

Read the articles below then answer the questions by filling in the blanks

\$1,500 for 'naturally refined' coffee? Here's what that phrase really means.

Fancy a cup of coffee with beans plucked from an elephant's poop? That's the promise of one of the world's current priciest coffee options. Sold in two-serving packets for about \$150, the brew's served at luxury hotels and to VIP clients. **1.....D.....** To make the pricey brew, captive Asian elephants are fed a mix of coffee cherries and fruit, and their stomachs break down the plant matter through fermentation, stripping it of its bitterness, according to company founder Blake Dinkin, a Canadian who launched the venture in 2012. He currently works with the owners of seven elephants in northern Thailand's Surin Province to make his whole coffee line.

Dinkin advertises Black Ivory Coffee—the only major elephant poop coffee on the market—as having notes of “chocolate, cacao nibs, light peach, tamarind” and black tea, flavoured in part by what else is in the herbivore's stomach. The coffee's price has taken a leap over the years—from \$60 for a couple servings in 2012 to \$150. A full pound costs \$1,500. The pandemic boosted the company's sales and global interest: **2.....F.....** The product got a shout-out in a recent episode of Apple TV's drama “The Morning Show.”

As highlighted in the episode, it's now the world's “rarest coffee,” with production only amounting to about 500 pounds in 2023. More poo-to-brew options are garnering interest. **3.....G.....** Also, monkey parchment coffee—monkey-chewed (but not poed) coffee beans. Then there's the most well-known “naturally refined” coffee option: kopi luwak, which is sourced from the poop of cat-like creatures called civets native to Southeast Asia and sub-Saharan Africa.

Civet poop coffee has been around for decades—it was first reported in 1981—but the product continues to resonate and has even grown in popularity. One recent market analysis valued the kopi luwak coffee industry at \$6.5 billion in 2021 **4.....B.....** It was predicted that it would reach as much as \$10 billion by 2030, with growth particularly in Indonesia and India, among other locales.

“I think a large part of it is the novelty factor, having an interesting story to tell your friends,” says Neil D'Cruze, global head of wildlife research at London-based World Animal Protection, an international animal welfare nonprofit. Though each of the brews' main selling point is the avant-garde sourcing and beans free of the bitterness of the standard cup of joe, the details of the supply chain and potential animal welfare concerns may differ with each product. **5.....C.....**

Kopi luwak primarily comes from the Indonesian islands of Java, Sumatra, and Sulawesi, but it's widely available in the U.S., Europe, and across Asia. **6.....A.....** But many of the kopi luwak offerings come from captive animals, with inherent animal welfare and zoonotic disease risks if the animals are kept in cramped, stressful conditions. Some researchers suspected a species of civet was an intermediary for the COVID-19 virus jumping to people.

These solitary, short-legged mammals are often fed poor diets in captivity that may include only the coffee cherries, leaving them emaciated and ill, work by D'Cruze and others has found.

7.....^H..... . “If you give them only coffee berries that’s not a balanced diet. That will lead to health problems and, ultimately, death,” he says.

Answer the questions above by choosing the letter of the correct answer.

- A. The priciest kopi luwak offerings comes from wild civets that wander the forest and, as part of their natural diet, eat coffee cherries that are then excreted, collected, washed, and processed.
- B. One recent market analysis valued the kopi luwak coffee industry at \$6.5 billion in 2021.
- C. All require further scrutiny, D’Cruze says by email.
- D. A small amount is also sold online.
- E. Exotic coffee, often sourced from remote and unique locations around the world, is celebrated for its distinctive flavours and aromas.
- F. Direct-to-consumer sales of elephant poop coffee exploded when people were at home and eager to try something new, Dinkin says.
- G. There’s Brazil’s bird poop coffee, made from the washed and roasted coffee cherries gathered from the faeces of the jacu, an endangered South American bird.
- H. Those captive civets may only live two or three years, says Vincent Nijman, who directs wildlife trade research at Oxford Brookes University in the U.K

Food systems: supporting the triangle of food security

“Food security” embraces the many complex factors and systems that describe our relationship with food, including health, environmental, and economic outcomes. Imagine a food security framework as a triangle: On one side is the pressing need to properly feed more than eight billion people. Leaning against this is another side, the urgent need to protect the planet from climate change and biodiversity loss. 8.....^E..... The interactions comprising this triangle are so complex and interdependent that to achieve food security, we must maintain and improve all its sides, all the time. And the pressure is mounting.

Today, global food systems use almost half the world’s habitable land and around three-quarters of human water consumption, while generating more than a third of global greenhouse gas emissions (GHG). 9.....^B..... Meanwhile, more than a billion are classified as obese. As the population surges toward 10 billion – the estimation for 2050 - providing healthy diets for all in ways that won’t damage the environment, but will still support a resilient food chain, requires a holistic approach. Global food security means more than increasing production: growers, processors, packagers, distributors, policymakers, and consumers must work together to strengthen all three sides of the food security triangle.

10.....^G..... Traditionally, to feed more people you simply farmed more land, but this approach is no longer viable. Instead, we must make better use of existing farmland by boosting yields. With nearly two-thirds of agricultural land devoted to meat production, increasing the productivity of pastures is crucial. This might involve improving the quality of fodder, providing better veterinary care and land management, or even improving the animal breeds themselves. Science is also working to create plants that produce greater yields and are more resistant to pests, disease, and extreme weather.

Beyond this, there is a fundamental need for people everywhere to expand the range of foods they eat, making dietary choices that better support more equitable and sustainable food systems. Protein is essential for a healthy diet, but while it is often associated with meat, there are many other sources of protein to explore. 11.....^A..... These can be cultivated more readily and sold more affordably, boosting global access to a healthy diet.

Food processing and packaging also play essential roles in making nutritious food more readily available and helping to minimise food loss: globally, around 30 percent of food produced is wasted. As a leading food processing and packaging solutions company, Tetra Pak is committed to increasing global access to safe nutrition through innovative solutions. 12.....^H..... Quality and safety of perishable foods are preserved, making them available to consumers over vast distances, while also helping to reduce food waste. What's more, the aseptic cartons themselves are designed to be recyclable, and are usually made from around 70 percent paperboard.

To improve access to nutritious foods, collaboration is essential. Since 1962, Tetra Pak has been working with customers, stakeholders, governments, and NGOs to develop school feeding programs with the goal of improving the health and education of schoolchildren. 13.....^D..... Aseptic packaging is a part of this, keeping milk and other perishable foods safe at room temperature for up to six months—and providing more children access to a healthier diet.

All efforts to increase global access to healthy foods must be balanced with the need to protect the planet by minimising the carbon footprint and environmental impact across the entire food system. 14.....^C..... Moving away from tradition, hydroponics skips soil completely to grow crops in nutrient-rich water, often indoors where every aspect can be controlled to maximise yield. While relatively small-scale, this method offers the potential to grow some crops in previously difficult-to-farm places.

Answer the questions above by choosing the letter of the correct answer.

- A. Producers and consumers should be encouraged to embrace meat alternatives such as plant-based proteins, including nuts, beans, and seeds.
- B. Despite this, 828 million people go to bed hungry and as many as 2.4 billion struggle to get regular access to sufficient food.

- C. This requires a shift from intensive industrial agriculture to less destructive land management, including a reduced reliance on monoculture supported by chemical fertilisers and pesticides.
- D. This collaboration provides practical support and enables the sharing of expertise on best practices to ensure food safety and quality control.
- E. And underpinning both sides is the base of the triangle—the need to contribute to the livelihoods of people around the world working across the entire food supply system.
- F. Achieving food security and improved nutrition is integral to many of the United Nations Sustainable Development Goals (SDGs) and is commonly taught in schools.
- G. The first challenge is improving food access—getting enough nutritious food to everyone in a way that ensures food safety, while still promoting a healthy diet.
- H. Aseptic processing and packaging ensure that both food and packaging materials are free of harmful bacteria; this enables a product’s long shelf life without the need for preservatives or refrigeration.

The White Lung Syndrome

The term “white lung syndrome” refers to the whiteness that appears on an x-ray of the lungs of a patient with pneumonia. 15.....^F..... “What people have called white lung syndrome appears to be just standard pneumonia,” Wu says.

Pneumonia is the world’s leading cause of death for children under the age of five, and the leading cause of hospitalisation for adults in the United States, with over one million admissions per year; about 40,000 Americans die from the disease annually. Pneumonia, which can range from mild to life-threatening, is caused by inflammation within the tiny air sacs in the lungs. 16.....^C..... Pneumonia is an infection of the lower airways, specifically the tiny air sacs, called alveoli, which serves as the exchange point for delivering oxygen to the blood, and removing carbon dioxide. This infection can be triggered by various factors that initiate in the upper airway and then travel into the deeper parts of the lungs.

Some of the common symptoms for pneumonia include cough, shortness of breath, chest pain, and general fatigue. 17.....^A..... “That’s all that’s needed to diagnose pneumonia,” Wu says, adding that if a doctor is still unsure, they can also order an x-ray of the lungs, which will confirm the diagnosis.

The four main types of pneumonia that are characterised based on the cause: bacterial, viral, fungal, and hospital-acquired.

18.....^E..... . “Most pneumonias don’t ultimately get a diagnosis” of what is causing it. Instead, doctors will treat pneumonia based on a patient’s symptoms and their medical history, using this information to determine the best course of treatment.

Bacterial pneumonia, which is the most common type, is caused by bacteria, which means that it is easily treated with an antibiotic. **19**.....**B**..... “The earlier the treatment, the better,” Wu says. There is also a vaccine that protects against the most prominent bacterial strain that causes pneumonia, and is approved for certain groups, including patients over the age of 65 and those with certain pre-existing conditions.

Viral pneumonia, which is less common, is caused by a virus, such as influenza, SARS-CoV-2—the virus that causes COVID-19—or RSV, a respiratory virus that usually causes mild, cold-like symptoms. **20**.....**G**..... A viral infection can also lead to bacterial pneumonia by weakening a patient’s immune system, leaving them vulnerable to a secondary infection. Although no virus can be treated with an antibiotic, there are vaccines that can help prevent infection: the yearly flu shot, COVID vaccine, and for those who are eligible, the new RSV vaccine.

21.....**D**..... Fungal pneumonias tend to affect people with autoimmune disorders, patients who are undergoing chemotherapy, or other chronic conditions that can affect a person’s immune system, says Lucas Kimmig, a pulmonologist at University of Chicago Medicine. Fungal pneumonias require a different treatment strategy and can often be more serious, due to both the complications of pneumonia, as well as the patient’s other underlying conditions.

Answer the questions above by choosing the letter of the correct answer.

- A.** To diagnose pneumonia, a doctor will use a stethoscope to check a patient’s breathing, listening for a characteristic crackling sound, similar to the sound of crumpling paper, Wu says.
- B.** For many patients, treating pneumonia with an antibiotic will help resolve their symptoms, and help them start to feel better within days of starting treatment.
- C.** It can lead to deadly consequences—including a lack of oxygen and blood infections—if left untreated.
- D.** Fungal pneumonias are rare, and usually found in patients with pre-existing conditions, such as a compromised immune system.
- E.** For the most part, “there’s no way to tell if pneumonia is being caused by a bacterium, a virus, or a fungi just by examination,” Wu says.
- F.** Normally, lungs appear dark on an x-ray, but when inflammation or mucus is present, these can appear as white patches or spots and is a hallmark often used to diagnose pneumonia.
- G.** Many of these viral infections begin in the upper airways, then travel down into the lungs.
- H.** Did you know that the word "pneumonia" comes from the Greek word "pneumon," which means "lung"?

The quest for the Holy Grail began long before King Arthur

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The Holy Grail has occupied a central place in the Western imagination for millennia, whether as a sacred relic, a lost treasure, or an object of unattainable perfection. But the Grail did not begin as any of those things. Rather it was a simple cup at the Last Supper. **22.....C.....** Written around A.D. 53, Paul's words are heard every Sunday by many Christian worshippers around the world: "In the same way, after supper he took the cup, saying, 'This cup is the new covenant in my blood; do this, whenever you drink it, in remembrance of me'" (1 Corinthians 11:25).

The Gospels of Mark, Matthew, and Luke also describe how the soon-to-be crucified Jesus bids his disciples to drink wine from a cup as a communal ritual. (The Gospel of John makes no mention of it.) **23.....G.....** The later Gospels of Matthew and Luke also present the key elements of Mark's account.

As Christianity grew and spread, the miraculous process by which bread and wine become the body and blood of Christ developed into the doctrine of transubstantiation. This belief was widespread in Christian Europe by the 12th century, and the vessels that were part of these Holy Communion ceremonies became venerated themselves. **24.....E.....** Dubbed the Holy Grail, the cup's whereabouts, protectors, and powers were a favourite topic of mediaeval authors. The search for the Grail and the contest to possess it became the basis for a rich tradition of literature and storytelling that would last for centuries.

The fate of the original chalice from the Last Supper is unknown, but relics associated with Jesus began to surface shortly after the Roman emperor Constantine I converted to Christianity. **25.....B.....** Around the year 325, shortly after the religion was recognized by the Roman Empire, Helena (later canonised as a saint) made a pilgrimage to the Holy Land in search of early Christian relics and sacred sites.

Among the stops on her tour was Jerusalem, but the city no longer resembled the one when Jesus lived. Roman legions had razed the city in A.D. 70 following the brutal suppression of a rebellion in Judea. Decades later, this time under the leadership of Hadrian, they again ravaged the city in 135 to crush a new revolt led by Bar Kokhba. Helena was undeterred in her identification and mapping of holy sites. **26.....H.....** As a result of their "archaeological" investigations, specific places began to be associated with events surrounding the life and death of Jesus as described in the Bible.

Helena is credited with finding several relics, most notably the True Cross on which Jesus was crucified. Other items associated with her pilgrimage were a nail from the Crucifixion and the seamless robe Jesus wore on the cross. Helena also identified the tomb where Jesus was buried, the future site of the Church of the Holy Sepulchre, built on Roman orders. From that point on, relics would play a fundamental role in Christian worship, especially those related to the Passion, such as the Crown of Thorns, the Holy Lance that pierced Jesus' side, and the Holy Sponge used to moisten Jesus' lips during his suffering. **27.....A.....**

The first mention of the existence of an actual Grail relic comes in 570 in the form of an anonymous travelogue to the Holy Land, written by a man scholars call the pilgrim of Piacenza. **28.....D.....** There is also the onyx cup which He blessed at the [last] supper, and many other wonders." Over the next few centuries, references to the chalice dwindled considerably, even as veneration of relics increased in mediaeval Europe.

Answer the questions above by choosing the letter of the correct answer.

- A. Of all the objects associated with Christ, the chalice used at the Last Supper would prove the most elusive.
- B. His mother, Helena, was a Christian herself and believed to be instrumental in her son's conversion.
- C. The earliest reference to it can be found in Paul's First Letter to the Corinthians, the basis of the sacrament of the Eucharist.
- D. In Jerusalem he saw "the sponge and the reed, about which we read in the Gospel; we drank water from this sponge.
- E. It was around this time that the original cup used by Jesus at the Last Supper began to appear in literature.
- F. The chalice, often made of precious metals and sometimes adorned with jewels, symbolises the Last Supper.
- G. The oldest Gospel account of the Last Supper is that of Mark, written sometime after Paul's epistle but before the destruction of the Jewish Temple in A.D. 70.
- H. She had the invaluable help of Eusebius of Caesarea, a bishop and historian from Palestine whose Ecclesiastical History laid the foundations for the official history of Christianity.

American crocodiles are spreading north in Florida. That's a good thing.

On a canal bank lined with palm trees off the Banana River in Satellite Beach, Florida, in October, a 10-foot-long American crocodile basked in the midday sun, its toothy jaws opening as neighbours looked on from their docks.

The reptile had become the subject of gossip and local news, because until this year, most residents in the coastal communities east of Orlando had never seen one, according to the Florida Fish and Wildlife Conservation Commission. Some were frightened. More were curious. **29**..... State trappers wrangled the male crocodile, taped his jaws shut, and loaded him into a transport vehicle bound for southern Florida, where he was released. American crocodiles typically live in the mangrove estuaries in and around the Everglades—a good 200 miles from Banana River. Although the historic range of American crocodiles reaches up Florida's coasts as far as the Canaveral National Seashore, northeast of Orlando, massive habitat loss had virtually eliminated the species from the north.

But over the past few years, verified sightings of American crocodiles north of the Everglades have climbed, and experts believe the reptiles may be reclaiming at least some of their homeland. Though no one knows how many crocodiles live in northern Florida, the increase in sightings

suggest the animals will begin breeding soon, experts say. **30**.....^F.....
American crocodiles reach about 15 feet in length, while the average American alligator seldom exceeds 10 feet. The best way to tell the species apart is by the shape of their snouts: Alligators have a rounder appearance, while crocodiles' noses narrow to a point.

Like their smaller alligator cousins, the American crocodile was declared endangered in the 1970s by the U.S. Fish and Wildlife Service. **31**.....^H..... While the International Union for Conservation of Nature lists the American crocodile as vulnerable overall, the FWS downlisted the species—in Florida only—to threatened in 2007. "It's an endangered species success story," says Frank Mazzotti, an ecology professor and American crocodile expert at the University of Florida. The species' return is positive, especially because the apex predators are vital to the coastal wetlands, helping keep prey animals in check, he says.

They're also not a threat to people. "Due to the American crocodile's shy and reclusive nature, conflicts between them and people are extremely rare in Florida, with only one [non-fatal] bite incident ever having been documented," says Lauren Claerbout, a spokesperson for the state wildlife commission. **32**.....^A..... Roads and dikes staunched and diverted the Everglades' natural southward flow, rendering many downstream habitats inhospitable. These habitat changes have posed a bigger problem for crocodiles than for their hardier relatives.

While alligators have made themselves at home in just about any water body in Florida, including swimming pools, crocodiles are not as flexible, and need mangrove forests to thrive. Though once the dominant coastal habitat in southern Florida, many mangrove forests have been destroyed by construction and hurricane activity supercharged by climate change. **33**.....^E.....

34.....^G..... Instead, their data indicates that the reptiles are flourishing in habitats outside the Everglades region, such as protected areas around Biscayne Bay south of Miami and Crocodile Lake National Wildlife Refuge on Key Largo. They're doing so well, in fact, that the animals are setting off for new territories.

"It's the same thing as with the human population," says Mazzotti. **35**.....^D..... A large-scale effort to safeguard mangrove wetlands, particularly as state and federal protected areas, has boosted the species' numbers. In 1996, Florida enacted a law that bans "direct human damage" to mangroves, and various state agencies and volunteer organisations have replanted mangrove forests over the years.

Answer the questions above by choosing the letter of the correct answer.

- A.** Just like American alligators, American crocodile populations in Florida took a downturn largely due to habitat destruction.
- B.** Despite this power, crocodile jaws are not designed for chewing. Instead, they swallow their prey in large chunks or even whole.
- C.** Nonetheless, the commission decided it was in everyone's best interest to intervene.

- D. Many Floridian coastal estuaries have lost as much as 60 percent of their mangrove forest cover in the past century.
- E. “When you have a healthy population of animals, they have to find more areas to occupy, and these crocodiles are moving up the coast in response to that.”
- F. Florida is the only place in the world where alligators and crocodiles coexist in the wild.
- G. For instance, Everglades National Park and Florida Bay, to the park’s south, still experience disrupted flows, which is why crocodiles are scarce there, according to data collected by CrocDocs, a multidisciplinary team at the University of Florida.
- H. Thanks to mangrove forest conservation, their numbers have risen dramatically from an estimated all-time low of around 150 to around 2,000 individuals in the state of Florida.

How these parrots went from the tropical jungle to the concrete jungle

Temple City, California, is an unassuming city east of Pasadena that’s home to the usual busy thoroughfares, shopping malls, and residential neighbourhoods that one expects in densely developed Los Angeles County. And in addition to people and their pets, Temple City hosts a surprising avian population.

At dusk, hundreds of wild parrots, some in large flocks, some singly or in pairs, approach from all directions, squawking loudly and circling overhead before settling on a variety of roosts. The brightly coloured birds create a spectacle as they land in trees, on power lines, and on cell towers, but what makes them so distinctive is the racket they make. In the dying light of a recent November evening, I watched as a particularly large flock of green parrots settled into a nearby tree, and thus camouflaged disappeared among the branches. **36**.....^G..... The commotion made it easy to understand why a gathering of parrots is called a pandemonium. The squawking sounded chaotic and random, then suddenly the birds went silent, as if a switch had been flipped.

“Look,” said Luke Tiller, my parrot guide and the chapter president of the Pasadena Audubon Association as he pointed at a distinct speck in the sky. “A falcon.” Tiller explained that flock behaviour offers protection to the parrots. **37**.....^B..... Additionally, the sheer size of the flock deters predators like falcons and hawks from targeting the parrots. As soon as the falcon flew off, the parrots resumed their raucous cries.

38.....^D..... Though, seemingly at odds with the dense urban environment. It also begged the question: How did these parrots, and others like them across Los Angeles, come to live so far from their native habitats in an environment that is completely different?

Like most good Hollywood stories, the origin of Los Angeles’s thriving wild parrot population is debated and shrouded in myth. Some trace it back to the closure of Busch Gardens Van Nuys in the 1970s, which could have resulted in the release of captive birds into the city environment.

39.....^A.....

“My guess is there’s probably a kernel of truth in most of those stories,” says Jamie Gilardi, the executive director of World Parrot Trust. “I don’t think anyone ever did it intentionally. Parrots are valuable, so they’re probably accidental releases.” 40..... H No extant species of parrot has lived in the continental United States since the native Carolina Parakeet went extinct over 100 years ago. The pet trade in one form or another brought these birds to Los Angeles.

Parrots are popular household pets, and some can live to be 80 years old. With over 30 species of parrots currently living in the Los Angeles area, it’s likely that pet birds have escaped over the years and made their way to flocks where they found mates and reproduced. 41..... C The parrots’ main impact has been to amuse or annoy people during the raucous overflights of large flocks. However, due to the severe decline of one species in its native landscape, there may be an important second act for L.A.’s parrots.

The most commonly seen parrot in Los Angeles is the red-crowned parrot, which is native to a small region of northeastern Mexico. 42..... F The birds have been red-listed by the International Union for Conservation of Nature as an endangered species.

Answer the questions above by choosing the letter of the correct answer.

- A. There are also unconfirmed stories of mass parrot releases during the 1992 riots, as well as tales of parrots being freed during a fire at a pet store in Pasadena in the 1990s.
- B. Individual parrots alert the flock to danger through vocalisations, and many birds means many watchful eyes.
- C. Unlike many non-native species, L.A.’s parrots are relatively benign and haven’t displaced native birds, and therefore aren’t considered invasive by the state of California.
- D. Witnessing the parrots returning to their evening roost was a startling and captivating experience.
- E. Interestingly, while parrots appear vividly colourful to us, their feathers can look even more spectacular under ultraviolet light, which is visible to other parrots.
- F. Native populations of these birds have been decimated by the illegal pet trade and habitat loss, declining by 95 percent.
- G. Out of sight, the overwhelming cacophony of the birds seemed to come from everywhere and nowhere at once.
- H. The parrots certainly didn’t make it to Los Angeles on their own.