Wolfie Bowl

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Packet 9

1. **These numbers are the subject of a theorem by Hillel Furstenburg in which a topological proof begins with an arithmetic sequence. Euler showed that the sum of the reciprocal of these numbers diverges, which demonstrates the (*)** infinitude of these numbers. Every nonzero number can be written as the product of this type of numbers uniquely. For 10 points, name this type of numbers that are not divisible by any other number except one and itself.
ANSWER: **prime numbers**

2. **One movement of a piece by this composer begins in G major and an alto solo sings "he was despised" in E flat major. This composer wrote a movement titled La Réjouissance that is part of a piece written for the end of the (*)** War of Austrian Succession. One piece by this composer was performed on the river Thames and he is best known for an oratorio that includes sections like "he that dwelleth in heaven." For 10 points, name this composer of Messiah which includes the "Hallelujah" chorus.
ANSWER: George Frideric **Handel**

3. **The first king of this family was victorious in the War of the Three Henrys and another member of this family guaranteed religious freedom in the Edict of Nantes. This family briefly ruled (*)** France until the July Revolution in 1830 and since 1700, this family has mostly ruled Spain. For 10 points, name this European royal family whose notable members include Louis XIV (14) and Louis XVI (16), the latter of which was beheaded during the French Revolution.
ANSWER: House of **Bourbon**

4. **It's not ceramide, but these molecules are known to "glue" sphingolipids. The inhibition of the enzyme HMG CoA-reductase leads to lower levels of this molecule and is the main way (*)** statins work. This molecule is a precursor to the hormones aldosterone and estrogen as well as LDL and HDL. This molecule regulates fluidity and functions of proteins in a cell's phospholipid bilayer. For 10 points, name this steroid which in high amounts can lead to clogging of the arteries.
ANSWER: **cholesterol**

5. **In one short story by this man, the protagonist finds a body part of one of his customers in a loaf of bread. In that story, the title body part belonging to a state official becomes sentient. This author of (*)** *The Nose* also wrote about a low ranking civil servant claiming to understand the language of dogs in *The Diary of a Madman*. In another short story, this man wrote about Akakiy Akakiyevich's obsession with the title clothing. For 10 points, name this Russian author of *The Overcoat*.
ANSWER: Nikolai **Gogol**

6. This actor played a younger version of James Franco in the 2016 film *The Adderall Diaries* and he starred in four episodes of the series *Royal Pains* as the character Luke. In a 2018 film, this actor portrayed the drug addicted son of (*) Steve Carell's character; that film is *Beautiful Boy*. One character portrayed by this actor falls in love with Oliver in a film set in 1983 Northern Italy. For 10 points, name this actor who starred as Elio Perlman in the 2017 film, *Call Me By Your Name*.
ANSWER: Timothée **Chalamet**

7. **This group painted a phrase derived from Psalm 73 on their shields. Pope Sixtus IV [4th] formalized a papal bull that established this group in 1478. This group targeted (*)** Marranos and Moriscos and forced them to become Conversos. Tom´as de Torquemada first led this group that conducted auto-da-fé rituals. For 10 points, name this group that prosecuted Catholic heretics and expelled Jews under the reign of Ferdinand and Isabella.
ANSWER: **Spanish inquisition** (accept **Tribune of the Holy Office of the Inquisition**; prompt on "inquisition")

8. **A member of this family wants to be just like Dave Singleman, a man whose funeral was attended by hundreds of people. Another member of this family quit summer school after finding his father was cheating on his mother. That son, (*)** Biff, stole a fountain pen from an interview for a loan and told his brother Happy about it at a restaurant. Biff and Happy are the sons of Linda and Willy and members of, for 10 points, what central family in *Death of a Salesman*?
ANSWER: the **Loman** family

9. A **defect in these organelles causes phytanic acid buildup in Refrum's disease. One congenital disorder called Zellweger syndrome is characterized by the reduction or absence of these organelles. These organelles are involved in beta oxidation of very long chain (*)** fatty acids and it is the site of first reactions in plasmalogen synthesis. These organelles also contain the enzyme catalase. For 10 points, name these organelles that break down H_2O_2 [H-2-O-2].
ANSWER: **peroxisome**(s)

10. **This holiday is celebrated by Jains where they commemorate the nirvana of Mahavira. Another group celebrates this holiday to remember the martyrdom of Bhai Mani Singh. For this holiday, observers decorate with rangoli designs and (*)** illuminate their homes with diyas. This holiday has a five day festival, the first day being Dhanteras. This holiday celebrates the defeat of the evil Ravana by Rama. For 10 points, name this "festival of lights" that commonly commemorates the Hindu goddess Lakshmi.
ANSWER: **Diwali** (accept Divali or Deepavali) ¡Jade¿

11. **The Winkler test type of this technique is used to measure levels of oxygen in water. The Karl Fischer type of this technique detects small amounts of water and the (*)** complexometric type uses EDTA for metal ion solutions. Pka equals half the pH at the equivalence point in the acid-base type of this technique. A burette is used in this technique to reach the point where the color change occurs. For 10 points, name this scientific technique used to determine concentration of an unknown solution.
ANSWER: **titration**

12. **One character in this novel named Enoch kills a royal python. At the end of this novel, a district commissioner remarks that the protagonist's story would make for an "interesting paragraph or two." The protagonist accidentally kills (*)** Ezeudu's son which earns him a banishment of seven years from Umuofia and he was previously chosen to be the guardian of Ikemefuna. Okonkwo is the protagonist of, for 10 points, what novel set in colonial Nigeria by Chinua Achebe?
ANSWER: **Things Fall Apart**

13. **This artist's depiction of Marie Bonaparte was highly controversial due to its lewd shape. in addition to completing "Princess X," this artist designed a World War I memorial with twelve seats at (*)** Targu Jiu (TER-goo zhoo). One sculpture by this artist depicts simple geometric shapes kissing. His most well known piece encapsulates the essence of flight in bronze and marble. For 10 points, name this Romanian sculptor of "Birds In Space."
ANSWER: Constantin **Brancusi**

14. **William H. Seward sold this woman land in Auburn, New York in 1859. This first woman to lead an armed expedition served as a scout of the Union Army and guided a raid at Combahee Ferry. This woman escaped (*)** slavery twice and assisted John Brown in recruiting supporters for his raid on Harper's Ferry. In 2016, it was announced this woman would replace Andrew Jackson on the front of the $20 bill. For 10 points, name this abolitionist known for rescuing slaves through the Underground Railroad.
ANSWER: Harriet **Tubman**

15. **The protagonist of this novel is imprisoned after he attacks his boss, Phil Connor, who had sexually assaulted Ona. Towards the end of this novel, the protagonist begins working for Tommy Hind and attends a (*)** socialist lecture. Ona, dies in childbirth and her first child drowns in a puddle of mud water. Jurgis Rudkus, is a Lithuanian immigrant living in the meatpacking district of Chicago in, for 10 points, what Upton Sinclair novel that aimed for the "public's heart," but ended up hitting its "stomach?"
ANSWER: **The Jungle** (do not accept or prompt on "The Jungle Book")

16. **One ruler from this dynasty was capture during the Tumu crisis. Another leader of this dynasty established the jinyiwei which ended when this dynasty was overthrown by Li Zicheng. The founder of this dynasty led the Red Turban rebellion and helped depose the preceding (*)** Yuan dynasty. The Yongle emperor moved this dynasty's capital to Beijing and built the Forbidden City there. That emperor ordered treasure fleets led by Zheng He. For 10 points, name this Chinese dynasty known for their porcelain.
ANSWER: **Ming** dynasty

17. **The Grande Arche can be found in this city's Defense district. A road of monuments in this city called the Historical Axis and other avenues were widened to easily suppress revolts; those road projects were done by (*)** Baron Haussmann. A network of underground catacombs are located in this city whose Sacré-Coeur Basilica is in Montmartre. This city is divided by the Seine River and its Champs-Elysées ends at the Arc de Triomphe. For 10 points, name ths home of the Eiffel Tower, the capital of France.

ANSWER: **Paris**

18. **One side in this battle set up seven redoubts at Gloucester Point, the ninth of which was cut through by John Laurens. Charles O'Hara presented the sword of the surrendering commander and the winning side of this battle was aided by (*)** Comte de Grasse [Comb- du-Grahs]. Comte de Rochambeau [Roe-sham-boe] led the French troops while George Washington led the Continental Army to defeat General Cornwallis. For 10 points, name this 1781 battle that ended the American Revolution.
ANSWER: Battle or Siege of **Yorktown**

19. **Donald Knuth used one type of this entity on exact open covers of finite spaces using matrices. The cocktail shaker type of this entity operates bidirectionally, while "turtles" and "rabbits" under this entity move less efficiently under the bubbling type. This entity named for (*)** Dijkstra [DYK-struh] finds the path with the minimum weight between two nodes; this entity is commonly described as "greedy." For 10 points, name this entity which follows a sequence of steps used to solve a class of problems.
ANSWER: **algorithm** (anti prompt on "Algorithm X," "sorting algorithm," "path finding algorithm")

20. **This philosopher claimed the cause of an object must contain as much reality as the object itself. This philosopher hypothesized that the mind and body are connected by the (*)** pineal gland. They argued that the mind can exist independent of the body and vice versa in their namesake dualism. This philosopher made his "trademark argument" for the existence of God in *Meditations on First Philosophy*. For 10 points, name this French philosopher who declared "I think, therefore I am."
ANSWER: René **Descartes**