

NEW TRIER SCOBOL SOLO 2012

ROUND 1

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with Sam Donow, Tom Egan, Mark Grant, Jonah Greenthal, Tanay Kothari, and Mike Laudermith



1. There is some confusion over the numbering of this composer's symphonies because he originally labeled one piece as his second symphony and later stated, it was "a poem, suite, fairy tale, story, anything you like, but not a symphony". That piece is now considered a symphonic suite named *Antar*. This composer attempted to edit the works of Mikhail Glinka, and he heavily utilized the oboe in his *Variations in G minor on a theme by Glinka*. One of his pieces, which asks the violins and violas to play one section as guitars, is *Capriccio Espagnol*. Another, subtitled *Overture on Liturgical Themes*, is the *Russian Easter Festival Overture*. Name this composer of *Scheherazade* whose opera *The Tale of Tsar Saltan* includes the interlude "Flight of the Bumblebee".

ANSWER: Nikolai (Andreyevich) Rimsky-Korsakov

2. The third article of this document says that Indian lands should never be taken without consent and that schools should always be encouraged. Its sixth and final article forbids slavery except as a punishment, but adds that escaped slaves should be returned. Its fifth article was further specified by the Enabling Act of 1802, which called for a convention to meet in Chillicothe [CHIL-uh-KOH-thee]. One of the few major laws passed under the Articles of Confederation, it was re-passed by the First Congress and signed by President Washington. Under this law, once five thousand males lived in a region, the region was granted self-governance, and sixty thousand males led to statehood. Name this act that called for the creation of three to five states east of the Mississippi River and north of the Ohio River.

ANSWER: Northwest Ordinance [or Freedom Ordinance or Ordinance of 1787 or An Ordinance for the Government of the Territory of the United States, North-West of the River Ohio]

3. As a child, this character sat behind a curtain paging through Bewick's *History of British Birds* fearing nothing but interruption. Her cousin John then told her to stand away from windows and mirrors so he could throw the book at her. This character also lives with her cousins Eliza and Georgiana Reed. After spending time at a school run by Mr. Brocklehurst, this woman gets a job teaching Adele Varens at Thornfield Hall. Before she tries to marry, her wedding veil is torn by Bertha Mason. Name this character loved by Mr. Rochester, an orphan who is the title character of a Charlotte Brontë novel.

ANSWER: Jane Eyre [accept either]

4. This state is the location of the Mogollon [moh-goh-YOHN] mountains, an important location for the Mimbres culture one thousand years ago that also inhabited this state's Gila Cliff Dwellings. It also contains several kiva ceremonial rooms in Frijoles [free-HOH-layss] Canyon in Bandelier [ban-duh-LEER] National Monument, which has been damaged by the 2011 Las Conchas and 2000 Cerro Grande [SAIR-oh GRAHN-day] fires. On July 16, 1945, the Trinity nuclear test took place in this state near Alamogordo. This state is the origin of the Pecos River, and the Rio Grande enters it after leaving Colorado and before forming the southern border of Texas. Name this state with largest city Albuquerque and capital Santa Fe.

ANSWER: New Mexico

5. A legend about this leader states that he established his intelligence when he melted a lion made of wax. He gained much of his territory in a peace negotiated by Megasthenes [meh-GAAS-thuh-neeZ] with Seleucus [s'-LOO-kus] the First, in which he gave up five hundred elephants and possibly agreed to marry Seleucus' daughter. Near the end of his life, he gave his lands to his son Bindusara and became a religious ascetic, and he is believed to have fasted himself to death. Early in life he may have been taught by Kautilya [kaw-TIL-yuh], also known as Chanakya, who wrote *Arthashastra* and helped him overthrow the Nanda Empire. Name this grandfather of Ashoka the Great who took control of what is now India soon after the death of Alexander the Great.

ANSWER: Chandragupta Maurya [accept either]

6. Neil Postman criticized this concept's recent focus on economic utility and proposed alternative future narratives in his book on the end of this. Paulo Freire criticized the banking model of this, and Ted Sizer used his character of Horace to explain his ideas on this subject. The alternative title of Jean-Jacques Rousseau's *Émile* states that it is a book on this. A 1916 book addressed Rousseau's theories on this topic but stated that this process should be more communal and should be tied to the development and maintenance of democracy; that work was written by John Dewey, who paired it with *Democracy*, and other writers on this topic have been Rudolf Steiner and Maria Montessori. Name this subject which includes topics such as pedagogy and curriculum.

ANSWER: education [accept word forms; accept schooling before "1916" and prompt on it thereafter; prompt on related answers]

7. This longtime collaborator with Earl Hines performed alongside Max Roach, Charles Mingus, Bud Powell, and Charlie Parker as part of a jazz concert considered the "greatest ever". That concert was released as the album *Jazz at Massey Hall*. This artist's so called "Chinese music" got him in trouble with his first major bandleader, Cab Calloway. Frequent improvisation and solos characterized a musical style pioneered by this musician and used for works like "Salt Peanuts" and "A Night in Tunisia". Name this bebop jazz pioneer best known for playing with a bent trumpet.

ANSWER: (John Birks) "Dizzy" Gillespie

8. The area of a lattice is defined as the area of a fundamental one of these shapes. One law named for them states that the sum of the squares of its diagonals equals the sum of the squares of its sides. Like more specific quadrilaterals, the area of one of these shapes equals the magnitude of the cross product of two vectors forming adjacent sides, and the other law named for it is used to add vectors. The diagonals of these polygons bisect one another, and any two adjacent interior angles are supplementary. Name this quadrilateral that has two pairs of congruent, parallel sides.

ANSWER: parallelogram(s) [accept unit cell before "squares"]

9. One work by this poet describes Oxford as "that sweet city with her dreaming spires," and is named after a Vergil character who was a shepherd. Another poem, based on a story by Glanvil, tells of a person who joined a group that "had arts to rule as they desired the workings of men's brains." That work is addressed to a shepherd, and the person described had been an Oxford student. Another work claims that the world "seems to lie before us like a land of dreams" and that we are "swept with confused alarms of struggle and flight". It begins "The sea is calm to-night", and its final line is "where ignorant armies clash by night". Name this English poet who wrote "Thyrsis" [THUR-sis], "The Scholar-Gipsy", and "Dover Beach".

ANSWER: Matthew Arnold

10. The selective version of this process is used to produce semiconducting thin films. Anhydrous [aan-HY-drus] zinc chloride can be purified by this process in a stream of hydrogen chloride gas, followed by heating to it 400 degrees Celsius in a stream of dry nitrogen gas. This is used for electronic cooling and heat transfer with naphthalene, with which it can also be used to create a purified form of caffeine collected on a cold surface as it condenses. It is the opposite of deposition, and notably occurs to carbon dioxide in the form of “dry ice”. Name this process, the direct transformation of a solid to a gas.

ANSWER: sublimation [accept word forms]

11. This event began during a DESOTO operation, and it may have been further instigated by the capture of an amphibious landing team and shellings by fast patrol boats 72 and 48 hours earlier. It extended to a second attack 48 hours later that never happened, though the result of that phantom attack was Operation Pierce Arrow. Both of this event’s real and phantom attacks involved the USS *Maddox*, and despite the president lying to Congress about American involvement prior to this incident, a joint Congressional resolution was passed giving Lyndon Johnson a free hand to use the military as he saw fit. Identify this 1964 event often seen as the point of escalation of America’s involvement in Vietnam.

ANSWER: Gulf of Tonkin Incident [accept variant wordings containing both parts; prompt on Tonkin; accept USS Maddox Incident until “Maddox”]

12. One story by this author is set in a town in Brazil where the natives celebrate the miracle of a growing stone, and in another story Janine visits a fort without her husband Marcel. Those works are both in his collection *Exile and the Kingdom*. One of his novels gives the point of view of Parisian lawyer Jean-Baptiste Clamence. In another novel, Raymond Rambert decides not to leave a troubled city, helping Castel and Dr. Bernard Rieux [ree-yoo] treat sick people in Oran instead. In another novel by him, the protagonist has an affair with Marie Cardona soon after his mother dies. That protagonist, a friend of Raymond Sintès, shoots an Arab on a beach. Name this author of *The Fall* and *The Plague* who wrote about Meursault in *The Stranger*.

ANSWER: Albert Camus [kah-moo]

13. At the beginning of this process, there is a sharp separation between RAN guanosine [GWAN-oh-seen] triphosphate [try-FAHS-fayt] and RAN guanosine diphosphate. Towards the end of this phase, Polo-like kinase [KYNE-ase], sometimes with Aurora B, causes cohesin [co-HEE-sin] to separate from chromosomes as part of its namesake pathway. In this stage of mitosis the nucleolus disappears, and once condensin causes chromatin condensation, the chromatin becomes visible. This phase leads to prometaphase [pro-MEH-tuh-fayz], which in turn leads to metaphase, and it follows the second gap of interphase. Name this first stage of mitosis.

ANSWER: prophase [prompt on mitosis before “pathway”; do not accept “prophase I” or “prophase II”]

14. This region of the atmosphere contains nacreous [NAY-kree-us] clouds, which are typically near the poles during cold seasons. Some scientists believe they can control climate change by injecting sulfate aerosols into this layer. Convection does not occur because of temperature inversion in this layer, whose coldest part is at its bottom, near the tropopause. The upper part of this region, which absorbs most of the ultraviolet light from the sun, is the ozone layer. Name this region between the troposphere and the mesosphere where most airplane flight takes place.

ANSWER: stratosphere

15. Dionysus punished this man by making the Argive women eat their children, and before becoming king of Argos, this man made Dictys the king of Seriphus after killing king Polydectes. He threw a discus at the funeral games of Teutamides [too-TA-mih-deez] which killed his grandfather Acrisius [ah-KRIH-see-us]. He was conceived when Zeus arrived in a shower of gold to his mother who was trapped in a bronze cell, Danaë. This man saved his future wife Andromeda from a sea monster, and Hermes gave this man a cap of invisibility and winged shoes to help him with his most famous task. Identify this hero of Greek mythology who used a reflecting shield from Athena to avoid petrification when he slew Medusa.

ANSWER: Perseus

16. The differential form of the law named after this person finds the curl of a magnetic field. That law was corrected by adding a term for the time derivative of the electric displacement field. It states that the line integral of the magnetic H-field equals the surface integral of the free current density. The correction was done by James Clerk Maxwell, who made this person's circuital law one of his four equations. Name this Frenchman who became the namesake of the unit equivalent to a watt per volt or to a coulomb per second, the standard unit of current.

ANSWER: André-Marie Ampère

17. This author wrote about Jimmie Trescott butchering Tennyson's "Charge of the Light Brigade" in his story "Making An Orator." That work, like this author's novella *The Monster*, took place in the fictional town of Whilomville. Another story by this author—about an oiler named Billie who is stuck with a correspondent, a cook, and a captain—takes place shortly after a shipwreck. One of this author's title characters is rejected by her mother, Mary Johnson, and her boyfriend, Pete. In another work, the death of Jim Conklin is seen by his friend Henry Fleming during the Civil War. Name this author of "The Open Boat", *Maggie: A Girl of the Streets*, and *The Red Badge of Courage*.

ANSWER: Stephen Crane

18. The theorem named for this mathematician states that the cardinality of a power set is greater than the cardinality of the original set. The function named after him, known as the Devil's staircase and commonly used as an example of a function that is continuous but not absolutely continuous, is based on the base-3 representation of a number. That function is closely related to the set named for him, also known as his "dust", which is generated by repeatedly removing open middle thirds starting with the closed unit interval. He is credited with developing the continuum hypothesis and transfinite numbers. Name this mathematician who used a diagonalization argument to show that there are more real numbers than integers.

ANSWER: Georg [GAY-awrk] (Ferdinand Ludwig Philipp) Cantor

19. This man led a political party called the Nonpartisan Bloc for Support of Reforms. He was arrested during Władysław Gomułka's [vwah-DIS-wahf gaw-MUW-kah'z] time in office, during which he began protesting excessive food prices. Prime Minister Wojciech Jaruzelski [VOY-chek yar-oo-ZEL-skee] resigned shortly after being opposed by this man at the Round Table Talks. This man was elected President of his nation over a decade after leading massive strikes as an electrician working at the Gdansk shipyards. Name this Nobel Peace Prize-winning Polish trade union organizer, who led the Solidarity Party in the 1980s.

ANSWER: Lech Wałęsa [vah-WEN-sah]

20. A pet magpie holds this painter's calling card and a group of finches is caged in his portrait of Manuel Osorio Manrique de Zuñiga [mahn-REEK-ay day zoon-YEE-gah]. An early set of prints he made were titled *Los Caprichos*, and, starting with a picture of a man kneeling with outstretched arms, he made a series of about 80 etchings titled *The Disasters of War*. Towards the end of his life, he painted works such as *Two Old Men Eating Soup* on the walls of his house. That group of works, known as his *Black Paintings*, includes a grotesque work in which a wide-eyed Saturn devours one of his sons. Name this artist who portrayed Spanish resistance during the Peninsular War in *The Charge of the Mamelukes* and a work showing a man in a white shirt in front of a firing squad, *The Third of May, 1808*.
ANSWER: Francisco (José de) **Goya** (y Lucientes)

TB1. The last insurgency led by this ethnic group was put down quickly when British Colonel Duncan McKenzie defeated Chief Bombatha in 1906. This group had won a major victory at the Battle of Isandlwana, but that was followed by several losses and the eventual ceding of independence by Cetshwayo in 1879. Recently, it has been headed by Mangosuthu Buthelezi, who started the Inkatha Freedom Party in opposition to both the African National Congress and apartheid, and its homeland has merged with the province of Natal in South Africa. Name this group that was led by the half-brother of Dingane and Mhlangana from 1816 to 1828, who was named Shaka.
ANSWER: (Kwa)**Zulu** [or **AmaZulu**; prompt on **Bantu** or **Nguni**]

TB2. Squaring this value gives the reciprocal of the product of permeability and permittivity. Like the Boltzmann constant, gravitational constant, and reduced Planck constant, this value is set equal to one when using Planck units. Christiaan Huygens [HOY-genz] was the first person to successfully approximate this value, using data collected by Giovanni Cassini and Ole Rømer on eclipses of Jupiter. The Fizeau–Foucault [fih-zoh foo-kohl] apparatus measured this more accurately using a rotating mirror. The fact that this value is in fact constant was the second postulate of special relativity. Name this value that is squared to give the ratio between energy and mass, equal to about 3 times ten to the 8th meters per second.
ANSWER: **speed of light** (in a medium) [prompt on c_0 ["C naught" or "C (sub) zero"]; accept **speed of light in a vacuum**]

TB3. This is the birth month of Eleanor Roosevelt, Mike Ditka, and John Lennon. Name this month featuring National Coming Out Day and Columbus Day that follows September.
ANSWER: **October**