Tech News

Report on 4th meeting

Last week we tried launching a six-foot hot air balloon at the beginning of the meeting. We used two electric hair dryers to fill the plastic balloon, while the top of it was held by a kid on the bridge of the climbing structure. The two hair dryers produced almost enough heat to lift the balloon. In desperation, I added a third hair dryer, and we got some lift, but tripped a circuit breaker. (The circuit breakers are rather inaccessibly locked up in Elliot's music closet.)

I had predicted that 3 hair dryers would be too much, as each is rated at somewhere between 1200 and 1450 watts (10–12 amps), and the most common circuit breakers have a 20 amp limit.

After tripping the circuit breaker, we went back inside for less destructive scratch programmming.

Running scratch at home

There are pointers to the version of scratch we are using (as well as some example programs) at

http://www.soe.ucsc.edu/~karplus/scratch_programs

I've also put PDF files with the back copies of *Tech News* there, so parents of kids who join Tech Club late can still read all the issues.

Family Science Night

Last night the Family Science Night Committee met to start choosing projects for a "mini-Exploratorium" to be set up in the Fellowship Hall Tuesday April 24. For more information about the event, and to volunteer to help see

http://www.soe.ucsc.edu/~karplus/family-science-night.html

Programming tip

Today's tip is about a feature borrowed from the "turtle" of the Logo programming language: the use of a "pen" to record the motion of a sprite. Here, I illustrate this with the solo dance for the S sprite from the "Karplus" name animation. Note that the pen size and color can be set, as well as putting the pen up or down. The "clear" command removes the results of any pen or stamp actions.

One can also write a very simple drawing program using the pen commands for a sprite that follows the mouse pointer.

These screen shots of the S_solo routine give the state of the display after each of the corresponding repeat loops has completed.