Name_____

Animated Cartoons

Cartoons have been around longer than you might think. In 1640, Athanasius Kircher was the first man who attempted to put drawings into motion. He drew images on layers of glass slides and had them move within a lantern, giving the appearance of movement.

In the early 1800s, it was determined that movement can also be accomplished by placing fixed images on paper. This was called "the persistence of vision." To illustrate this, John Paris invented the Thaumatrope. It was a two-sided plate with a different image on each side. Paris took an image of a bird on one side and an empty cage on the other. He used two strings and wound it so that when pulled tight, it spun and the two images "moved," creating the illusion of the bird in the cage.

Mathematician William Horner invented the Zoetrope in 1867. It was a roll of paper with drawings on it, placed inside a turning drum with slots. As it turned and one looked through the slots, the images appeared to move. It was actually first called The Wheel of the Devil but was later renamed the Zoetrope.

Later, in the 1800s, Thomas Edison invented the Kinetoscope, the first cinema machine. One looked into a slot where a reel of photos or pictures passed, and the images moved seamlessly.

Based on Edison's invention, images were eventually placed on film that moved at a high rate of speed. The cartoons were all hand drawn and carefully filmed to show natural movement.

Today, cartoons are made via computer technology, and the old-fashioned method of hand drawing every image is uncommon. Cartoons have expanded from being intended primarily for children to providing entertainment for all ages. After over three hundred years, they still have not lost their appeal.

Text Questions

1. Which device was invented first?
   a. the Zoetrope
   b. the Kinetoscope
   c. the Thaumatrope
   d. the cinema machine
2. What is the best way to describe animation?
   a. Still images appear to move.
   b. It brings objects to life.
   c. It is used to make movies more exciting.
   d. It can only be accomplished with computers.
3. What does the word *persistence* mean as it is used in the second paragraph?
   a. refusing to give up
   b. remaining
   c. continuing an effect
   d. repeating a question
4. Which statement best describes the first animated cinema movies?
   a. He drew images on layers of glass slides and had them move within a lantern, giving the appearance of movement.
   b. The cartoons were all hand drawn and carefully filmed to show natural movement.
   c. Today, cartoons are made via computer technology, and the old-fashioned method of hand drawing every image is uncommon.
   d. By spinning the two images, Paris created the illusion of movement.
5. What makes the techniques of animation so fascinating to people?

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LIVEWORKSHEETS