

WHICH HAND DID THEY USE?

READING PRACTICE SETS

COMPILED FOR YOU BY TERRA NOVA ENGLISH LANGUAGE CENTER



TOEFL iBT READING PRACTICE SET

Directions: Read the passage and answer the questions. Give yourself 18 minutes to complete this practice set.

WHICH HAND DID THEY USE?

- 1 We all know that many more people today are right-handed than left-handed. Can one trace this same pattern far back in prehistory? **[A]** Much of the evidence about right-hand versus left-hand dominance comes from stencils and prints that have been found in rock shelters and caves located in France, Spain, Turkey, Australia, Indonesia, Argentina, and South Africa. **[B]** When a left hand has been stenciled, this implies that the artist was right-handed, and vice versa. **[C]** Even though the paint was often sprayed on by mouth, one can assume that the dominant hand assisted in the operation. One also has to make the assumption that hands were stenciled palm downward – a left hand stenciled palm upward might of course look as if it were a right hand. **[D]** Of all the stencils found in the Caves of Gargas, located in the Pyrenees region of France, 136 have been identified as left hands, and only 22 as right hands. Therefore, about 27,000 years ago, when the stencils were made, right-handedness was heavily predominant.
- 2 Cave art furnishes other types of evidence of this phenomenon. **Most engravings, for example, are best lit from the left, as befits the work of right-handed artists, who generally prefer to have the light source on the left so that the shadow of their hand does not fall on the tip of the engraving tool or brush.** In the few cases where an Ice Age figure is **depicted** holding something, it is mostly, though not always, in the right hand.
- 3 Clues to right-handedness can also be found by other methods. Right-handers tend to have longer, stronger, and more muscular bones on the right side, and Marcellin Boule, a famous French paleontologist, geologist, and physical anthropologist, as long ago as 1911 noted that the La Chapelle-aux-Saints Neanderthal skeleton, estimated to be about 60,000 years old, had a noticeably stronger right upper arm bone than the left. Similar observations have been made on other Neanderthal skeletons such as La Ferrassie I and Neanderthal itself.
- 4 Fractures and other cut marks are another source of evidence. Right-handed soldiers tend to be wounded on the left. The skeleton of a 40- or 50-year-old Nabatean warrior, buried 2,000 years ago in the Negev Desert, Israel, had multiple healed fractures to the skull, the left arm, and the ribs.
- 5 Tools themselves can be revealing. Long-handed Neolithic spoons of yew wood preserved in Alpine villages dating to 3000 B.C. have survived. The signs of rubbing on their left side indicate that their users were right-handed. The 17,000-year-old fossilized rope fragments found in the French cave of Lascaux in 1953 clearly indicate that the cord was twisted from three strands of vegetable fiber spiraling to the right, and was thus braided by a right-hander.
- 6 Occasionally scientists can determine whether stone tools were used in the right hand or the left, and it is even possible to assess how far back this feature can be traced. In stone toolmaking experiments conducted in the 1980s, Nicholas Toth, an American archaeologist and paleoanthropologist, a right-hander, held the core (the stone that would become the tool) in his left hand and the hammerstone in his right hand. As the tool was made, the core was rotated clockwise, and the flakes, removed in sequence, had a little crescent of cortex (the core's outer surface) on the side. Toth's knapping produced 56 percent flakes with the cortex on the right, and 44 percent left-oriented flakes. A left-handed toolmaker would produce the opposite pattern. Toth applied these criteria to the similarly made pebble tools from a number of early sites at Koobi Fora, Kenya, probably made by *Homo habilis*, who inhabited parts of sub-Saharan Africa between roughly 2.1 and 1.5 million years ago. At seven sites, he found that 57 percent of the flakes were right-oriented, and 43 percent left, a pattern almost identical to that produced today.
- 7 About 90 percent of modern humans are right-handed: we are the only mammal with a preferential use of one hand. The part of the brain responsible for fine control and movement is located in the left cerebral hemisphere, and the aforementioned findings suggest that the human brain was already asymmetrical in its structure and function not long after 2 million years ago. Among Neanderthals of 70,000-35,000 years ago, Marcellin Boule noted that the La Chapelle-aux-Saints individual had a left hemisphere slightly bigger than the right, and the same was found for the brains of specimens from Neanderthal, Gibraltar, and La Quina.

1. It can be inferred from paragraph 1 that even when paint was sprayed by mouth to make a hand stencil
 - (A) there was no way to tell which hand was stenciled
 - (B) the stenciled hand was the weaker hand
 - (C) the stenciled hand was the dominant hand
 - (D) artists stenciled more images of the dominant hand than they did of the weak hand

2. Which of the sentences below best expresses the essential information in the highlighted sentence in paragraph 2? Incorrect choices change the meaning in important ways or leave out essential information.
 - (A) Right-handed artists could more easily have avoided casting shadows on their work, because engravings in prehistoric caves were lit from the left.
 - (B) The tips of engraving tools and brushes indicate that these instruments were used by right-handed artists whose work was lit from the left.
 - (C) The best lighting for most engravings suggests that they were made by right-handed people trying to avoid the shadow of their hands interfering with their work.
 - (D) Right-handed artists try to avoid having the brush that they are using interfere with the light source.

3. The word **depicted** in the passage is closest in meaning to
 - (A) identified
 - (B) revealed
 - (C) pictured
 - (D) imagined

4. All of the following are mentioned in paragraphs 1 and 2 as evidence of right-handedness in art and artists EXCEPT
 - (A) the ideal source of lighting for most engravings
 - (B) the fact that a left hand stenciled palm upward might look like a right hand
 - (C) the prevalence of outlines of left hands
 - (D) figures in prehistoric art holding objects with the right hand

5. According to paragraph 3, the La Chapelle-aux-Saints Neanderthal skeleton can be identified as right-handed because
 - (A) other Neanderthal skeletons found nearby are also right-handed
 - (B) the right arm bone is stronger than the left
 - (C) it is similar to skeletons of La Ferrassie I and Neanderthal
 - (D) the right side of the skeleton shows less evidence of fractures

6. Which of the following statements about fractures and cut marks can be inferred from paragraph 4?
 - (A) Fractures and cut marks inflicted in the battlefield by right-handed soldiers tend to occur on the right side of the injured party's body.
 - (B) The right arm sustains more injuries because, as the dominant arm, it is used more actively.
 - (C) In most people, the left side of the body is more vulnerable to injury since it is not defended effectively by the dominant arm.
 - (D) Fractures and cut marks on fossil humans probably occurred after death.

7. According to paragraph 5, what characteristic of a Neolithic spoon would imply that the spoon's owner was right-handed?
- (A) The direction of the fibers
(B) Its long handle
(C) The yew wood it is carved from
(D) Wear on its left side
8. What was the purpose of Nicholas Toth's toolmaking experiment described in paragraph 6?
- (A) To shape tools that could be used by either hand
(B) To produce replicas of early tools for display in museums
(C) To imitate the production of pebble tools from early sites
(D) To determine which hand made the early tools
9. Look at the four squares [A-D] that indicate where the following sentence could be added to the passage.

The stencils of hands found in these shelters and caves allow us to draw conclusions about which hand was dominant.

Where would the sentence best fit?

10. **Directions:** An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the **THREE** answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. **This question is worth 2 points.**

Several categories of evidence indicate that people have always been predominantly right-handed.

-
-
-

Answer Choices

- (A) Stencils of right-handed figures are characteristic of cave art in France, Spain, and several other countries.
- (B) The amount of prehistoric art that was created by right-handed artists indicates that left-handed people were in the minority.
- (C) Signs on the skeletal remains of prehistoric figures, including arm-bone size and injury marks, imply that these are the remains of right-handed people.
- (D) Neanderthal skeletons often have longer finger bones in the right hand, which is evidence that the right hand was stronger.
- (E) Instruments such as spoons, ropes, and pebble tools show signs indicating that they were constructed or used by right-handed people.
- (F) Nicholas Toth, a modern right-handed toolmaker, has shown that prehistoric tools were knapped to fit the right hand.