

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 1999 Volume VII: Electronics in the 20th Century: Nature, Technology, People, Companies, and the Marketplace

Introduction to Magnetism and Basic Electronics

Guide for Curriculum Unit 99.07.02 by Rebecca E. Blood

This unit on magnetism and basic electronics is designed for Elementary school students in Kindergarten and first grade. It will help provide children with a basis for understanding some modern electronic equipment. The initial focus will be on magnetic properties and static electricity. Children will participate in a wide variety of interesting experiments to learn about magnetism and the properties of static electricity. Once the class has a firm handle on those concepts, the focus will then move to electronics. To culminate their study, students will work with a simple tape recorder. First sounds will be recorded, played, erased and re-recorded on a tape in a functioning tape player. Then using real tools, students will have the opportunity to disassemble a nonfunctioning tape recorder. Once disassembled, children will continue exploration, experimentation and assessment of the tape player's parts and mechanisms.

This unit will provide eager students with an opportunity to explore, experiment and learn using a wide variety of materials and media. As students are encouraged to formulate and test their own ideas, they will be developing the problem solving skills, vocabulary and literacy skills necessary to take their knowledge to the next level.

(Recommended for Science and Literacy, grades K-1.)

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