A face — or 5,000 — in the crowd

Student-created	Required (bold)

In the first study of its kind, scientists discovered that humans recognize an amazing 5,000 faces. People can recall everyone from family and friends to strangers on the subway and public figures on the news. The study was announced on Wednesday, October 10.

Through most of history, humans lived in small groups of a hundred or so individuals, a pattern that has changed drastically in recent centuries.

The study was done by scientists at England's University of York. They found that our ability to recognize faces allows us to process the thousands of people we meet in busy social environments, on our smartphones and on our television screens every day.

Identifying Friends, Colleagues And Celebrities

"In everyday life, we are used to identifying friends, **colleagues** and celebrities, and many other people by their faces," Rob Jenkins said. He is a researcher from York's Department of Psychology.

"But no one has established how many faces people actually know."

The study was published in the science journal the Proceedings of the Royal Society B.

Jenkins and his team asked participants to write down as many faces as they could remember from their personal lives.

The volunteers were then asked to repeat the memory exercise with people they recognized but did not know personally.

Thousands Of Images

They were also shown thousands of images of famous people and asked which ones they recognized. They were shown two photos of each to ensure consistency.

The team found an enormous range of the number of faces each participant could recall, roughly 1,000 to 10,000.

"We found that people know around 5,000 faces on average," Jenkins said. He said that our ability to tell just dozens of people apart also allows us to remember thousands of individuals.

"It seems that whatever mental **apparatus** allows us to **differentiate** dozens of people also allows us to differentiate thousands of people."

The study may also help scientists better understand cases of mistaken identity.

"Psychological research in humans has revealed important differences between unfamiliar and familiar face recognition," said Jenkins.

"Unfamiliar faces are often misidentified. Familiar faces are identified very reliably, but we don't know exactly how."

The team said it was focused on how many faces humans actually know. However, they said it might be possible for some people to continue learning to recognize an unlimited number of faces, given enough practice.

Brain's Limitless Capacity

They pointed out that the brain has an almost limitless capacity to memorize words and languages. What limits people instead is study time and

motivation.

The range of faces recognized by participants went far beyond what may have been **evolutionarily** useful. For thousands of years, humans would likely have met only a few dozen people throughout their lives.

Jenkins said it was not clear why we developed the ability to distinguish between thousands of faces in the crowd.

"This could be another case of 'overkill' that is sometimes seen in nature," he said.

"The venom of some spiders can kill a horse, even though the spider has no need to eat a horse."

1. Which section from the article suggests that recognizing thousands of faces might not be that useful of a skill?
   a) Introduction [paragraphs 1-3]
   b) "Identifying Friends, Colleagues And Celebrities"
   c) "Thousands Of Images"
   d) "Brain's Limitless Capacity"
2. Read the following sentences from the article.
   1   The team found an enormous range of the number of faces each participant could recall, roughly 1,000 to 10,000.
   2   "It seems that whatever mental apparatus allows us to differentiate dozens of people also allows us to differentiate thousands of people."
   3   The team said it was focused on how many faces humans actually know.
   4   Jenkins said it was not clear why we developed the ability to distinguish between thousands of faces in the crowd.

   Which two sentences taken together provide the BEST evidence to support the idea that scientists do not fully understand how the human brain recognizes faces?
   b) 1 and 2
   c) 1 and 3
   d) 2 and 4
   e) 3 and 4
3. Which answer choice describes two CENTRAL ideas in the article?
   a) A new study suggests that humans have the ability to recognize thousands of faces, but scientists are not yet clear on why or how facial recognition works.
   b) Humans did not always need to recognize so many faces because they lived in small groups. Now, with busy cities and technology, humans need to know more faces.
   c) A new study found that humans range greatly in their ability to recognize faces, but scientists believe that the brain has an unlimited capacity to learn faces as long as it is trained.
   d) Humans have evolved from the ability to only recognize a few hundred faces to the ability to recognize a few thousand. This could be helpful when solving crimes.
4. Read the following two paragraphs from the article.

   Jenkins and his team asked participants to write down as many faces as they could remember from their personal lives.

   They were also shown thousands of images of famous people and asked which ones they recognized.

   How is the CENTRAL idea developed in these two paragraphs?
   a) The two paragraphs suggest that humans easily recognize celebrities.
   b) The two paragraphs explain how the facial recognition study worked.
   c) The two paragraphs prove that humans remember many faces.
   d) The two paragraphs describe the reason why Jenkins did the study.