

Tech News

Chainmail this week

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This week Tech Club members will learn to make chain mail. Nick's Dad has kindly offered to loan us tools. I have ordered some 5-tool sets that cost (with shipping) only \$8 per set, but they were only shipped yesterday, so won't be here until the next Tech Club. These tools will also be useful later in the year when we do some electronics work.

Medieval chain mail was made of iron wire, with each ring riveted shut. More recent Turkish mail is made of iron wire with the rings just butted closed, a much simpler and faster construction technique. We'll be doing butted rings with copper wire, which is soft enough for kids to bend and cut without needing fancy tools. The resulting mail will be very much like real medieval mail in the way it drapes and how much it weighs, but will not be as strong—not strong enough to stop a sword or dagger attack.

Scratch logo competition

The Scratch website has an ongoing competition to make logos for holidays. The rules are simple: you have to make a scratch project relevant to the holiday, and you need to make a logo that is 230 pixels wide and 80 pixels high. You post the result to the forum under topic "Design the next Scratch logo". You can pick any holiday you want—there's not much competition for the minor holidays.

No Tech Club for Thanksgiving

Next week is Thanksgiving, and the school will be closed, so there will be no Tech Club. We'll meet again on Thursday 29 Nov.

Free rice

There is a new vocabulary game on the web at <http://www.freerice.com/>

The game is free—even better, it donates to the UN World Food Program every time you get a word right. The game automatically adapts itself to the level of the player, so can be played by anyone who can read. This is a great way to donate to charity and improve vocabulary at the same time.

Give one, get one

The One Laptop Per Child project (OLPC) is making a one-time offer to allow people in first-world countries to buy their laptop. According to

<http://www.laptopgiving.org/en/give-one-get-one.php>

Between November 12 and November 26, OLPC is offering a Give One Get One program in the United States and Canada. This is the first time the revolutionary XO laptop has been made available to the general public. For a donation of \$399, one XO laptop will be sent to empower a child in a developing nation and one will be sent to the child in your life in recognition of your contribution. \$200 of your donation is tax-deductible (your \$399 donation minus the fair market value of the XO laptop you will be receiving).

I believe that OLPC laptops do not run Scratch, though there has been talk of making it available.

Scratch v1.2 scheduled for Dec 1

The new release of scratch is now scheduled for December 1. Abe and I were playing with the beta release and created a cool pinball game that you can play on the scratch web site at

http://scratch.mit.edu/projects/kevin_and_abe/54377

If you want to see how the code works, you'll have to wait until v1.2 is released.

School Pinball



Step 1

Wind wire around a mandrel to make a coil. A hole drilled in the rod to hold the wire makes the coil easier to wind. Here I used 14-gauge copper wire and a 3/8" diameter dowel rod. With these sizes, about 40 rings can be made from 5 feet of wire. For stiffer steel wire, use a steel rod for the mandrel, and use a crank to get more leverage for winding the coil.



Step 2

Cut the coil into rings, using the tips of diagonal cutters. Try to leave a tiny bit of overlap, so that



Step 3

Holding the ring with one pair of pliers, use a second pair to open or close the ring, bending only in the third dimension, not in the plane of the ring. Open about half your rings and close about half.



Step 4

Make chains of alternating 2 rings and 1 ring. The single rings start as open rings, adding two more closed ring to the chain each time



Step 5

Join the chains together by threading open rings through 2 rings from one row and 2 rings from 2 rows lower, to make sheets of mail.