

# Tech News

## Tech Club Halloween

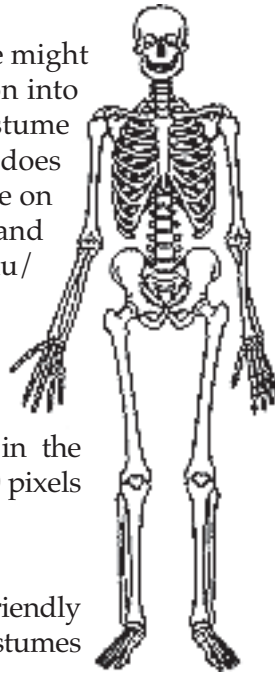
Kevin Karplus

This is the last Tech Club before Halloween so we should talk about costumes, ghost effect, and other Halloween themes.

### Costumes

As you know by now, the primary way that you get sprites to do interesting things (like walking or dancing) is by changing their costumes. For a sprite, a costume change is a very fast way to change its appearance. It is used not just for changing the "clothing" a sprite has, but also the positions of its body parts, its facial expression, and other major changes.

For example, for Halloween one might want to change a sprite of a person into a sprite of skeleton, but the costume library that comes with scratch does not include a skeleton. I found one on the web, rescaled and edited it, and shared it at [http://scratch.mit.edu/projects/kevin\\_karplus/47911](http://scratch.mit.edu/projects/kevin_karplus/47911) so that you can download it and use it in your own projects.



To turn a person into this skeleton, you would want a person in the same pose and at the same size (250 pixels high, 100 pixels wide).

### Ghosts

Scratch does include several friendly ghost images in the Fantasy costumes folder, but there is a fancier and more useful way to get ghosts. In the looks menu there is `change ghost effect by 25`, which will make any sprite be partially transparent. When the ghost effect is up to 100, then the sprite is completely transparent and behaves the same as if it was hidden (which means that it can't interact with other sprites). Setting ghost effect to 99 makes the sprite almost impossible to see, but it can still interact with other sprites. Ghost effect around 30 to 70 looks a lot like a traditional movie ghost effect—you can see through the sprite, but you can also easily see the sprite itself.

Try the ghost effect with some of your favorite sprites. People work well as ghosts, but not all sprites do.

*This screenshot shows the ghost effect for four sprites. The first one has ghost effect of 0, the next has 30, then 50, then 70. Notice that the complicated background image makes the ghost effect much more obvious than it would be on a solid-color background.*



## Chainmail Jewelry

Our first non-computer project this year will be to make chainmail (the interlocking rings used for armor in medieval times). We won't be making armor (the iron wire would be a bit too stiff for kids to work with easily), but we'll use the same principles with finer wire to make jewelry (pendants, bracelets, earrings, and so forth). Ambitious kids might be able to make a belt, though this would mostly have to be done outside the Tech Club meetings.

For this project, each kid will need a set of tools: flat nose pliers, roundnose pliers, and small diagonal cutters. They will also need materials: 18 gauge copper, brass, or silver wire. I was pricing tools and materials today, and it looks like I could easily supply them for about \$35 a kid. With some web ordering (and somewhat lower-quality tools), I think I could get the price down to about \$20 a kid.

The same tools will be useful for other jewelry projects and for small electronics projects.

Please let me know if you are interested in ordering a set of tools and wire for making jewelry, and what price limit you want to set:

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Child's Name: \_\_\_\_\_

Want to buy tools if \$20 or less \_\_\_\_\_

if \$25 or less \_\_\_\_\_

if \$30 or less \_\_\_\_\_

if \$35 or less \_\_\_\_\_