

2008-2009 ACF-Format Set #4

Round 1

**Tossups** 

1. In one play by this author, Serafina delle Rose ends a three-year mourning period when she meets a truck driver, and in another of his plays a disgraced minister becomes a tour guide in Mexico. In addition to *The Rose Tattoo* and *Night of the Iguana*, this man wrote a play in which Amanda Wingfield tries to net her daughter Laura a gentleman caller and a play in which Stanley and Stella Kowalski host Blanche DuBois. For 10 points, name this American playwright of *The Glass Menagerie* and *A Streetcar Named Desire*.

ANSWER: Tennessee Williams

2. Works for solo piano by this composer include *Visions fugitives* and *Suggestion diabolique*. He included the movement "The Evil God and the Dance of the Pagan Monsters" in his *Scythian Suite*, and a troika ride is depicted in his *Lietenant Kije* suite. A work by Carlo Gozzi inspired his opera *Love for Three Oranges*, and Joseph Haydn inspired his first symphony, nicknamed the "Classical." In another work by this composer, an oboe represents a duck, and three horns represent the titular animal. For 10 points, name this Russian composer of *Peter and the Wolf*.

ANSWER: Sergei Prokofiev

3. Clidemus claimed this figure died in a storm off Sicily after violating a decree not to sail with more than five men. Love for this father of Catreus and Androgeus caused Scylla to betray her father Nisus, king of Megara. This son of Zeus and Europa offered a reward for whoever could thread a spiraled shell. Like his brother Rhadamanthus, he became a judge in Hades, and with his wife Pasiphae, he was the father of Ariadne, who betrayed him for Theseus. For 10 points, name this king of Crete who built the labyrinth.

ANSWER: Minos

4. He is credited with the creation of a liturgy used during certain weekdays of the Great Lent, and he wrote a work that contrasts the roles of bishops and pastors. In addition to writing *The Liturgy of the Presanctified Gifts* and *The Rule for Pastors*, this man helped spread the idea of private penance and promulgated the view of Mary Magdalene as a prostitute. Calvin called this Doctor of the Church, canonized immediately after death, the last good Pope. For 10 points, name this sixth-century pope whose name is often used to describe a form of monastic chanting.

ANSWER: Saint **Gregory I** [or **Gregory the Great**; prompt on **Gregory**]

5. A member of the CIA named Harry Hubbard narrates this man's novel *Harlot's Ghost*, and he described the boyhood of Adolf Hitler in *The Castle in the Forest*. One work by this man is divided into "Western Voices" and "Eastern Voices" and centers on the murderer Gary Gilmore. Another work tells the story of Lieutenant Robert Hearn and an infantry platoon that invades a Japanese-held island during World War II. For 10 points, name this creator of New Journalism and author of *The Executioner's Song* and *The Naked and the Dead*.

ANSWER: Norman Mailer

6. This artist painted four men in fezzes in front of the Giza pyramids in *Shrine Quartet* and the ritual planting of a tree next to a schoolhouse in *Arbor Day*. He depicted three old women standing in front of Emanuel Leutze's *Washington Crossing the Delaware* in his *Daughters of the Revolution*. In another one of this man's paintings, two figures modeled after his sister Nan and his pitchfork-holding dentist stand in front of a barn. For 10 points, name this lowa regionalist painter of *American Gothic*.

ANSWER: Grant Wood

7. William James described this concept as "a live hypothesis which may be true" in a work examining the "Logical Conditions" for belief in it. Bronislaw Malinowski differentiated it from a similar concept in that "there is no future ... it is meant to ... prevent." In addition to "The Will to Believe" and *Magic, Science, and* [this], totemism as its most primitive form was proposed in an Emile Durkheim work discussing the "Elementary Forms" of its type of life. For 10 points, identify this concept which Karl Marx called "the opiate of the masses," examples of which include Judaism.

ANSWER: religion

8. This man claimed that the pineal gland was "the seat of the soul" and wrote a treatise on *The Passions of the Soul*. He elucidated his skepticism to the existence of the outside world in his "dream argument." He argued that the body follows the laws of physics but the mind does not and described the "wax argument" in the fifth of his *Meditations on First Philosophy*. The namesake of a "dualism," this philosopher's most famous saying is found in French in his *Discourse on Method*. For 10 points, name this person who coined the phrase "cogito ergo sum," a French philosopher.

ANSWER: René **Descartes** 

9. One person of this name took the throne despite the existence of fifty more appropriate relatives, as no Catholic was allowed to take the throne, and was an instrumental figure in the formation of the Quadruple Alliance. The Delhi Durbar of the fifth of these was the only one attended by the person being honored, requiring the creation of a special crown. The sixth one of them was the last emperor of India, in addition to being the final king of Ireland. For 10 points, give the common name of these men, the third of whom ruled England during the American Revolution.

ANSWER: King **George** [or equivalents, such as kings of England named **George**]

10. This island's longest river is the South Esk, while its highest point of Mount Ossa is found in its Central Highlands. Its last full-blooded native is thought to have died in 1876 after most of its people were relocated to Flinders Island off its north coast. Separated from the mainland by the Bass Strait, its capital and largest city is Hobart. It was originally named Van Diemen's Land and was once the home of a namesake marsupial wolf. For 10 points, name this island off the south coast of Australia, the former habitat of a certain "devil."

ANSWER: Tasmania

11. The emission of these particles when another particle accelerates results in the Abraham-Lorentz force. Theories about one phenomenon produced by these particles were complicated by observations of the Arago spot, which is predicted by Huygen's principle. Bose-Einstein statistics were developed to explain a "gas" of these entities, and bodies emit Cerenkov radiation when they travel faster than these particles, which are massless gauge bosons. For 10 points, identify these electromagnetic force carriers, the particles that make up light.

ANSWER: photons

12. A clerk in this work exclaims "Oh! the good potpie! I know nothing better than that." That man is married to Matilda, who "suffered from the poverty of her apartment." One character in this work forgoes plans to buy a gun shortly after receiving an invitation to a party hosted by the Minister of Public Instruction. The other main character borrows the title object from Mrs. Forestier, but she loses it and lives in poverty to replace it. The titular piece of jewelry is revealed to be a fake at the end of, for 10 points, what Guy de Maupassant short story?

ANSWER: "The Necklace"

13. One class of compounds termed this is used in coupling reactions with iodides, while another receives its central metal atom from sodium dichromate and is used interchangeably with PCC. In addition to examples named for Gilman and Jones, another class is derived from a reaction of an alkyl halide with magnesium. Yet another class of these does not oxidize ketones and thus does not produce a silver mirror. For 10 points, name these compounds used abundantly in organic chemistry tests, with classes named for Grignard and Tollens.

ANSWER: reagents

14. Two structures associated with this object are named for Gossamer and experience Poynting-Robertson drag. One moon of this planet is the namesake of a plasma torus and was used by Ole Romer to measure the speed of light. This planet's atmosphere is divided into light-colored zones and dark-colored belts. It rotates more rapidly than any other planet and has the most powerful magnetosphere. Shoemaker-Levy 9 collided with this planet, which is home to the Great Red Spot. For 10 points, name this planet whose moons include Callisto and Ganymede.

**ANSWER: Jupiter** 

15. After rebounding an Allen Iverson shot, this player scored the winning basket in the 2006 NBA All-Star Game. Before Cole Aldrich, this player was the last to have a triple-double in the NCAA tournament, doing so in 2003 for Marquette. He passed Alonzo Mourning as his team's all-time leading scorer, and his current teammates include Daequan Cook and Michael Beasley. Recently banned from wearing themed Band-aids, this player can often be seen in commercials for T-Mobile along with Charles Barkley. For 10 points, name this guard for the Miami Heat.

ASWER: Dwyane Wade

16. This figure has "no idea of the arts of war" or of "shield or sword-play" and conjures the harm from cutting weapons, making him impervious to all blades on earth. Aeschere is killed in retaliation for this figure's death, and he terrorizes the Shieldings for a span of twelve winters. He dies at the hands of a kinsman of Hygelac, while the King of Glory who desires this figure's death spends the night with the queen Wealhtheow. For 10 points, name this descendant of Cain whose murderous acts in Hrothgar's hall of Heorot are avenged by Beowulf.

ANSWER: Grendel

17. An early prime minister of this region was Gerrit P. Judd, and its monarchy was forced to accept the 1887 Bayonet Constitution. John L. Stevens was its first American leader, and this region was annexed as a US territory under Sanford Dole in 1895. It was politically united by Kamehameha the Great shortly after being "discovered" by Captain James Cook. Its native dynasty ruled until the 1895 abdication of Queen Liliuokalani. For 10 points, name this Pacific archipelago that in 1959 became the 50th state in the Union.

ANSWER: **Hawaii** [or **Hawaiian** Islands]

18. Two atoms of one intermediate in this process are removed by transketolase, resulting in erythrose-4-phosphate. In its fourth step, DHAP is produced by triose phosphate isomerase, and many enzymes that partake in it also work in the pentose phosphate pathway and gluconeogenesis. It occurs during daytime in organisms with CAM fixation, which circumvents the problem of photorespiration that can occur during it. RuBisCO indirectly produces two molecules of G3P in, for 10 points, what series of light-independent reactions in photosynthesis?

ANSWER: <u>Calvin</u>-Benson-Bassham cycle [prompt on "<u>light reactions</u>" until "daytime"]

19. In one of this man's operas, the soothsayer Colas serves as matchmaker to a shepherdess and her similarly named lover. In addition to *Bastien and Bastienne*, he composed an opera in which two soldiers pretend to be Albanians to test the fidelity of their wives. In a less comedic work than *Cosi fan tutte*, he created Tamino, Pamina, and the Queen of the Night, and another of his operas includes the Catalogue Aria and ends with the title womanizer being dragged to hell by a statue. For 10 points, name this composer of *The Magic Flute* and *Don Giovanni*.

ANSWER: Johann Chrysostom Wolfgang Amadeus Mozart

20. He expanded his nation's Muslim population in his conquests of Astrakhan and Kazan, two Tatar states. He founded the Oprichniki to weed out subversives, including killing thousands at the Massacre of Novgorod, and he blinded the architect of St. Basil's Cathedral. One of his outbursts resulted in the throne being passed to the mentally deficient Feodor, since he had killed his son and heir to the throne with his scepter despite the intervention of Boris Godunov. For 10 points, name this czar whose ironfisted reign gave him the epithet "Grozny."

ANSWER: Ivan IV [or Ivan the Terrible; or Ivan Grozny before mention; prompt on Ivan]

21. DES and TACE are synthetic examples of this class of compounds. Aromatase can be used to convert certain compounds into these compounds, unsaturated forms of which include equilenin and equilin. It stimulates production of osteoblasts to counter the effects of osteoporosis, and it is synthesized in the *theca interna* cells of the corpus luteum. Often used as a cure for Turner syndrome, its production is stimulated by FSH and LH. Responsible for secondary sex characteristics, this is, for 10 points, what class of female sex hormone?

ANSWER: estrogens

22. One of the sons of the central patriarch in this set of novels becomes a sensual grade-school teacher engrossed with the work of Spinoza. In the last novel, the matriarch Amina's final illness shifts the focus to Khadija's home on Sugar Street. The five-year abstinence of Al-Sayyid Ahmad ends during its second section, and the lives of the members of the central Jawad family are set against the backdrop of revolution in this collection's first novel, *Palace Walk*. For 10 points, name this collection of three novels by Naguib Mahfouz set in the namesake capital of Egypt.

ANSWER: Cairo Trilogy

23. This man removed the body of Richard Montgomery from the battle of Quebec. He suffered heatstroke at the Battle of Monmouth and used a social club as an early political machine. Chief Justice John Marshall ruled that he could not be convicted of treason, and his desire for power left the election of 1800 deadlocked as he refused to concede the presidency, leading to the passage of the 12<sup>th</sup> Amendment. For 10 points, name this third vice-president of the United States who shot Alexander Hamilton in a duel.

ANSWER: Aaron Burr



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Round 1

**Bonuses** 

1. This politician was once known as "Jawad." For 10 points each:

[10] Identify this leader of the Dawa party, who now holds the position once held by Iyad Allawi and Ibrahim al-Jaafari.

ANSWER: Nouri al-Maliki

[10] Nouri al-Maliki is the prime minister of this country, which, like Iran, has a majority Shia population.

ANSWER: Republic of Iraq [or Jumhuriyat al-Iraq]

[10] al-Maliki was a prominent opponent of this party, which was founded by Michel Aflaq in Damascus.

This party was led by Saddam Hussain until his deposition.

ANSWER: **Ba'ath** party [or **Ba'th** Party]

2. Mick Cornett is the current mayor of this state capital, which is home to Tinker Air Force Base and the National Cowboy Hall of Fame. For 10 points each:

[10] Name this city whose Alfred P. Murrah building was bombed by Timothy McVeigh.

ANSWER: Oklahoma City

[10] Thanks to the McClellan-Kerr Waterway, this second-largest city by population in Oklahoma is an inland port. It is home to Mohawk Park and Oral Roberts University.

ANSWER: Tulsa

[10] This seat of Cleveland County is located approximately twenty miles south of Oklahoma City and is the site of the University of Oklahoma.

ANSWER: Norman

3. These sounds are produced from a partial or complete closure of the vocal tract. For 10 points each: [10] Name these sounds, examples of which include b, f, and z.

ANSWER: consonants

[10] Consonants like b and z, as well as all vowels, have this property, in that their sounds are generated by vibrating vocal chords.

ANSWER: voiced

[10] Consonants like f and z belong to this class, in which air is forced into a narrow opening between two articulators to produce sound. Sibilants are a subclass of this class of consonants.

ANSWER: **fricative**s [or **spirant**s]

- 4. A ballad by Goethe was the basis of a work by this composer that uses pounding octaves in the right hand to depict the rhythm of a horse's hooves. For 10 points each:
- [10] Name this composer of "Der Erlkönig." His other compositions include the Trout Quintet, and he notably left his Symphony No. 8 unfinished.

ANSWER: Franz Schubert

[10] This composer reused some material from an unfinished symphony for a third piano concerto. He is better known for his Pathétique Symphony and the ballet The Nutcracker.

ANSWER: Pyotr Ilyich **Tchaikovsky** 

[10] This composer never finished the last movement of his Symphony No. 9 in D minor, although he did finish his Romantic symphony and a Symphony No. 0.

ANSWER: Anton Bruckner

- 5. Basic fuchsin or safranin is used as a stain in this technique, and the retention of an iodine-crystal violet complex indicates a positive test. For 10 points each:
- [10] Name this biological technique that can be used to differentiate between two types of bacteria.

ANSWER: Gram stain

[10] In Gram-negative bacteria, a layer made of this peptide-polysaccharide encloses the periplasmic space. In Gram-positive bacteria, teichoic acids are covalently bound to it.

ANSWER: peptidoglycan

[10] This other biological staining technique is used to stain nervous tissue and consists of hardening the tissue in potassium bichromate and impregnating it with silver nitrate.

ANSWER: Golgi stain

- 6. This twin brother of Xolotl was exiled by the evil Tezcatlipoca. For 10 points each:
- [10] Name this "plumed serpent" deity.

ANSWER: Quetzalcoatl

[10] Along with Tlaloc and Huitzilopochtli, Quetzalcoatl was one of the gods of these Mesoamerican people. They mistook Hernan Cortes for the returning Quetzalcoatl.

ANSWER: Aztecs

[10] The mythology of these other people featured gods such as Kukulkan and Hurakan. The story of Hero Twins is told in their book, the *Popul Vuh*.

ANSWER: Mayans

- 7. Name some ancient historians born in Greece, for 10 points each.
- [10] This man helped found the colony of Thurii and wrote *Histories*, which detailed the Greco-Persian Wars. For that work, he is often labeled the "father of history."

ANSWER: **Herodotus** of Halicarnassus

[10] An Athenian strategos until he was ostracized for his failure to defend Amphipolis from the Spartans, this man used his ensuing spare time to write *History of the Peloponnesian War*.

**ANSWER: Thucydides** 

[10] Writing during the reign of Antoninus Pius, this native of Alexandria is best known for his accounts of the civil wars of 133-78 B. C. E. in his *Roman History*.

ANSWER: Appian of Alexandria [or Appianus]

- 8. The speaker claims the titular concept is a "slave to Fate, Chance, kings, and desperate men" and commands the titular concept to die at the end of the poem. For 10 points each:
- [10] Name this poem in which the speaker warns the titular concept to not express the titular emotion even though some have called it mighty and dreadful.

ANSWER: "Death Be Not Proud"

[10] "Death Be Not Proud" was written by this poet, who wrote about the mixing of two bloods in "The Flea" and also penned "A Valediction: Forbidding Mourning."

ANSWER: John **Donne** 

[10] "Death Be Not Proud" is the tenth poem in this Donne series that also includes "Batter My Heart."

ANSWER: *Holy Sonnets* [or *Divine Meditations*; or *Divine Sonnets*]

- 9. It is equal to the side of a right triangle opposite an angle divided by the side adjacent to it. For 10 points each:
- [10] Name this trigonometric function, which is also equal to sine divided by cosine.

ANSWER: tangent

[10] One identity involving the tangent function states that 1 plus the square of the tangent equals the square of this other trigonometric function. This function equals 1 over the cosine.

ANSWER: secant

[10] As with sine and cosine, tangent is a periodic function. This is the angle, in degrees, over which tangent is periodic. It is also the interval between points for which tangent is undefined.

ANSWER: 180 degrees

- 10. This artist portrayed Cosimo di'Medici and his sons as wise men in *Adoration of the Magi*, and several imps surround the sleeping Mars in his *Venus and Mars*. For 10 points each:
- [10] Name this artist whose other works include Madonna of the Pomegranate.

ANSWER: Sandro **Botticelli** [or Alessandra di Mariano di Vanni **Filipepi**]

[10] Figures in this Sandro Botticelli work include Mercury reaching toward some orange trees, the three Graces, the goddess Flora, and the nymph Chloris.

ANSWER: **Primavera** [or **Spring**]

[10] In this Botticelli work, the titular goddess emerges from a seashell while another goddess prepares to cover her with a robe.

ANSWER: The Birth of Venus

- 11. He was defeated in his bid for the 1824 presidential election when Henry Clay dropped out of the race to become John Quincy Adams' secretary of state. For 10 points each:
- [10] Name this victim of the "corrupt bargain" who was previously governor of Tennessee and who dealt with Peggy Eaton and the nullification crisis as the seventh president.

ANSWER: Andrew Jackson

[10] Samuel Worcester filed a polarizing law suit against this state during Jackson's presidency, which led to the Cherokee nation being considered sovereign. They were still kicked out.

ANSWER: Georgia

[10] Jackson caused widespread bank failure by issuing this decree. It required payment for all public land in gold or silver, which created a panic during Van Buren's presidency.

ANSWER: Specie Circular

- 12. This bombardier eventually deserts for Sweden. For 10 points each:
- [10] Name this literary character, who is unsuccessful in pleading insanity and is thus prevented from being relieved of his duty of flying dangerous missions ordered by Cathcart and Peckham.

ANSWER: Captain John Joseph Yossarian

[10] Yossarian is the protagonist of this 1961 Joseph Heller novel, whose other characters include Doctor Daneeka and Lieutenant Milo Minderbender.

ANSWER: Catch-22

[10] This other Heller work details the later lives of many characters from *Catch-22* and sees Yossarian as a failed writer and father of an artist.

ANSWER: Closing Time

- 13. One of these processes named for Baeyer and Villiger converts ketones to esters. For 10 points each:
- [10] The Corey-Kim reaction is another example of this process in which atoms lose electrons.

ANSWER: oxidation

[10] Constructed from Latimer diagrams, these diagrams plot energy against oxidation states. Thus, a species towards the bottom of the plot is relatively stable in redox reactions.

ANSWER: **Frost** diagram

[10] The thiol functional group features this element, which is produced in the Frasch process, bonded to a hydrogen atom.

ANSWER: Sulfur

- 14. Following the death of his father Terah, he departed from Ur of the Chaldees, along with his nephew Lot. For 10 points each:
- [10] Name this central figure from the Book of Genesis, the first patriarch of Judaism, Islam, and Christianity.

ANSWER: Abraham [or Abram]

[10] In Genesis 22, Abraham nearly sacrifices this young boy, his only son with his wife Sarah. Muslim tradition replaces this figure with his elder half-brother Ishmael.

ANSWER: Isaac

[10] This firstborn son of Isaac was a legendarily hairy man, and he supposedly relinquished his birthright in exchange for a bowl of pottage.

ANSWER: **Esau** [accept **Edom**]

- 15. This man's first film was *Strike*, and production of his trilogy on Ivan the Terrible was halted by the Soviet government. For 10 points each:
- [10] Name this Russian film director of Alexander Nevsky.

ANSWER: Sergei Eisenstein

[10] Eisenstein's most famous film is this 1925 movie about a mutiny aboard the titular ship.

ANSWER: **Battleship Potemkin** 

[10] One of the most famous scenes in cinema occurs in *Battleship Potemkin* when tsarist troops massacre a crowd of demonstrators on the steps to the sea in this Ukrainian port city.

ANSWER: Odessa

- 16. The suicide of Prince Rudolph and the death of Charles Louis elevated this avid hunter to successor to the throne. For 10 points each:
- [10] Name this Austrian nobleman who was married to Sophia von Chotkowa.

ANSWER: Franz Ferdinand

[10] This young dissident assassinated Franz Ferdinand in Sarajevo.

ANSWER: Gavrilo Princip

[10] Princip was a member of this terrorist organization that had repeatedly tried to kill Archduke Ferdinand.

ANSWER: **Black Hand** [or **Unification or Death**]

- 17. He wrote about a woman who "walks in beauty, like the night." For 10 points each:
- [10] Name this British romantic poet of *Manfred* who died of a fever while fighting with the Greeks.

ANSWER: George Gordon Lord **Byron** 

[10] In this satirical epic that was unfinished at Byron's death, the title womanizer is sold to the Turks and ends up in Catherine the Great's court.

ANSWER: **Don Juan** 

[10] The title character of this Byron poem wanders around Europe, falls in love with Julia in Germany, and finally dies in Rome.

ANSWER: Childe Harold's Pilgrimage

- 18. He names three laws of spectroscopy that have to do with emission and absorption lines. For 10 points each:
- [10] Name this physicist, whose eponymous equations represent the motion of a body in an ideal fluid. He is better known for his two namesake laws of circuits.

ANSWER: Gustav Robert Kirchhoff

[10] This one of Kirchhoff's laws states that by conservation of charge, the sum of currents flowing toward a point is equal to the sum of currents flowing away from it.

ANSWER: <u>junction</u> rule [or <u>nodal</u> rule; or <u>point</u> rule; or <u>first</u> law; prompt on <u>current</u> law]

[10] Kirchhoff's loop rule states that this quantity must sum to zero around a loop.

ANSWER: voltage [or potential difference]

- 19. The first narrator of this work grows up in post-World War I Danzig, while the second obsessively writes letters to his cousin. For 10 points each:
- [10] Name this final book in the *Danzig Trilogy*. It centers on Eddi Amsel, who builds some creepy scarecrows before being cast out of his hometown.

ANSWER: **Dog Years** 

[10] This author of *Dog Years* revealed he was pretty much a Nazi in an interview promoting his most recent work, *Peeling the Onion*. His other recent works include *Crabwalk*.

ANSWER: Günter Grass

[10] Günter Grass may be best known for this novel, in which Oskar Matzerath receives the title object for his third birthday and decides he never wants to grow up.

ANSWER: The **Tin Drum** [or Die **Blectrommel**]

- 20. He earned the title "Hero of Two Worlds." For 10 points each:
- [10] Name this revolutionary who believed that he had his government's support in trying to take Rome in the mid-19th century. His volunteers were known as the Red Shirts.

ANSWER: Giuseppe Garibaldi

[10] Dying just months after the declaration of a unified Italy, this prime minister of Piedmont-Sardinia oversaw the quintupling of the size of his home country.

ANSWER: Count of **Cavour** [or Camillo Paolo Filippo Giulio **Benso**]

[10] This pope was the last to hold temporal powers. During his reign, the Papal States became part of the newly unified Italy. He would also call the First Vatican Council.

ANSWER: Pius IX [or Giovanni Maria Mastai-Ferretti]

- 21. This author wrote about the politically motivated killing of fifteen peasants and the subsequent disclosure of the event by the Catholic Church in *Of Love and Shadows*. For 10 points each:
- [10] Name this Chilean author who wrote about Gregory Reeves in *Infinite Plan* and about the titular South American orphan in *Eva Luna*.

ANSWER: Isabel Allende

[10] This other Allende novel opens with the death of Rosa the Beautiful and chronicles the lives of Esteban, Clara, their daughter Blanca, and their granddaughter Alba.

ANSWER: The **House of the Spirits** [or La **casa de los espíritus**]

[10] Esteban and his children belong to this central family of *The House of the Spirits*. They own the country estate of Tres Marías.

ANSWER: Trueba

- 22. Like quicksort, it runs in Big O of n log n time. For 10 points each:
- [10] Name this sorting algorithm that recursively breaks a data set in half and then combines the two halves with its namesake operation.

ANSWER: merge sort

[10] Merge sort was first developed by this Hungarian, who worked on the EDVAC project, developed a namesake computer architecture, and was a co-founder of game theory.

ANSWER: John von Neumann

[10] Merge sort is one of these algorithms, characterized by non-overlapping subproblems. They work by recursively splitting a problem into smaller parts.

ANSWER: divide-and-conquer algorithms

- 23. Answer the following about dynastic rule in Asia, for 10 points each.
- [10] The Yellow Turban rebellion led to the collapse of this dynasty, and its rule was split by the reforms of Wang Mang before he was taken down by the Red Eyebrows.

ANSWER: <u>Han</u> Dynasty

[10] This dynasty, known for its pottery and naval expeditions, followed the Yuan dynasty and was founded by the Hong Wu Emperor.

ANSWER: Ming Dynasty

[10] This dynasty ruled Korea until 1910. Earlier, it repelled the Hideyoshi invasions using "turtle ships," it was called a "Hermit Kingdoms" due to its isolationist policies.

ANSWER: **Choson** [or **Choson**; or **Chosu**]