

Tech News

First Tech Club of the Year

Kevin Karplus

Thursday 13 is the first day of Tech Club for the year. Like last year, it will be a free drop-in after-school activity for 4th, 5th, and 6th graders. There are two major differences: we'll be meeting in Ms. Riddle's 3rd grade classroom (since it has the most computers) and we'll be meeting on Thursdays, since that is when I can get time away from work.

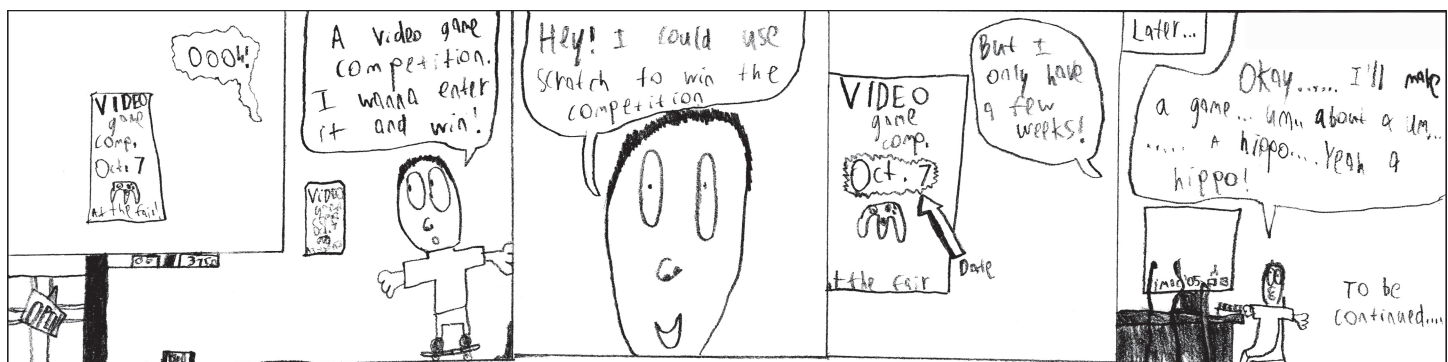
For most club meetings, kids can just drop in if they have time (I understand that homework loads, sports, music, dance, and other activities will often interfere), but some meetings will require prepayment of a material fee for projects in which we build some hardware.

We have a lot of possible projects for this year, and I welcome ideas for other projects. Of course, we'll spend a lot of time programming video games and animations in scratch, the free programming language for kids from MIT. I also hope to do some soldering projects this year also—perhaps making some blinking lights projects (like electronic dice or a stroboscope) or a small robot (like a solar roller).

We can also work on making chainmail (in conjunction with the 5th and 6th grade history class), tablet weaving, and other non-electronic technology.

This *Tech News* newsletter will come out each week, but with a difference from last year—this year I'd like about half the content to come from the kids. Abe has volunteered to write a weekly *Scratch Tips* column, and Grant to draw a *Scratch Comics* cartoon. Submissions are needed a week ahead of time, so that I can get the *Tech News* laid out over the weekend.

Scratch Comics by Grant Simmons



Spring Hill Tech Club

Scratch at Home

The programming language scratch is available free from <http://scratch.mit.edu> for both Windows and Mac OS X machines. I strongly recommend that families with computers download a copy for use at home, as the Tech Club time is not long enough for programming complicated games. Also kids will want to show you what they've done! The MIT site also has forums for discussing scratch and getting help, and program-sharing site that has source code from over 28,000 projects that students can use for inspiration in their own projects.

Scratch Tips: Go To vs. Glide

Abe Karplus

There are many ways in Scratch of getting your sprite to move around the screen. The simplest way is [move (m) steps], which moves your sprite m pixels in the direction it is pointing. There is also [go to x:(x) y:(y)], which will set your sprite's position to x,y. In a similar vein are the [set x (x)] and [set y (y)] commands, which are like half of "go to". They have their counterparts, [change x by (x)] and [change y by (y)]. Last is [glide (t) seconds to x:(x) y:(y)], which is a "go to" stretched out over t seconds.