

Electronic Paper Fact Sheet

Electronic paper is made up of tiny balls that are white on one side and black on the other. The balls are sandwiched in between 2 sheets of rubbery plastic material. The balls can switch colors when they come close to a positive or negative charge. It is similar to when your hair is attracted to a balloon because of static cling.

COOL FACTS

- Nick Sheridon at the Xerox Company discovered the original idea for electronic paper in 1973.
- Signs made from electronic paper have already been used at major department stores like J.C. Penny's and Macy's.
- Other current uses for electronic paper include displays for cell phones and personal organizers as well as watches and other portable electronics.
- A future use for electronic paper is to make an electronic book that can hold the entire Library of Congress.

Replace the box above with a picture. Write a two or three line caption for picture.

FAQ's

Q: Can I buy electronic paper at the store?

A: Electronic paper is still in its experimental stages and is not available to the general public. Only two companies currently make electronic paper – Gyricon and E-Ink. Currently, both Gyricon and E-ink only sell the paper directly to companies that want to make products like cell phone screens or store signs.

Q: How is electronic paper different from my computer?

A: There are many differences between electronic paper and a computer. One example is that electronic paper does not need batteries once the words are written on the page. Electronic paper is very light and flexible like regular paper, so that it can be taken almost anywhere. It is also easier to read words on electronic paper than it is to read words on a computer.

RELEVANCE TO OUR LIVES: Paper is a material that has many uses in our daily lives. It is so common that if you look around your house, you could find hundreds of things that are made out of paper. Although paper is a very useful product, there are some problems that come from using paper too much. Since so many people use paper everyday, it becomes difficult to dispose of all of it. This causes problems with the environment. Another issue with paper is that it is easily destroyed. Many important books and documents are lost every year because paper can burn, tear, get wet or fall apart. Due to these problems, material scientists have been doing research to make a different type of paper that is reusable and strong, so that it creates less waste and cannot be destroyed easily. The result of all of this research has been the introduction of electronic paper!

RESOURCES:

Gyricon: www.gyricon.com

E-ink: www.eink.com

Paper University: Where students and teacher's explore the world of paper
www.tappi.org/paperu/