

Passage 5

Television was not invented by any one person. Nor did it spring into being overnight. It evolved gradually, over a long period, from the ideas of many people—each one building on the work of their predecessors. The process began in 1873, when it was accidentally discovered that the electrical resistance of the element selenium varied in proportion to the intensity of the light shining on it. Scientists quickly recognized that this provided a way of transforming light variations into electrical signals. Almost immediately a number of schemes were proposed for sending pictures by wire (it was, of course, before radio).

One of the earliest of these schemes was patterned on the human eye. Suggested by G. R. Carey in 1875, it envisioned a mosaic of selenium cells on which the picture to be transmitted would be focused by a lens system. At the receiving end there would be a similarly arranged mosaic made up of electric lights. Each selenium cell would be connected by an individual wire to the similarly placed light in the receiving mosaic. Light falling on the selenium cell would cause the associated electric light to shine in proportion. Thus the mosaic of lights would reproduce the original picture. Had the necessary amplifiers and the right kind of lights been available, this system would have worked. But it also would have required an impractical number of connecting wires. Carey recognized this and in a second scheme proposed to "scan" the cells—transmitting the signal from each cell to its associated light, in turn over 3 single wire. If this were done fast enough the retentive image to be seen as a complete picture.

1. Which of the following is the best title for the passage?
(A) The Art of Television
(B) Television in the Electronic Era
(C) Harmful Effects of Television
(D) First step in the Invention of Television
2. In line 1 of the passage, the word "being" could best be replaced by which of the following?
(A) place
(B) existence
(C) creature
(D) subsistence
3. An important discovery in early television was the electrical resistance of
(A) mosaics
(B) the human eye
(C) lenses
(D) the element selenium

PRACTICE TEST 61

Passage 1

During the early years of this century, wheat was seen as the very lifeblood of Western Canada. When the crops were good, the economy was good; when the crops failed, there was depression. People on city streets watched the yields and the price of wheat with almost as much feeling as if they were growers. The marketing of wheat became an increasingly favorite topic of conversation.

War set the stage for the most dramatic events in marketing the western crop. For years, farmers mistrusted speculative grain selling as carried on through the Winnipeg Grain Exchange. Wheat prices were generally low in the autumn, but farmers could not wait for markets to improve. It had happened too often that they sold their wheat soon after harvest when farm debts were coming due, only to see prices rising and speculators getting rich. On various occasions, producer groups asked for firmer controls, but governments had no wish to become involved, at least not until wartime wheat prices threatened to run wild.

Anxious to check inflation and rising living costs, the federal government appointed a board of grain supervisors to handle deliveries from the crops of 1917 and 1918. Grain Exchange trading was suspended, and farmers sold at prices fixed by the board. To handle the crop of 1919, the government appointed the first Canadian Wheat Board, with full authority to buy, sell, and set prices.

1. What is the main purpose of the passage?
(A) To explain how wheat is marketed today
(B) To justify suspension of trading on the Grain Exchange
(C) To describe the origins of the Canadian Wheat Board
(D) To argue for further reforms on the Canadian Wheat Board
2. The author uses the term "lifeblood" (line 1) to indicate that wheat was
(A) difficult to produce in large quantities
(B) susceptible to many parasites
(C) essential to the health of the country
(D) expensive to gather and transport.
3. According to the passage, most farmers debts had to be paid
(A) when the autumn harvest had just been completed
(B) because wheat prices were high
(C) as soon as the Winnipeg Grain Exchange demanded payment
(D) when crop failure caused depression
4. According to the passage, wheat prices became unmanageable because of conditions caused by
(A) farmers
(B) supervisors
(C) weather
(D) war
5. In line 13, the word "check" could best be replaced by which of the following?
(A) control
(B) investigate
(C) finance
(D) reinforce
6. According to the passage, a preliminary step in the creation of the Canadian Wheat Board was the appointment of
(A) the Winnipeg Grain Exchange
(B) a board of supervisors
(C) several producer groups
(D) a new government