

PRACTICE TEST 58

Passage 1

The railroad industry could not have grown as large as it did without steel. The first rails were made of iron. But iron rails were not strong enough to support heavy trains running at high speeds. Railroad executives wanted to replace them with steel rails because steel was ten or fifteen times stronger and lasted twenty times longer. Before the 1870's, however, steel was too expensive to be widely used. It was made by a slow and expensive process of heating, stirring, and reheating iron ore.

Then the inventor Henry Bessemer discovered that directing a blast of air at melted iron in a furnace would burn out the impurities that made the iron brittle. As the air shot, through the furnace, the bubbling metal would erupt in showers of sparks. When the fire cooled, the metal had been changed, or converted, to steel. The Bessemer converter made possible the mass production of steel. Now three to five tons of iron could be changed into steel in a matter of minutes.

Just when the demand for more and more steel developed, prospectors discovered huge new deposits of iron ore in the Mesabi Range, a 120-mile-long region in Minnesota near Lake Superior. The Mesabi deposits were so near the surface that they could be mined with steam' shovels.

Barges and steamers carried the iron ore through Lake Superior to depots on the southern shores of Lake Michigan and Lake Erie. With dizzying speed Gary, Indiana, and Toledo, Youngstown, and Cleveland, Ohio, became major steel-manufacturing centers. Pittsburgh was the greatest steel city of all.

Steel was the basic building material of the industrial age. Production skyrocketed from seventy-seven thousand tons in 1870 to over eleven million tons in 1900.

1. Which of the following is the best title for the passage
(A) The Railroad industry (B) Famous Inventors
(C) Changing Iron into Steel (D) Steel Manufacturing Centers
2. According to the passage, the railroad industry preferred steel to iron because steel was
(A) cheaper and more plentiful (B) lighter, and easier to mold
(C) cleaner. And easier to mine (D) stronger and more durable
3. According to the passage, how did the Bessemer method make the mass production of steel possible?
(A) It directed air at melted iron in a furnace. removing all impurities.
(B) It slowly heated iron ore.. then stirred it and heated it again.
(C) It changed iron ore into iron, which was a substitute for steel.
(D) It could quickly find deposits of iron ore under the ground.
4. The furnace that Bessemer used to process iron into steel was called a
(A) heater (B) steamer (C) converter (D) shower
5. According to the passage. where were large deposits of iron ore uncovered?
(A) In Pittsburgh (B) In the Mesabi Range
(C) Near Lake Michigan (D) Near Lake Erie
6. In line 17 the words 'Barges and steamers could best be replaced by which of the following?
(A) Trains (B) Planes (C) Boats (D) Trucks
7. It can be inferred from the passage that the mass production of steel caused
(A) a decline in the railroad industry (B) a revolution in the industrial world
(C) an increase in the price of steel (D) a feeling of discontent among steel workers

Passage 2

The origins of the horse go back to eohippus the "dawn horse" of the Eocene only 10 to 20 inches tall. Like its relatives the ancient tapir and rhinoceros, eohippus had four toes on its front feet, three on the rear, and teeth adapted to a forest diet of soft leaves. Eohippus died out about 5.1 million years ago in both North America and Europe.

Late ancestral horse types moved from their forest niche out onto the grassy plains. Their teeth adapted to accommodate hard siliceous grass. No longer could these protohorses slip away through thick forest when danger threatened. Escape now demanded speed and endurance. Limbs grew longer. Extra toes became vestiges that were not visible externally.

1. The passage mainly discusses the
(A) evolution of the horse
(B) size of eohippus
(C) animals of the Eocene
(D) plight of endangered species
2. The author states that eohippus was related to the
(A) horsefly
(B) tapeworm
(C) hippopotamus
(D) rhinoceros
3. What did the eohippus eat?
(A) Rhinoceros meat
(B) Soft leaves
(C) Hard siliceous grass
(D) Other horses
4. In what way did predators present less of a threat to eohippus than to later proto horses.
(A) Eohippus was hidden by the forest.
(B) Eohippus could run farther.
(C) Eohippus was not edible.
(D) Eohippus was larger and stronger
5. The paragraph following the passage most probably discusses
(A) other changes that the rhinoceros has undergone
(B) more reasons for the extinction of eohippus
(C) further development of early horse types.
(D) the diet of eohippus.