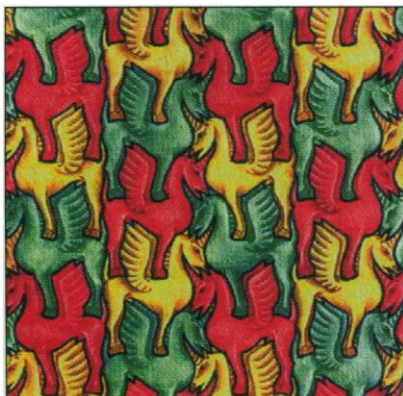


IMAGES

Cookie-Cutter Math

The works of Dutch artist M. C. Escher, the Tetris video game, and many bathroom floors have more in common than you might think: Each involves tessellations, or repeating patterns of identical closed shapes (above, one of Escher's designs). *Totally Tessellated* serves up an introduction to this century-old branch of mathematics, covering concepts like angles, polygons, and periodicity, and notes where tessellations arise in science—in particular, in x-ray crystallography (library.advanced.org/16661). The site also offers a great collection of tessellated art—from the designs of Piet Mondrian to ornate Islamic mosaics—as well as templates for making tessellations and a glossary. *Totally Tessellated* was designed by high school students for an educational contest called ThinkQuest that's inspired a host of spiffy new Web sites. Check out more entries on everything from the Amazon rainforest to "Designer Genes" at www.advanced.org/thinkquest/explore/exp-tq98semifr.html



HOT PICKS

Orbiter in a box. If you fancy a tiny Mars spacecraft on your bookshelf, then come here to download a pattern for building a glue-and-card-stock 1/24-scale model of the Mars Climate Orbiter, which will be launched by NASA this December. Assembly takes at least 5 hours, says the site, by which time "you'll know the ... spacecraft very well indeed!" mars.jpl.nasa.gov/msp98/model.html

Chemists' cornucopia. Try this site for links to more than 500 online chemistry and other science journals—"the most comprehensive list," the site says. Many require a subscription to get anything more than abstracts or tables of contents, but 49 are entirely free—for now. www.chemconnect.com/library/journals.shtml

Watch those tentacles. Are you a sucker for octopus or squid? If it's not sushi you're after but details about the living creatures, try The Cephalopod Page, loaded with photos, background info, and references on these and other invertebrate denizens of the deep. is.dal.ca/~ceph/taxa.html

NET NEWS

Wired Schools Remain Unconnected

More and more U.S. schools are now wired to the Internet, but few teachers seem to be plugged in. About 85% of the nation's schools were hooked to the Net in the 1997-98 school year, up from 32% just 2 years earlier, according to a report released this week by Market Data Retrieval (MDR), a company in Shelton, Connecticut. But almost one-fourth of the wired schools said none of their teachers are using the Net in teaching, and only 14% reported that 90% of their teachers do so.

Part of the disconnect may simply reflect the fact that "it's still a relatively new technology, and teachers haven't had the

training yet to integrate it into the curriculum," says Maureen Hance of MDR. But others say many schools give short shrift to that training. Jodie Buenning of the nonprofit Schools and Libraries Corp., which oversees the E-rate, a national program for subsidizing schools' connections, says that's why applicants must submit a detailed "technology plan" that includes a professional development component.

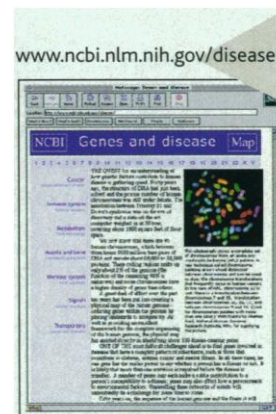
Still others fault the nature of the Internet itself. Charles Hutchison of TERC, a nonprofit education research group in Cambridge, Massachusetts, complains that the Web is frustratingly thin on good info for kids, such as human anatomy sites "that a middle school kid can understand." Another big challenge is using the Net as a tool for focused learning as a class, rather than just letting kids "roam in cyberspace," says Hutchison. "It's still very difficult for teachers to figure out how to integrate this tool into the classroom."

SITE VISIT

A Gene Map for All

The latest map of the human genome, described on page 744 of this issue of *Science*, is big news for biomedical scientists, but some of its details can be heavy going for the rest of us. So if you're curious about genetic topics such as Marfan syndrome, which may have afflicted Abraham Lincoln, or baldness in men, surf over to Genes and Disease, a site that the National Library of Medicine (NLM) has set up to complement GeneMap '98.

The site briefly describes the role genes are thought to play in about 60 diseases, from melanoma to muscular dystrophy, and offers links to GeneMap '98 and other databases. On the page for cystic fibrosis, for example, you can learn about the gene for an ion transport protein that, when defective, causes this lung disease; and you can see the gene's sequence and where it's located (on chromosome 7). Other links lead to PubMed references, disease entries in Online Mendelian Inheritance in Man (*Science*, 5 June, p. 1499), and research foundations. David Lipman of the NLM says GeneMap '96 had a similar component, but this one is bigger and will be updated as new info on diseases comes out. "A huge investment went into" the Human Genome Project, Lipman says, explaining that the philosophy behind the site is to "leverage" that money. "The cost is small and the value is quite big."



Science ONLINE

Quantum teleportation can't beam things around à la *Star Trek*, but it can instantly transfer information about an object from one place to another. In this week's Enhanced Perspective, Carlton Caves discusses an experiment reported in this issue that shows unambiguous evidence for quantum teleportation via lightbeam. Hyperlinks will teleport you to information about quantum mechanics, quantum information theory, and other experiments. www.sciencemag.org/cgi/content/full/282/5389/637

Send Internet news and great Web site suggestions to netwatch@aaas.org