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Curriculum Units by Fellows of the Yale-New Haven Teachers Institute  
2003 Volume IV: Physics in Everyday Life

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## The Physics of Cell Phones

Guide for Curriculum Unit 03.04.07  
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The purpose of this unit is to provide students in grades 5-8 the opportunity to explore and to solve problems about the physics of how cell phones work. This unit is divided into four sections. The first section of the unit establishes a definition of cell phones; the second section gives the history and some background information on how the cell phone evolved; the third section talks about how the cell phones work; the fourth section discusses turning speech into electrical impulses, and the fifth and final section of this unit talks about the pros and cons of cell phones.

Lesson plans are structured, so that students can become highly engaged in hands-on assignments to learn concepts taught. The use of technology by way of the online resource "How Stuff Works" ([www.howstuffworks.com](http://www.howstuffworks.com)) is used to help explain and to assimilate concepts taught. The concepts are strongly linked to the scientific method and goals and objectives which are framed around standards in science. Curriculum standards are introduced in this unit with lesson plans. In addition, the unit consists of a teacher reading list, a student reading list and a bibliography.

(Recommended for General Science and Physical Science, grades 5-8.)

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