

In 1911, the Mona Lisa, displayed at the Louvre Museum, came to global stardom when it fell victim to one of the most notorious art thefts in history. For two years, the whereabouts of Leonardo da Vinci's masterpiece remained unknown. Then, in November 1913, Vincenzo Peruggia, the thief, contacted an art dealer in Italy, offering to return the painting for a reward of 500,000 lire. Peruggia had moved to Paris in 1908 and had worked at the Louvre for some time. Disguised in a white smock worn by Louvre employees, he hid inside the gallery until it closed for the night. The next morning, he removed the painting from its frame and concealed it under his smock, casually walking out when the museum reopened. The theft was brilliantly simple—dressed as an employee, Peruggia attracted no suspicion and was long gone by the time the theft was discovered. He was eventually arrested, but served only eight months in prison due to a psychiatrist's testimony that he was 'intellectually deficient'.

The underlined word 'stardom' in the passage is closest in meaning to ----.

- A) change B) fame
- C) doubt D) perception
- E) search

Peruggia did not attract any suspicion as the thief of the Mona Lisa because ----.

- A) no one knew the location of the painting for two years following the theft
- B) he had moved to Paris in 1908 and began seeking employment
- C) he demanded 500,000 lire from an art dealer in exchange for the painting
- D) authorities doubted his guilt due to his perceived intellectual deficiency
- E) he was dressed in his work attire when he exited the museum with the painting

What is the author's attitude towards Peruggia's eight-month prison sentence?

- A) Suspicious B) Sarcastic
- C) Supportive D) Disapproving
- E) Impartial





Social media websites emerged during a time of increasing human loneliness, which initially made their promise of greater connection very appealing. A recent study revealed a complex relationship between loneliness and social networking. Social media users experienced slightly lower levels of social loneliness (the feeling of not being connected with friends) but significantly higher levels of family loneliness (the feeling of not being connected with family). This could be because social networking encourages more interaction with people outside our households at the expense of family relationships, or it could be that individuals with unhappy family relationships turn to social media for companionship. The concerns that social media is distancing us from each other and increasing loneliness highlight the anxieties these platforms have created. In reality, social media has shown that a connection is not the same as a bond and that instant, widespread connection does not necessarily lead to a happier, better world.

According to the passage, what made social media so appealing?

- A) It linked people from diverse backgrounds to enhance their social experiences.
- B) It helped family members to deepen their bonds with each other.
- C) It promoted happiness by allowing people to form new social connections.
- D) It provided greater connection during a period when people were experiencing significant loneliness.
- E) It boosted the self-confidence of introverts by encouraging them to reach out to new people.

According to the passage, social networking ----.

- A) causes people to spend a majority of their time on electronic devices
- B) can result in isolation within family relationships
- C) hinders people from addressing challenges in their relationships
- D) might cause people to have a more limited perspective of the world
- E) leads to mutual misunderstandings in relationships

What is the author's main purpose?

- A) To provide examples of how social media harms close relationships
- B) To emphasize the fundamental human need for connection with others
- C) To explain the reasons behind social media's widespread appeal
- D) To demonstrate that social networking does not guarantee happiness
- E) To outline the methods for making friends through social networking





Humanoid robots, often known as androids in the realm of science fiction, are crafted to imitate human form. Over centuries, these basic humanoid automatons have undergone refinement to better emulate our appearance and actions. Among the earliest documented instances is Leonardo da Vinci's mechanical knight, which operated through a system of pulleys and cables, enabling it to stand, sit, and maneuver its arms independently. Cloaked in armor reminiscent of a medieval knight, da Vinci's creation, though rudimentary by contemporary standards and devoid of artificial intelligence or remote control, showcased groundbreaking innovation in the 15th century. Da Vinci's penchant for employing pulleys. weights, and gears extended to various inventions, notably his self-propelled cart, often regarded as an early prototype of a robot. His foray into robotic design culminated in the creation of the robot knight, commissioned for a royal event in late 15th-century Milan. Da Vinci's original schematics for the robot knight continue to serve as blueprints in modern robotics, influencing developments even within organizations like NASA.

According to the passage, which statement about humanoid robots is accurate?

- A) They are required to possess artificial intelligence and other mechanisms to qualify as robots?
- B) They have undergone modifications over time to better resemble humans?
- C) They have been poorly documented throughout history?
- D) They are significantly different from science fiction androids?
- E) They have only recently started to emerge?

It is stated in the passage that da Vinci's robot ----.

- A) attracted more attention than his self-propelled cart at a royal event in Milan
- B) was armored for potential military use
- C) was history's first example of artificial intelligence
- D) was capable of physical movements through various mechanisms
- E) lacked detailed documentation of its design, giving it a primitive appearance

It can be understood from the passage that da Vinci's design of the robot knight proves its practicality as it ----.

- A) has spurred a surge in humanoid robot production rates
- B) is still considered sophisticated even by contemporary standards
- C) was constructed using ahead-of-its-time technology
- D) has served as a blueprint for modern robotics
- E) has advanced artificial intelligence technology





In the 1900s, birds were identified with string tags around their legs, bearing handwritten codes. By the 1940s, radar was employed to study migrating animals, followed by sonar in the 1950s. Over the past three decades, scientists have adopted satellite technology for animal tracking. Recent advancements in battery tech and the integration of solar panels have led to smaller and more efficient tracking transmitters. Typically, the upper limit for the weight of these devices is around 3% of the animal's weight, with the lightest transmitters developed weighing just 0.6g. In addition to direct methods, researchers use indirect techniques like 'proximity sensors,' emitting electromagnetic radiation to monitor bats without physical contact, aiding in disease spread assessment. Other noninvasive methods include temperature and CO level checks, drones equipped with cameras for periodic animal surveillance, and the use of image recognition software with cameras placed near nests and hives to count individual animals.

It is clearly pointed out in the passage that tracking animals ----.

- A) has never been as effortless as it was during the emergence of radar technology
- B) has progressively increased in efficiency since the early 20th century
- C) involved the use of handwritten identification codes between the 1940s and 1950s
- D) has prompted concerns among researchers regarding the well-being of animals
- E) was hindered during migration by limitations in radar technology

The passage indicates that the weight of tracking transmitters ----.

- A) has emerged as a notable concern since the implementation of solar panels.
- B) holds particular significance, especially in the tracking of migrating animals.
- C) must not exceed a specific limit determined by the animal's weight.
- D) influences the mobility of larger animals to a greater extent than smaller ones.
- E) remains under scrutiny regarding its impact on trackability.

Besides tracking transmitters, the passage mentions that ----.

- A) alternative methods not involving equipment placement on animals are also utilized
- B) young researchers are exploring less invasive options
- C) indirect techniques are employed beyond just tracking bats or other flying creatures
- D) observation with cameras for data collection is a prevalent approach
- E) future adoption of motion-sensitive cameras may depend on advancements in cost-effective technology





In American archaeology, a longstanding question revolves around the identity of the earliest inhabitants of the Americas. Traditionally, it was believed that the Clovis culture, originating from Siberia around 13,000 years ago, represented the earliest settlers. However, recent archaeological findings challenge this notion. Discoveries at the Gault site in central Texas provide compelling evidence for an earlier human presence in the Americas, along with the existence of an unexpected tool tradition predating Clovis culture. Stone tools unearthed at the Gault site, including projectile points, blades, and flake tools, date back as far as 20,000 to 16,000 years ago, surpassing the age of any known Clovis spear points. Tom Williams of Texas State University highlights the sophistication of this ancient toolkit, indicating a population well-adapted to their environment.

According to the passage, the Clovis culture ----.

- A) had individuals arriving in North America from Siberia even prior to 13,000 years ago.
- B) traditionally held the designation by scholars as the initial inhabitants of the Americas.
- C) engaged in a presumed rivalry with earlier American cultures regarding tool sophistication.
- D) exhibited notable disparities from their ancestors regarding tool manufacturing methods.
- E) previously linked to migration from Siberia, a belief challenged by recent findings.

The archaeological findings discussed in the passage ---

- A) did not entail the discovery of a novel toolkit utilized by the Clovis people 20,000 years ago
- B) have not substantiated the notion that the forebears of the earliest Americans were driven out of Siberia
- C) are likely to prompt a reassessment among scientists regarding the identities of the earliest Americans
- D) indicate that the Clovis people might have developed a sophisticated tool tradition much earlier than previously believed
- E) were uncovered by researchers who had long speculated that the earliest Americans inhabited the period between 20,000 and 16,000 years ago

The passage primarily discusses ----.

- A) The tools utilized by early inhabitants of the Americas
- B) The predecessors of the Clovis culture
- C) The evolution of tool-making practices within the Clovis culture
- D) Fresh perspectives on the early inhabitants of the Americas
- E) Modern archaeological methods for dating ancient tools

