



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
1st Section
Toss-up Questions

Question #1: Science

10 points

These organs are the primary source of the **angiotensin** [an-jee-oh-TEN-sin]-converting enzyme. The collapse of these organs is called **atelectasis** [at-uh-LEK-tuh-siss] and can be caused by a lack of surfactants. These organs have oblique fissures on both sides but a horizontal fissure only on the right side, so there are three lobes on the right one of these organs and two on the left. These organs are in **pleural** ["plural"] sacs. These organs expand when the diaphragm contracts. The artery going to this organ carries **deoxygenated** [dee-"oxygen-ate-id"] blood. This organ has many tiny structures called **alveoli** [al-VEE-uh-"lie"] that take in oxygen. Name these organs of the respiratory system.

lungs

Question #2: Literature

10 points

The end of this short story refers to a "common wish of all hen-pecked husbands" and states that the title character tells this story to "every stranger that arrived at Mr. Doolittle's hotel". The end of this story also states that whenever there is a thunderstorm in the Catskills, people imagine it is Henry Hudson playing nine-pins. Earlier in this story, the title character is surprised to see a picture of George Washington where there used to be a picture of King George III. Name this story written by Washington Irving about a man who sleeps for 20 years.

"Rip Van Winkle"



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
1st Section
Toss-up Questions

Question #3: Social Studies

10 points

Shortly before dying in 1861, this politician stated “Every man must be for the United States or against it. There can be no neutrals in this war; only patriots and traitors.” Earlier, this person stated “the people of a Territory can, by lawful means, exclude slavery from their limits prior to the formation of a State constitution”, which became known as the Freeport Doctrine. This senator overturned part of the Missouri Compromise by writing and sponsoring the Kansas–Nebraska Act. This person finished fourth in electoral votes as the Northern Democrat in the election of 1860. Name this politician who, in 1858, took part in a series of debates against Abraham Lincoln.

Stephen A(rnold) Douglas

Question #4: Fine Arts

10 points

Near the beginning of this opera, two of the characters sing “E soffitto e pareti” [ay soh-FEET-toh ay pah-RAY-tee] while inspecting a new house. In Act 2 of this opera, the female lead sings “Un bel dì, vedremo [vay-DRAY-moh]” while imagining seeing smoke on the horizon. In this opera, a man enters a marriage under the assumption he will be able to get a divorce, and the man is surprised to learn much later that the marriage produced a son. That man is U.S. Navy Lieutenant Pinkerton. The wife, who uses a sword to kill herself near the end of this opera, is Cio-Cio-san [cho cho sahn]. Name this Giacomo Puccini [JAH-koh-moh poot-CHEE-nee] opera that is set in Japan.

Madame Butterfly [or
Madama Butterfly]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
1st Section
Toss-up Questions

Question #5: Science

10 points

This planet's **Elysium Planitia** [uh-LEE-zee-um pluh-NEE-shuh] is where the InSight lander touched down in 2018. The first craft to orbit this planet was *Mariner 9* in 1971, which arrived just before Soviet orbiters. The geography of this planet includes Tharsis Bulge, which is near both its equator and a large group of canyons called **Valles Marineris** [VALL-uss mair-uh-NEAR-is]. This planet is also the location of our Solar System's largest volcano, Olympus Mons. This planet's surface is covered with iron oxide, which explains its color. This planet's moons are Phobos and **Deimos** [DEE-mohss]. Name this red planet, the fourth planet from the Sun.

Mars

Question #6: Literature

10 points

This person's name is used in the title of the posthumously collected papers written by Milman Parry, and this person is the subject of much of the second half of Albert Lord's *The Singer of Tales*. The hymns named for this person, beginning with "To **Dionysus** [die-oh-NY-siss]", praise a variety of gods. A work attributed to this writer begins with **Chryses** ["CRY-sees"] trying to get his daughter **Chryseis** ["cry-SEE-us"] back, and that work ends with the burial of Hector after King **Priam** ["PRY"-um] has retrieved his body. Another work attributed to this writer is about a hero's return to his wife, Penelope. Name this legendary ancient Greek writer credited with writing the *Iliad* and the *Odyssey*.

Homer [or Homeros]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
2nd Section
Teamwork Questions

Question #7: Social Studies

10 points per part

When Jesus said “I have come into the world to bear witness to the truth”, this person replied by asking “What is truth?”.		
1	Name this governor of Judea [joo-DEE-uh] who presided over the trial of Jesus and ordered the crucifixion.	(Marcus) Pontius Pilate [accept either underlined name; accept Pilatus]
2	This two-word Latin phrase attributed to Pontius Pilate means “behold the man”.	ecce homo [EK-ay HOH-moh]
3	After the crucifixion, Pontius Pilate allowed this man to take the body of Jesus.	Joseph of Arimathea [air-ih-muh-THEE-uh] [prompt on Joseph]

Question #8: Social Studies

10 points per part

This person is traditionally credited for writing the Book of Proverbs.		
1	Name this person who was David’s son and successor as King of Israel. The Bible claims that he built the First Temple in Jerusalem.	Solomon [or Shlomo ben David; prompt on Jedidiah or Yedidiah]
2	Solomon was also traditionally credited with writing this book that states “To every thing there is a season, and a time to every purpose under the heaven.”	Ecclesiastes [eh-kee-zee-ASS-teez] [or Kohelet]
3	This mother of Solomon married David after her marriage to Uriah the Hittite, whose death David indirectly caused. She worked with Nathan to get David to recognize Solomon as his successor.	Bathsheba [or Bat-sheba]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
2nd Section
Teamwork Questions

Question #9: Science

10 points per part

Metals are often used for this purpose.		
1	Name these materials that allow the free flow of electrical current, in contrast to insulators.	(electrical) <u>conductors</u> [or <u>conducting</u> materials]
2	This material property, which is low in electrical conductors, equals resistance times cross-sectional area divided by length.	<u>resistivity</u> [do not accept variations]
3	This process is the weakening of an electric field due to the presence of conductors. The Debye [duh-BY] form of this effect occurs in plasmas.	electric-field <u>screening</u> or <u>shielding</u> or <u>sheathing</u>

Question #10: Science

10 points per part

The Nobel Prize in Physics in 2014 was given for the invention of the blue light-emitting type of this device.		
1	Name these devices that conduct electric current primarily in one direction.	<u>diodes</u>
2	The diode law is sometimes named for William Shockley, who along with John Bardeen and Walter Brattain [BRAT-un] invented this three-terminal semiconductor device.	(point-contact) <u>transistors</u>
3	Many early diodes were these devices that take advantage of the Edison effect. Early computers like ENIAC [EE-nee-ak] used thousands of these devices.	<u>vacuum tubes</u> [prompt on electron <u>tubes</u> or <u>valves</u>]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
2nd Section
Teamwork Questions

Question #11: Literature

10 points per part

This poem ends “And then my heart with pleasure fills, and dances with the daffodils.”		
1	Name this poem that is sometimes just called “Daffodils”.	“ <u>I Wandered Lonely as a Cloud</u> ”
2	This poet wrote “I Wandered Lonely as a Cloud” and several poems about a girl named Lucy.	William <u>Wordsworth</u>
3	William Wordsworth also wrote this poem which, after starting with its title, states “Late and soon, getting and spending, we lay waste our powers.”	“The <u>World Is Too Much With Us</u> ”

Question #12: Literature

10 points per part

According to this poem, “The falcon cannot hear the falconer.”		
1	Name this poem that ends “And what rough beast, its hour come round at last, slouches towards Bethlehem to be born?”.	“The <u>Second Coming</u> ”
2	This Irish poet wrote “The Second Coming” and “Lake Isle of Innisfree”.	W(illiam) B(utler) <u>Yeats</u> [rhymes with “ <u>gates</u> ”]
3	“The Second Coming” contains this two-word Latin phrase that can be translated as “world soul”.	“ <u>Spiritus Mundi</u> ”



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
2nd Section
Teamwork Questions

Question #13: Mathematics

10 points per part

Equivalence relations have a reflexive property, a symmetric property, and this property.		
1	Name this property stating that if x is related to y and y is related to z , then x is related to z .	<u>transitive</u> property or <u>transitivity</u>
2	This relationship between sets exists when all the elements of one set are contained in another set. This relationship is transitive but not symmetric.	<u>subset</u> relationship or <u>subsets</u> or “is a <u>subset</u> of” [accept answers that additionally include “proper”]
3	Find the number of subsets for a set that has four elements.	<u>16</u> subsets

Question #14: Mathematics

10 points per part

Matrix columns sometimes represent these mathematical things.		
1	Name these things that have magnitude and direction.	(coordinate) <u>vectors</u>
2	This operation finds a vector perpendicular to two vectors. The result has a magnitude equal to the product of the original vectors' magnitudes times the sine of the angle between the vectors.	<u>cross product</u> [accept <u>crossing</u> ; prompt on vector <u>product</u>]
3	Find the x -component of the cross product of the vector “1, 2, 3” and the vector “4, 0, 3”.	<u>6</u>



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
3rd Section
Toss-up Questions

Question #15: Social Studies

10 points

The premier of the northern part of this country was **Ahmadu Bello** [uh-MAH-doo BELL-oh] from 1954 until his assassination in 1966. This country's first prime minister, **Abubakar Tafawa Balewa** [uh-BOO-bah-kar tuh-FAH-wuh bah-LAY-wuh], was also assassinated in 1966. Soon after that, **Odumegwu Ojukwu** [aw-doo-MAY-goo oh-JOOK-woo] declared that the southern part of this country was the Republic of **Biafra** [bee-AH-fruh]. More recently in this country, 276 girls were kidnapped in 2014 in **Chibok** [chee-BOHK] by the terrorist group Boko Haram. This country is the most populous country in Africa. Name this country that in 1991 moved its capital from **Lagos** [LAH-gohss] to **Abuja** [ah-BOO-jah].

(Federal Republic of)
Nigeria

Question #16: Science

10 points

The use of these devices is sometimes described by the adjective "**isopycnic**" ["ice-oh-picnic"], which originally referred to surfaces of constant density inside a fluid. One of these devices is used to find the packed cell volume of blood. The **Zippe** [ZIP-uh] type of these devices is sometimes regulated by international treaties because it is used to enrich uranium. The basket type of these devices is used to process cane sugar and is good at separating liquids from solids. These devices are named after a fictitious force. Name these devices that separate mixtures according to density by spinning quickly.

centrifuges
[SENT-rih-fyooj-ez]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
3rd Section
Toss-up Questions

Question #17: Literature

10 points

This god got nine servants to kill each other by throwing a whetstone in the air. He then changed himself into a snake to get to **Gunnlod** [“gun-LOAD”], whom he was able to seduce. This god then drank mead that was made from blood and changed himself into an eagle to escape. This god uses magic to preserve **Mimir’s** [MEE-mir’z] head, which he consults because it can divine the future. This god made the world with the body of **Ymir** [EE-mir] along with his brothers, Vili and Vé. This god is often helped by the wolves **Geri** [“GEAR”-ee] and **Freki** [FREK-ee], the ravens **Huginn** [HYOO-gin] and **Muninn** [MYOO-nin], and the eight-legged horse **Sleipnir** [SLAYP-neer]. Name this husband of Frigg who oversees Valhalla.

Odin [or **Wotan**]

Question #18: Social Studies

10 points

In this U.S. state, almost the entire town of Elkinsville was taken by eminent domain during the construction of Lake Monroe Reservoir. This state used to be the location of the Miami tribe city of **Kekionga** [KEE-kee-ahn-guh]. That location is now a town named for a fort that in turn was named for a Revolutionary War general nicknamed “Mad Anthony”. The capital and most populous city of this state has a Soldiers’ and Sailors’ Monument at the intersection of Meridian and Market, and it is also the home of Butler University. This state is also the site of Ball State, Purdue, and Notre Dame universities. Name this state between Ohio and Illinois.

Indiana
(The town is Fort Wayne, and the capital is Indianapolis.)



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
3rd Section
Toss-up Questions

Question #19: Mathematics

10 points

If this formula is used to solve a **monic** [MAH-nik] problem, then the denominator equals 2. The golden ratio can be found by plugging the numbers 1, -1 , and -1 into this formula. This formula can be verified by using the sum and product of its solutions, and it is often derived by completing the square. This formula has a discriminant that is negative when this formula gives complex solutions. Name this formula used to find either the x -intercepts of a parabola or the solutions to a second-degree polynomial equation.

quadratic formula

Question #20: Miscellaneous

10 points

The ground on which this sport is played is marked by tramlines. Jimmy Van **Alen** [AL-un] both started this sport's hall of fame and designed its tiebreaker system. One of the biggest rivalries in the history of this sport was between Chris Evert and Martina Navratilova. Some matches in this sport have been hyped as the "Battle of the Sexes", including two matches in 1973 featuring Bobby Riggs, who claimed he could beat any woman; he defeated Margaret Court but lost to Billie Jean King. More recent stars in this sport have included Roger **Federer** [FED-ur-ur] and Serena Williams. Name this sport in which a ball is hit over a net.

(lawn) tennis



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
4th Section
Teamwork Questions

Question #21: Science

10 points per part

This sense is sometimes called olfaction [ohl-FAK-shun].		
1	Name this sense that detects odors.	sense of <u>smell</u> (ing)
2	The olfactory nerves are usually designated number one out of the 12 pairs of these nerves that connect directly to the brain rather than via the spinal cord.	<u>cranial</u> nerves
3	This term is used both to describe a round structure in the nasal cavity used to detect smells and a round structure made of capillaries in a kidney nephron.	<u>glomerulus</u> or <u>glomeruli</u>

Question #22: Science

10 points per part

Parasites are technically this type of creature, but this word more commonly refers to big carnivores like lions, tigers, and bears.		
1	Give this term for an animal that kills and consumes prey.	(apex) <u>predators</u>
2	Some species avoid predators by imitating another species. What term refers to that practice?	<u>mimicry</u> [accept <u>mimicking</u>]
3	These differential equations are called predator-prey equations because they model population changes in predators and prey.	<u>Lotka-Volterra</u> equations



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
4th Section
Teamwork Questions

Question #23: Literature

10 points per part

The protagonist of this novel is exiled after his gun goes off at a funeral, causing a death.		
1	Name this novel about Okonkwo [oh-KAHNK-woh] that is set primarily in the village of Umuofia [oom-WOH-fee-uh].	<u><i>Things Fall Apart</i></u>
2	<i>Things Fall Apart</i> was written by this Nigerian author who wrote about Okonkwo's grandson in <i>No Longer at Ease</i> .	(Albert) Chinua Achebe [CHIN-wah uh-CHEB-ay]
3	Many of the characters in <i>Things Fall Apart</i> , including Okonkwo, grow this food. Before each harvest, the village holds a feast to honor the goddess Ani [AH-nee] for this food.	(new) yams [do not accept "sweet potato(es)"]

Question #24: Literature

10 points per part

In this play, Joseph Garcin [gar-san] says "Hell is other people."		
1	Name this French play in which Garcin is in a room with Inez Serrano and Estelle Rigault [ree-gawl].	<u><i>No Exit</i></u> [or <u><i>Huis Clos</i></u> ; accept <u><i>In Camera</i></u> or <u><i>No Way Out</i></u> or <u><i>Dead End</i></u>]
2	<i>No Exit</i> was written by this existentialist who also wrote the novel <i>Nausea</i> .	Jean-Paul Sartre [zhahn "Paul" sart-ruh]
3	The room in <i>No Exit</i> has an ornament or statue that is made of this material and is too heavy to lift.	<u>bronze</u> [prompt on <u>metal</u>]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
4th Section
Teamwork Questions

Question #25: Social Studies

10 points per part

These two wars were fought from 1839 to 1842 and from 1856 to 1860.		
1	Name these wars between China and the United Kingdom that were fought over China's attempt to reduce trade in the namesake drug.	<u>Opium</u> Wars
2	Name the queen of the United Kingdom during those wars.	Queen (Alexandrina) <u>Victoria</u> (Hanover)
3	The First Opium War ended with this treaty. This first unequal treaty gave the U. K. control of Hong Kong.	Treaty of <u>Nanking</u> or Treaty of <u>Nanjing</u>

Question #26: Social Studies

10 points per part

This international organization lasted from 1920 to 1946.		
1	Name this organization that Woodrow Wilson called for in his Fourteen Points and which at one point had 58 members, though the United States never joined.	<u>League of Nations</u> [accept <u>LON</u>]
2	The Soviet Union was expelled from the League of Nations after it invaded this country in the Winter War in 1939. This country declared independence from Russia in 1917.	(Republic of) <u>Finland</u> [or <u>Suomi</u> or <u>Suomen</u> tasavalta or Republiken <u>Finland</u>]
3	The first action by the League of Nations allowed Finland to maintain control over these islands even though its leaders wanted to be part of Sweden.	<u>Åland</u> [<u>AW-lund</u>] Islands



Question #27: Fine Arts

10 points per part

This cathedral was built during the 12th and 13th centuries, and it suffered extensive fire damage in 2019.		
1	Name this cathedral on the <i>Île de la Cité</i> [eel deh lah see-tay] in Paris.	<u>Notre-Dame</u> de Paris
2	Notre-Dame's flying buttresses are examples of the use of this style of architecture that remained popular through the 16th century.	French <u>Gothic</u>
3	Notre-Dame was one of the first cathedrals to use this type of vault, which became common in Gothic architecture. It is named for its thin network of supports.	<u>rib</u> (bed) vault

Question #28: Fine Arts

10 points per part

This painter's fresco <i>The Last Judgment</i> covers the altar wall of the <i>Sistine</i> [SISS-teen] Chapel.		
1	Name this artist who also painted the Sistine Chapel's ceiling.	<u>Michelangelo</u> (di Lodovico) <u>Buonarroti</u> (Simoni) [accept either underlined name]
2	This panel on the Sistine Chapel ceiling shows God almost touching a man's hand.	<i>The</i> <u>Creation of Adam</u> [or <u>Creazione di Adamo</u>]
3	The Vatican also contains this 18th- and 19th-century sculptor's <i>Monument to the Royal Stuarts</i> and his <i>Perseus Triumphant</i> .	Antonio <u>Canova</u>



Question #29: Mathematics

10 points

The **Karatsuba** [kar-at-soo-bah] algorithm is used to perform this operation on large numbers. When this operation is supposed to be applied in an **iterative** [IH-tuh-ruh-tiv] fashion, pi notation is used. This operation can only be applied to two matrices if the number of columns of the first matrix equals the number of rows of the second matrix. Applying this operation before taking a logarithm has the same impact as addition after taking a log. This operation can be distributed over addition and subtraction. Name this operation that takes factors into a product.

multiplication or
multiplying [accept
product before the end;
accept **times** but not
“timesing”]

Question #30: Literature

10 points

Much of this novel consists of diary and journal entries, though one chapter is two cuttings from “The Dailygraph” describing the wreck of the ship **Demeter** [dih-MEE-tur], in which the captain’s body is tied to the wheel. A note at the end of this novel states that two characters had a son who was born on the anniversary of Quincey Morris’s death. As Morris died, he noticed that the scar on **Mina’s** [MEE-nuh’z] forehead had gone away. Earlier in this novel, Lucy Westenra died despite Abraham Van Helsing’s attempts to protect her with garlic. Name this novel by Bram Stoker about a vampire.

Dracula



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
5th Section
Toss-up Questions

Question #31: Science

10 points

One of these devices uses a combination of laser cooling and fountain design to achieve accuracy. That device, which uses six lasers to cool molecules to a few millionths of a degree above absolute zero, is the N.I.S.T.-F1 in Boulder, Colorado. More traditional varieties of these objects use balance wheels and resonators such as quartz crystals. Though **rubidium** [roo-BID-ee-um] is cheaper, the most precise modern examples of these devices use **cesium** [SEE-zee-um]. These objects traditionally used pendulums. Name these devices, the analog types of which have a long hand that goes around every hour and a short hand that goes around every 12 hours.

clocks [accept atomic clocks or timers or chronographs or chronometers or timepieces or timekeepers]

Question #32: Social Studies

10 points

Narciso [nar-SEE-soh] López, who was born in Venezuela, recruited people from the United States for two failed attempts to take over what is now this country. Pierre **Soulé** [soo-lay] encouraged the production of a document, probably written by James Buchanan, that called for purchasing this country. That 1854 document is the Ostend Manifesto. The Spanish-American War was sparked when the U.S.S. *Maine* was blown up while it was in what is now this country. In 1961, President Kennedy was heavily criticized for a botched invasion of this country at the Bay of Pigs. Name this Caribbean country where the U.S. tried to overthrow Fidel Castro.

(Republic of) Cuba or
(República de) Cuba



Extra Question #1: Mathematics

10 points

<p>The product of 1 more than this positive number times 1 less than this number equals 1. Half of this positive number equals this number's reciprocal. If this number were written as a fully reduced fraction, then both its numerator and denominator would have to be even, a fact used to prove that this number is irrational. This number equals approximately 1.414. The secant of 45 degrees equals this number, and the sine of 45 degrees equals half of this number. Identify this number equal to the length of a hypotenuse in a right triangle in which each leg has a length of 1.</p>	<p>square root of 2 [accept radical 2 or 2 to the 1/2 power]</p>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------

Extra Question #2: Fine Arts

10 points

<p>This city is the current location of Jan van Eyck's [yon vahn "Ike's"] <i>Annunciation</i>, Paul Klee's ["clay's"] <i>Revolving House</i>, and Edgar Degas' [day-gah'z] <i>The Green Dancer</i>. Those works are on display at this city's Thyssen-Bornemisza [TEE-sen bor-nuh-MEE-sah] Museum, which is part of this city's "Golden Triangle of Art", another museum in which is named for a queen who lives in this city. That museum contains works by Juan Gris ["grease"], who was born in this city. The largest art museum in this city contains many works by Diego Velázquez, who painted <i>Las Meninas</i> [may-NEE-nahss] in this city. Name this city that contains the Reina Sofía [ray-EE-nah soh-FEE-ah] Museum and Prado Art Museum and which is the capital of Spain.</p>	<p>Madrid, Spain</p>
------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
Extra Section
Toss-up Questions

Extra Question #3: Social Studies

10 points

This leader's early policies, passed with the support of his advisor Sextus **Afranius** [af-RAH-nee-uss] Burrus, included banning capital punishment and allowing slaves to sue their masters. The poet **Lucan** [LOO-kun] joined a conspiracy against this ruler which was called the **Pisonian** [pih-SOH-nee-un] conspiracy. This leader's mother **Agrippina** [a-grih-PEE-nuh] the Younger was initially his regent, but he eventually had her assassinated. This last ruler of the Julio-Claudian dynasty succeeded Claudius. Name this Roman emperor from 54 to 68 who, during the Great Fire of 64, supposedly fiddled.

Nero (Claudius Caesar Augustus Germanicus) [do not prompt on other parts of the name]

Extra Question #4: Science

10 points

These organisms do not exactly fit into a **genus** [JEE-nus], but the best-known examples are in the genus **Agaricus** [uh-GAR-ih-kuss]. These organisms sometimes grow in patterns called fairy rings. These organisms are classified as **monomitic** [mah-noh-MIT-ik] because they only contain generative **hyphae** ["HI"-fee]. These organisms do not live in the water, but they have structures called gills that can also be called **lamella** [luh-MELL-uh]. These organisms are easy to recognize by their **pileus** ["PIE"-lee-uss], which is their cap. Name this group of fungi that includes some poisonous examples, such as the deadly dapperling, and some delicious examples, such as **shiitake** [shih-tah-keh] and portobello.

mushrooms [accept **toadstools**; prompt on **fungus** or **fungi**]



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
Extra Section
Toss-up Questions

Extra Question #5: Literature

10 points

A novella by this writer begins “It is a sin to write this” and is mostly set in a tunnel under the earth. In that work, this author wrote about the World Council of Scholars, which rejects a rediscovery of electricity. Another novel by this author is about the use of an alloy that is both lighter and stronger than steel and that is developed by Hank Rearden. In that novel, this author has some characters wonder “Who Is John Galt?”. Galt hacks a radio broadcast to give a speech that supports this writer’s philosophy, objectivism. Name this author of *Anthem* and *Atlas Shrugged*.

Ayn Rand [“eye”n **rand**]
[or Alisa (Zinovyevna)
Rosenbaum or Alice
Rosenbaum or Alice
O’Connor]



Extra Question #6: Science

10 points per part

The amount of this energy transferred equals temperature times the change in entropy.		
1	Name this form of energy that flows from a warmer object to a colder object.	<u>heat</u> [or <u>thermal</u> energy]
2	For a given substance, this property equals heat change divided by temperature change per mass.	<u>specific heat</u> capacity or <u>heat capacity</u>
3	This law states that the molar specific heats of many metals are nearly the same.	Law of <u>Dulong</u> and <u>Petit</u> [<u>pay-tee</u>] or <u>Dulong-Petit</u> law [both names required without prompting; either order is acceptable]

Extra Question #7: Science

10 points per part

This person got into arguments with Robert <u>Koch</u> [<u>“coke”</u>] about developing the anthrax vaccine.		
1	Identify this French scientist whose namesake process is the application of heat to milk to make the milk last longer.	Louis <u>Pasteur</u> [prompt on <u>pasteurization</u> or <u>pasteurizing</u>]
2	Both the Pasteur effect and the Pasteur point are based on levels of this element in the air determining whether a process is anaerobic or aerobic.	<u>oxygen</u> [accept <u>O</u>]
3	Louis Pasteur and his wife Marie studied the properties of this organic acid, whose chemical formula is <u>C₄H₆O₆</u> [<u>“C four H six O six”</u>]. Those studies led to one of the earliest discoveries of an <u>enantiomer</u> [<u>en-ANT-ee-oh-mur</u>].	<u>tartaric</u> acid



Illinois Masonic Academic Bowl
2022 Sectional Tournament

Round 1
Extra Section
Teamwork Questions

Extra Question #8: Literature

10 points per part

This thing “sits looking over harbor and city on silent haunches and then moves on”.		
1	Name this phenomenon that, in a poem named for it, “comes on little cat feet”.	fog
2	This poet wrote “Fog”, “Chicago”, and “The People, Yes”.	Carl (August) Sandburg
3	In this other Sandburg poem, the title object says, “I cover all” and “Let me work.” This poem begins “Pile the bodies high at Austerlitz and Waterloo.”	“ Grass ”

Extra Question #9: Literature

10 points per part

The title of this book is based on the name that Jonas is told to use for the previous Receiver of Memory.		
1	Name this novel, the first in a quartet that continues with <i>Gathering Blue</i> , <i>Messenger</i> , and <i>Son</i> .	<i>The</i> <u>Giver</u>
2	This author wrote <i>The Giver</i> as well as <i>Number the Stars</i> .	Lois (Ann Hammersberg) Lowry [accept either underlined name]
3	In <i>The Giver</i> , this term is used for the ultimate punishment. Many people believe this term refers to being kicked out of the community, but it actually refers to being given a lethal injection.	being Released