

1. **This author wrote a poem about pursuing a creation “with thimbles,...forks, and hope.” In another work by this author, a story about three sisters who live at the bottom of a well and live off treacle is told by a (*) dormouse. One of his title characters is accompanied by her cat Dinah while following a white rabbit who is employed by the Queen of Hearts. He created Tweedledee and Tweedledum as well as the Cheshire Cat. For 10 points, name this author of *Alice’s Adventures in Wonderland*.**

ANSWER: Lewis Carroll [or Charles Lutwidge Dodgson]

027-09-11-11102

2. **The title figure in one of his paintings is bent forwards, showing the hand of cards she is playing. In addition to that portrait of Mary Cassatt, he showed a weary-eyed woman looking out over a glass of the title beverage in his (*) *L’Absinthe*. He depicted two men in suits and bowler hats examining the title commodity in his *New Orleans Cotton Exchange*. A man with a violin sits on the left in a painting depicting his most famous subjects. For 10 points, name this French Impressionist painter, noted for his depictions of horses and ballerinas.**

ANSWER: Edgar Degas (Day-GA) [accept Hilaire-Germain-Edgar Degas]

002-09-11-11103

3. **Misha Gordon witnesses a suicide at the beginning of this work, and that suicide victim's son is friends with Nicky Dudorov. One character in this novel takes on the name Strelnikov, meaning "The Shooter," having been formerly known as (*) Pasha Antipov. Pasha is married to the woman seduced by Victor Komarovsky. That woman works as a nurse during World War I alongside the title character. Tanya is the daughter of Lara and the title character, Yury, in, for 10 points, what work that prominently features the Russian Revolution by Boris Pasternak.**

ANSWER: Doctor Zhivago

023-09-11-11104

4. **In prokaryotes, this process typically begins at the Pribnow Box, where sigma factor 70 binds. This process is inhibited by a repressor protein, which is encoded by the *lacI* (LACK-"I") gene in the *lac* operon. In eukaryotes, this process typically begins when TBP binds to the (*) TATA box, triggering a pre-initiation complex that eventually allows RNA Polymerase to bind. This process has three steps: initiation, elongation, and termination. For 10 points, name this synthesis of mRNA from a DNA template, which is followed by translation.**

ANSWER: transcription

003-09-11-11105

5. **This work states that the best type of intelligence can assess a situation for what it is, though the kind that can assess what others understand is good too. It contrasts the mutinous army of Scipio Africanus with the unified, though ethnically diverse, army of Hannibal. This book suggests that fortune, as a (*) woman, should be held down. It dispenses such advice as to limit generosity and to never rely on mercenaries. It states that being feared is preferable to being loved. For 10 points, name this political treatise written by Machiavelli.**

ANSWER: *The* Prince [or *Il* Principe]

020-09-11-11106

6. **A particle not yet experimentally confirmed that mediates this force would have spin equal to two. This force emerges as a consequence of spacetime (*) curvature in the theory of general relativity. The nature of this force was investigated in an experiment conducted by Galileo featuring balls rolling down inclines. For 10 points, name this force accounted for in an inverse square law named for Newton.**

ANSWER: gravity

022-09-11-11107

7. **A decree that this leader co-promulgated with Licinius granted toleration in his lands. He besieged the city of Marseille and may have forced its commander to commit suicide. That commander, Maximian, had a son who also fought against this man in a battle wherein that son, (*) Maxentius, died by drowning. This man had a vision of a cross in the sky on which was written, "In this sign you will conquer," before that battle at Milvian Bridge. For 10 points, name this fourth century Roman emperor who was the first Christian emperor.**

ANSWER: Constantine I [or Constantine the Great; or Flavius Valerius Aurelius Constantinus; prompt on Constantine]

023-09-11-11108

8. **One character created by this author is robbed during a flood by his own uncle, and only succeeds in escaping his relatives' tribulations when he gets them addicted to opium. Another of her novels ends when an overjoyed family learns that Western help against the (*) Japanese is on the way. This author used the title *All Men Are Brothers* for her translation of *The Water Margin* and wrote about Ling Tan in *Dragon Seed*. For 10 points, name this daughter of missionaries who created Lotus Blossom and Wang Lung in *The Good Earth*.**

ANSWER: Pearl Comfort Sydenstricker Buck [or John Sedges]

019-09-11-11109

9. **One of the leaders in this military campaign was impeded by Isaac II Angelus and died of a heart attack after capturing Iconium, the capital of the Sultanate of Rüm. This military campaign was preceded by a victory for one side near Tiberias at the (*) Horns of Hattin. This campaign, led by Philip II of France and Frederick Barbarossa, ended when Richard I signed a treaty with the Kurdish holder of Jerusalem. For 10 points, name this military campaign that was thwarted by Saladin.**

ANSWER: Third Crusade

022-09-11-11110

10. **Some of the boundaries that define this construct are the Kermadec, Izu Bonin and Bougainville trenches. It is more visibly comprised of such arcs as the New Hebrides, the Kuriles (CURE-eye-ulz), and the Aleutians. Nearly all deep-focus (*) earthquakes, and eighty percent of shallow-focus earthquakes worldwide, originate in the tectonic boundaries that comprise this structure, which is more formally called the Circum-Pacific Belt. For 10 points, what is this circular zone at the margins of the Pacific Ocean, named for its high volcanic activity?**

ANSWER: the ring of fire [accept the Circum-Pacific Belt before it is read]

019-09-11-11111

11. **This author of *Folklore in the Old Testament* described how Nicaraguans abstained from eating chocolate during the harvest in "The Influence of the Sexes on Vegetation," a section of his greatest work, which also has chapters on "Our Debt to the Savage" and "The Corn-Spirit as an Animal." That work examines the relationship between (*) customs, magic, and religion. For 10 points, name this Scottish anthropologist who wrote about shared folklore in his 1935 work *The Golden Bough*.**

ANSWER: James Frazer

063-09-11-11112

12. **One religious sect from this region venerates a figure born from a lotus in the Ocean of Milk, Padmasambhava, who taught the practice of dzogchen. Another sect in this region venerates the 17 Gwalyang Karmapas. Containing the Nyingma, Sakya, Kagyu and Gelug schools, this region has a spiritual leader emanating from Avalokitesvara named (*) Tenzin Gyatso, who was exiled to India, but was chosen because he was born at the same time that the previous leader died. For 10 points, name this region whose spiritual leader is the Dalai Lama.**

ANSWER: Tibet

026-09-11-11113

13. **The formation of this body resulted in the presence of a surprising geochemical mixture of potassium, rare earth elements, and phosphorus called "KREEP." Spacecraft journeying near this body must be wary of mascons, gravitational anomalies associated with its Imbrium (*) basin. This body is locked in synchronous rotation with the body it orbits. It contains light highlands called terrae and dark plains of hardened lava called maria. For 10 points, name this natural satellite that orbits the Earth.**

ANSWER: the Earth's moon [or Luna]

026-09-11-11114

14. **In one work by this writer, the main character takes a ship along with a man with dyed hair and rouged cheeks. That main character in a work by him eats overripe strawberries and becomes infatuated with the (*) Polish boy Tadzio. In a novel by this author, a duel takes place during which Naphta commits suicide after Settembrini will not shoot at him. That work is set in a Swiss sanatorium. Gustav von Aschenbach and Hans Castorp are characters created by, for 10 points, which German author of *Death in Venice* and *The Magic Mountain*?**

ANSWER: Thomas Mann

023-09-11-11115

15. **One side in this conflict made the controversial decision to transfer gold reserves to the Soviet Union in the "Moscow Gold" scandal. Americans fighting in this war served in the Abraham Lincoln Brigades. This war began with a coup that deposed Second (*) Republic prime minister Juan Negrin. One side in this conflict was the Fascist Falange, which called in the Condor Legion of the German Luftwaffe to bomb Guernica, a Basque town. For 10 points, name this war that resulted in the formation of a dictatorship led by Francisco Franco.**

ANSWER: the Spanish Civil War [or Guerra Civil de España]

026-09-11-11116

16. **This man was the hero of a war over the bakers of Lerne's right to sell cakes. This man's son meets a rascal who knows 63 ways to earn money and 214 ways to spend it. This figure built the Abbey of (*) Theleme, whose motto allowed everyone to do as they pleased. 17,913 cows were required to sate the thirst of this character in his infancy. This son of Grangosier (gran-GO-see-ay) and Gargamelle meets with characters like Friar John and Panurge. For 10 points, name this creation of Francois Rabelais, the father and companion of Pantagruel.**

ANSWER: Gargantua [do not accept "Pantagruel"]

026-09-11-11117

17. **Two versions of one of his works differ in the third movement, which alternately includes a C major peoration or a tranquil "Chorus mysticus." That work's third movement is named for Mephistopheles. This composer of the (*) *Faust Symphony* created twelve works that included a study in tremolo entitled "Chasse-Neige" and a work based on a Hugo poem, "Mazeppa." This composer of the *Transcendental Etudes* also wrote nineteen works based on gypsy melodies. For 10 points, name this composer of the *Hungarian Rhapsodies*.**

ANSWER: Franz Ritter von Liszt [or Ferencz Liszt]

022-09-11-11118

18. **This man's Secretary of State was William Marcy, who suggested that James Buchanan and John Mason should meet with Pierre Soulé to discuss purchasing Cuba. He was also president during the passage of the bill that overruled the (*) Missouri Compromise. Diplomats of this man issued the Ostend Manifesto, and he presided over the passage of the Kansas-Nebraska Act. For 10 points, name this man who served between Fillmore and Buchanan as the fourteenth president of the United States.**

ANSWER: Franklin Pierce

026-09-11-11119

19. **This man's dog Nevado died at the Battle of Carabobo, and he issued the Decree of War to the Death during his Admirable Campaign. This author of the *Letter From Jamaica* and *The Cartagena* (CAR-tuh-HAY-nuh) *Manifesto* attempted to succeed where Francisco de Miranda had failed. He summoned the Congress of Angostura in an effort to establish (*) Gran Colombia. This general won the battles of Pichincha and Boyaca for Ecuadorian and Colombian independence. For 10 points, name this great South American liberator.**

ANSWER: Simon Bolivar

015-09-11-11120

20. **The Jahn-Teller ("YAWN" TELL-er) effect is most commonly observed in transition metal complexes with this configuration. Though their molecular geometries are, respectively, square planar and square pyramidal, xenon tetrafluoride (TET-ruh-FLOOR-ide) and bromine pentafluoride (PEN-tuh-FLOOR-ide) both have this electron geometry. For 10 points, give this electron geometry of sulfur hexafluoride (HEX-uh-FLOOR-ide) and all other compounds with a central atom surrounded by (*) six atoms or lone pairs.**

ANSWER: octahedral [or octahedron; award 15 points even on a giveaway buzz before power mark]

003-09-11-11121

21. **One author from this nation wrote about a starving man who wanders the streets in *Hunger*. A play set in this country is about the wife of George Tessman, who once was courted by Eilert Lovborg. Another play set in this country is about a woman who forges her father's signature to get the money for (*) Torvald Helmer to travel. This country is home to the author Knut Hamsun. For 10 points, name this country that is the setting of *Hedda Gabler*, and a play about Nora, *A Doll's House*, by Henrik Ibsen.**

ANSWER: Kingdom of Norway [or Kongeriket Norge]

027-09-11-11122

1. This type of flow occurs when the velocity of individual molecules is parallel to the overall velocity of the fluid. For 10 points each:

[10] Name this type of flow that is named for the streamlined appearance of paths traced by particles dropped in the fluid.

ANSWER: **laminar** flow

[10] Laminar flow is the opposite of this other kind of flow, in which individual molecules move in various directions. This type of flow is responsible for bumpy stretches of airplane flights.

ANSWER: **turbulent** flow [or **turbulence**]

[10] Motion in turbulent flow is best described by this adjective, which denotes any nonlinear system with extreme sensitivity to initial conditions but is more often used to negatively describe unpredictability or confusion.

ANSWER: **chaotic** flow [or word forms such as **chaos**]

003-09-11-11201

2. The eighth day of this festival is called Shemini Atzeret, and in Israel Simhat Torah is also celebrated on the same date. For 10 points each:

[10] Name this holiday that begins on the 15th of Tishri, which is a harvest holiday that is called the “Feast of Booths.”

ANSWER: **Sukkoth** [or **Sukkos**]

[10] Sukkot is a holiday in this religion. Practitioners of this religion also celebrate the Maccabees miraculously having a lamp light for eight days during Hanukkah.

ANSWER: **Judaism**

[10] This Jewish holiday occurs on the 1st of Tishri and its liturgy includes the blowing of a shofar horn. It is a High Holiday celebrating the new year.

ANSWER: **Rosh Hashanah**

027-09-11-11202

3. Answer the following questions about a trigonometric function, for 10 points each.

[10] Name this law which states that the side lengths in a triangle are proportional to the values of a certain function of their opposite angles.

ANSWER: **sine** law [or **law of sines**]

[10] When the sine law is used to solve a triangle, it occasionally gives to distinct solutions, a case which is known by this name.

ANSWER: **ambiguous** case

[10] This series, named for a French mathematician, decomposes periodic functions into sine and cosine components.

ANSWER: **Fourier** series

024-09-11-11203

4. The title character names his savage companion Friday and teaches him to be a Christian. For 10 points each:

[10] Name this novel based on the story of a shipwrecked sailor named Alexander Selkirk.

ANSWER: **Robinson Crusoe**

[10] This author of *Robinson Crusoe* also wrote a picaresque novel called *Moll Flanders* whose title character was born in Newgate Prison.

ANSWER: Daniel **Defoe**

[10] In this novel, Defoe chronicles time spent in London during a the 1665 outbreak of the Black Death.

ANSWER: A **Journal of the Plague Year**

032-09-11-11204

5. Give the following about seminal paintings of the 1940s, for 10 points each:

[10] This 1942 painting by Edward Hopper shows four people in a diner late at night. It communicates the loneliness and isolation of urban living.

ANSWER: **Nighthawks**

[10] This Dutch practitioner of De Stijl produced the abstract *Broadway Boogie-Woogie* in 1943. It features a number of colorful, shimmering squares which, among other things, symbolize Manhattan's city lights.

ANSWER: Piet **Mondrian**

[10] This 1948 Andrew Wyeth work depicts the titular woman lying in a field. She is looking up at and apparently crawling towards a house off into the distance. Its real life subject suffered from paralysis.

ANSWER: **Christina's World**

052-09-11-11205

6. Sequoyah developed a syllabary for the language of this Indian nation. For 10 points each:

[10] Name this Iriquoian tribe which was one of the five civilized tribes. They were forced to march on the Trail of Tears, along with other southeastern tribes like the Choctaw.

ANSWER: **Cherokee** [or **Keetowah**; or **Tsalagi**]

[10] Those who marched on the Trail of Tears were forced to settle in the Indian territory, which eventually became this state north of Texas.

ANSWER: **Oklahoma**

[10] In a lawsuit filed against this state, it was ruled in 1832 that only the federal government, and not states, had control over Indian land. That case's plaintiff was named Worcester.

ANSWER: **Georgia**

027-09-11-11206

7. This work opens with a "Benediction" that describes the birth of the author. For 10 points each:

[10] Name this Symbolist poetry collection, which includes the poem "The Albatross" in its section "Spleen and Ideal."

ANSWER: *The* **Flowers of Evil** [or *Les* **Fleurs de Mal**]

[10] This poet of "The Balcony" and "The Vampire" wrote *The Flowers of Evil*.

ANSWER: Charles **Baudelaire**

[10] Charles Baudelaire, as well as the author of *A Season In Hell*, Arthur Rimbaud, were both authors from this country.

ANSWER: **France**

027-09-11-11207

8. Name these Russian politicians of the 1990s, for 10 points each.

[10] This Gorbachev ally and first democratically elected President of Russia led the country from the fall of the Soviet Union to New Year's Eve 1999.

ANSWER: Boris Nikolayevich **Yeltsin**

[10] On the last day of 1999, Yeltsin handed power to this former KGB agent, who remained as president until 2008 and is now prime minister in the cabinet of his protégé Dmitri Medvedev.

ANSWER: Vladimir Vladimirovich **Putin**

[10] This foreign minister for the last five years of the Soviet period became the president of Georgia upon that country's independence and remained in office until the 2003 Rose Revolution.

ANSWER: Eduard Amvrosiyevich **Shevardnadze**

019-09-11-11208

9. One class of people with this mental disorder are catatonic, meaning they lack almost all voluntary motor action. For 10 points each:

[10] Name this disorder, first named by Eugen Bleuler, which can also come in a "paranoid" form. Sufferers of this might hallucinate and have disordered thoughts or delusions.

ANSWER: **schizophrenia**

[10] Prozac is used to treat this condition, in which sufferers have a low feeling of self-worth. Its associated sadness lasts much longer than a normal period of mourning might.

ANSWER: **depression**

[10] This fictitious disorder is defined by sufferers pretending to be sick in order to gain attention. When someone pretends that someone they know is ill, that is called this syndrome "by proxy."

ANSWER: **Munchausen's** syndrome

027-09-11-11209

10. In June 2004, he defected to the U.S. by fleeing on a raft, less than a year after hitting a game-winning home run for Cuba in the Baseball World Cup. For 10 points each:

[10] Name this first baseman, who had a breakout year in 2009 with 34 home runs for the AL West champions.

ANSWER: Kendry **Morales** Rodriguez

[10] Morales plays for this team, which defeated the Giants in the 2002 World Series and now boasts Torii Hunter, Bobby Abreu, and Jered Weaver on its roster.

ANSWER: Los Angeles **Angels** of Anaheim [prompt on **Los Angeles**; prompt on **Anaheim**]

[10] 2009 saw this Angels veteran play mostly as a DH after spending his previous career in right field. This former Montreal Expo hit his four hundredth career home run during the 2009 season.

ANSWER: Vladimir Alvino "Vlad" **Guerrero**

019-09-11-11210

11. This synoptic gospel is addressed to Theophilus. For 10 points each:

[10] Name this third gospel, traditionally coming between Mark and John.

ANSWER: the Gospel According to **Luke**

[10] Luke the Evangelist, the traditional author of Luke's gospel, is also held to have written this New Testament book, which is the fifth book after the four gospels.

ANSWER: **Acts** of the Apostles

[10] Luke is one of the apostles to relate this parable, in which the Kingdom of God is compared to the title object, which is cast into a garden and waxes into a large tree in which the "fowls of the air" nest.

ANSWER: Parable of the **Mustard Seed** [prompt on partial answer]

026-09-11-11211

12. In 1959 oil and natural gas were discovered in the seafloor of this sea. For 10 points each:

[10] Name this sea in which Norway and the United Kingdom engage in offshore oil drilling.

ANSWER: **North Sea**

[10] The largest offshore wind farm in the world is in the North Sea, off the coast of Jutland in this country. It is the southernmost of the countries traditionally considered to be part of Scandinavia.

ANSWER: Kingdom of **Denmark** [or Kongeriget **Danmark**]

[10] This canal runs through Schleswig-Holstein (SHLESS-vig HOLE-stine) and connects the North Sea to the Baltic Sea. It is estimated to be the world's busiest artificial waterway.

ANSWER: **Kiel Canal**

003-09-11-11212

13. This theory was advanced by Georges Lemaitre, a Roman Catholic priest. For 10 points each:

[10] Name this theory George Gamow refined, which states that the universe exploded outward from a single infinitesimally small point.

ANSWER: **Big Bang** theory

[10] This theory developed by Fred Hoyle was the competitor to the Big Bang theory. It states that the universe should look the same in all directions, and that new matter is continuously generated as the universe expands.

ANSWER: **Steady State** theory [prompt on **continuous creation**; prompt on **Infinite Universe**]

[10] The universe's ultimate fate may be a "heat death," or it may be this collapse that would end in a singularity.

ANSWER: the **Big Crunch**

026-09-11-11213

14. This man was attacked in the polemical book *Guilty Men*. For 10 points each:

[10] Name this Prime Minister of Britain at the onset of World War II. He is best known for proclaiming "peace for our time" after making concessions to Hitler in the 1938 Munich Agreement.

ANSWER: Neville **Chamberlain**

[10] Chamberlain conceded this region of Czechoslovakia to Hitler's Germany in the Munich Agreement. Hitler argued that the high German population in this region justified its absorption into Germany.

ANSWER: **Sudetenland**

[10] This German foreign minister was appointed to his position the same year as the Munich Agreement. The next year, he signed a nonaggression pact with his Russian counterpart, Vyacheslav Molotov.

ANSWER: Joachim von **Ribbentrop**

052-09-11-11214

15. For 10 points each, answer these questions about an American poet.

[10] This poet's book *Ariel* contains such poems as "Tulips," "Lady Lazarus," and one in which the speaker sees the title character as a Nazi, "Daddy."

ANSWER: Sylvia **Plath**

[10] Sylvia Plath is best known for this novel about the struggles of Esther Greenwood, which opens during "the summer they executed the Rosenbergs."

ANSWER: *The* **Bell Jar**

[10] Plath wrote a collection titled *The Colossus*. Emma Lazarus's poem "The New Colossus" describes "huddled masses, yearning to breathe free" and commemorates this New York City landmark.

ANSWER: **Statue of Liberty**

024-09-11-11215

16. This country lost the 1896 Battle of Adowa against Italy. For 10 points each:

[10] Name this country that was invaded by Italy in the 1930s and split with Eritrea in 1991.

ANSWER: Federal Democratic Republic of **Ethiopia**

[10] Ethiopia was ruled from 1930 to 1973 by this emperor, who is revered by Rastafarians and was known as the Lion of Judah.

ANSWER: Haile **Selassie** I

[10] Ethiopia was one of the suspected locations of this mythical figure, a powerful Christian ruler who was the subject of several crusade era quests.

ANSWER: **Prester John**

015-09-11-11216

17. Name some Italian authors, for 10 points each.

[10] This poet was one of the first to use Italian as a literary language, penning sonnets to Laura found in his *Canzoniere*, or *Song Book*.

ANSWER: **Petrarch** [accept Francesco **Petrarca**]

[10] This semiotician wrote novels such as *The Name of the Rose* and *Foucault's Pendulum*.

ANSWER: Umberto **Eco**

[10] This writer's posthumously published magnum opus, *The Leopard*, tells of the change in Sicilian society through the eyes of the Salina family.

ANSWER: Giuseppe Tomasi, Eleventh Prince of **Lampedusa** [or Giuseppe **Tomasi**]

026-09-11-11217

18. Answer the following about assorted operas, for 10 points each.

[10] This minimalist composer produced an opera adaptation of *Waiting for the Barbarians*. He composed a "portrait trilogy," which includes *Einstein on the Beach*.

ANSWER: Philip Morris **Glass**

[10] This duo included Captain Corcoran and Little Buttercup in *H.M.S. Pinafore* and included "I am the very model of a modern Major-General" in *The Pirates of Penzance*.

ANSWER: Sir William Schwenck **Gilbert** and Sir Arthur Seymour **Sullivan** [accept in either order; prompt until both names are given]

[10] The aria "Vissi d'arte" is sung in one of his operas about Mario Cavaradossi and Baron Scarpia. This composer of *Tosca* depicted Mimi and Rodolfo in *La Boheme*.

ANSWER: Giacomo Antonio Domenico Michele Secondo Maria **Puccini**

020-09-11-11218

19. Galvanic ones can be used to make batteries. For 10 points each:

[10] Name these devices which can consist of two halves filled with electrolyte in which reduction and oxidation reactions occur.

ANSWER: electrochemical **cell**

[10] Reduction occurs at this electrode in an electrochemical cell.

ANSWER: **cathode**

[10] This equation named for a German allows one to calculate the voltage of an electrochemical cell under non-standard conditions.

ANSWER: **Nernst** equation

001-09-11-11219

20. This composer wrote “Traumerei” (trow-MAIR-eye) as part of his piano work *Scenes From Childhood*. For 10 points each:

[10] Name this composer of *Papillons*, along with his “Spring” symphony.

ANSWER: Robert **Schumann**

[10] Robert Schumann wrote articles under this pseudonym. It was used to represent Schumann’s impetuous side, and contrasted with the identity of his pseudonym Eusebius.

ANSWER: **Florestan**

[10] Schumann wrote one of this type of work for a cello in A minor. This kind of work is often in three movements and has a virtuosic soloist being accompanied by an orchestra.

ANSWER: **concertos**

027-09-11-11220

21. Each unit of this material has formula $C_6H_{10}O_5$. For 10 points each:

[10] Name this organic material, a linear chain of beta-1,4 linkages of D-glucose that is the central component of plant cell walls.

ANSWER: **cellulose**

[10] Cellulose is an oligosaccharide, much like this analogue of starch that stores many chains of glucose molecules.

ANSWER: **glycogen**

[10] This is a long-chain polymer of N-acetyl-glucosamine, a glucose derivative. It is the analogue of cellulose in fungi, where it is the central component of the cell wall.

ANSWER: **chitin**

026-09-11-11221