aria "Di Provenza il mar" is sung by Giorgio Germont [JOR-joh jair-MOHNT], the father of Alfredo. Gualtier Malde is actually the Duke of Mantua, who is loved by Gilda in an opera by this composer and who sings "La donna è mobile [lah DOH-nah ay MOH-bee-lay]". The title character of that opera is the duke's hunchbacked court jester, Rigoletto. Name this composer of *La traviata*, who wrote about the love of Radamès [rah-dah-MAYS] for an Ethiopian slave in *Aida* ["eye"-EE-dah].

Giuseppe (Fortunino Francesco) <u>Verdi</u> [joo-SEH-pee VAIR-dee]



Round 5 Extra Section Toss-up Questions

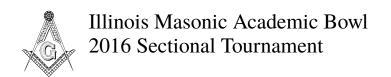
Extra Question #3: Literature - British Literature

10 points

Cair Paravel is at the mouth of this region's Great River.	<u>Narnia</u>
Dwarves are referred to as "Sons of Earth" in this	
location, where Strawberry became the talking horse	
Fledge. A 1014 Calormen invasion of this region was	
defeated by the two Kings and Queens, who came to	
power after defeating Jadis the White Witch. Mr.	
Beaver explains that the true king of this region is a	
talking lion named Aslan. Name this fictional region	
accessed by the Pevensie children from Earth through a	
wardrobe, in novels by C.S. Lewis.	

Extra Question #4: Science – Chemistry

The polydispersity ["poly"-"disperse"-ih-tee] index	polymer s
describes the weight distribution of these molecules.	
University of Illinois alumnus Wallace Carothers	
developed new types of these molecules while working	
for DuPont. The stereochemistry of these molecules is	
called their tacticity [tak-TISS-ih-tee], which can be	
controlled using Ziegler-Natta catalysts. These	
molecules can be formed by "step-growth" or	
"chain-growth" reactions. Examples of these	
compounds include PVC, Teflon, and nylon. Name	
these large molecules, which are composed of smaller	
units called monomers.	



Round 5 Extra Section Toss-up Questions

Extra Question #5: Social Studies – World History

The aftermath of this agreement saw a dispute over	Treaty of Versailles
control of Memelland, which became part of Lithuania.	
Under this agreement, Cameroon was placed under	
French control, while the British gained Togo. Though	
its terms were re-negotiated in the Dawes and Young	
plans, the initial amount of reparations was set at 132	
billion marks. George Clemenceau [zhorzh	
kleh-men-soh], David Lloyd George, and Woodrow	
Wilson were among the negotiators of this agreement.	
Name this treaty that formally ended World War I.	



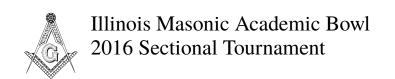
Extra Question #6: Science - Chemistry

10 points per part

One	element in this group is the only one that forms a	
sim	ple cubic lattice.	
1	Name this group found just to the left of the	chalcogens
	halogens [HAL-oh-jinz] on the periodic table.	[CHAAL-koh-jinz] or group 16 [accept oxygen group; or oxygen family]
2	This is the second-lightest member of the chalcogens. It naturally exists as an eight-membered ring, and it is known for being yellow and found in smelly compounds.	sulfur [accept S]
3	Sulfur is above this element in the periodic table. This element is substituted for sulfur in some rare amino acids, and it is bound to cadmium in a common type of quantum dot.	selenium [accept Se]

Extra Question #7: Science – Chemistry

Rea	ctions are slowed when an element changes to a	
heavier version of itself, which has this relation to the		
original.		
1	Give this term for atoms of an element with a different numbers of neutrons.	isotopes [or isotopy]
2	This isotope of hydrogen is commonly substituted in NMR solvents due to its lack of a signal. It is a component of heavy water.	deuterium [doo-TEER-ee-um] [prompt on Hydrogen-2 or H-2]
3	This scientist and Stanislaw Ulam used deuterium and tritium in their design of the hydrogen bomb.	Edward <u>Teller</u>



Extra Question #8: Literature – World Literature

10 points per part

One	novel set in this country centers on the Smales	
fam	ily, who rely on their former servant after a	
revo	lution.	
1	Name this country that banned that novel, Nadine	(Republic of) South Africa
	Gordimer's July's People. It is the home country of	[prompt on "RSA"]
	Gordimer, J. M. Coetzee [KUUT-see], and Alan	
	Paton [PAY-tun].	
2	In this Gordimer novel, the body of a dead black	The Conservationist
	man is found on Mehring's farm.	
3	The Conservationist, Gordimer's novel about a	Man Booker Prize
	white businessman who buys a farm, shared this	
	literary prize in 1974. Originally only eligible to	
	novels published in the United Kingdom, its	
	eligibility was expanded in 2013 to include any	
	novel written in English.	

Extra Question #9: Literature – World Literature

Foll	owing World War II, this person's Argentine	
nutr	ia [NOO-tree-uh] farm failed, as did his Frankfurt	
cem	ent factory.	
1	Name this German industrialist who saved Polish	Oskar <u>Schindler</u>
	Jews from the Holocaust, the subject of a novel by	
	Thomas Kenneally [kuh-NAY-lee] that inspired a	
	Steven Spielberg movie.	
2	Schindler's scheme to save Polish Jews involved his	Krakow ["CRACK-ow" or
	employment of them in a factory in this city, the	KRAH-koof]
	second largest in Poland.	
3	Thomas Kenneally is from this country. His novel	(Commonwealth of)
	The Chant of Jimmie Blacksmith was inspired by a	<u>Australia</u>
	pair of Aborigine [ab-uh-RIJ-uh-nee] outlaws.	