THE SCRATCH PATCH

The Bubble Sort Algorithm

This month, I thought we'd do something a little different: an algorithm.

Algorithms are step-by-step instructions for doing a certain task. If you learned the "grid method" for multiplying numbers at school, then you are using an algorithm. If you follow the steps correctly, you will get the right answer.

When we write a computer program, we want an algorithm that is as fast as possible and that uses as little memory as possible. It also needs to produce the correct result, of course!

As usual, if you get stuck you can download the project from:
http://scratch.mit.edu/forums/

My user name is "racypy".

The Bubble Sort is an algorithm for sorting lists of numbers.

It's actually not one of the most efficient sorting methods: it can be quite slow on a really jumbled list.

However it is very fast at sorting lists that are almost in the right order.

Here's the start of our program. It simply announces what the program is and then calls two processes - "Make_Array" and "Bubble_Sort".


```
when [flag] clicked
say [The Bubble Sort!] for (2) secs
broadcast [Make_Array ▼] and wait
say [Here's a random list of the numbers 1 to 15.] for (2) secs
broadcast [Bubble_Sort ▼] and wait
say [Done!] for (2) secs
stop all
```

Fact:

Algorithms get their name from a Persian mathematician:

Al-Khw rizm (c.780 – c. 850).