Math Class Cheat Sheet

Here is a shortened list of helpful functions for working with numbers. This isn't a complete list of what is possible, but the most useful at this point in our curriculum. If you would like to read more about the Math class, check out some of the examples here (don't worry if it all looks greek to you):
http://livedocs.adobe.com/flash/9.0/ActionScriptLangRefV3/Math.html

Functions

Math.random()
Spits out a random number between 0 and 1. This isn't usually useful on it's own, so to get more specific numbers some simple math will help get you the number you are looking for.

Random number between 0 and 100:

```
Math.random() * 100
```

Random number between 2 and 50:

```
2 + Math.random() * 48
```

Or, use this formula:

```
minNumber + Math.random() * (maxNumber – minNumber)
```

Math.round(someNumber)
Rounds your number up or down to the closest whole number. For instance Math.round(2.7) will give you the number 3. Math.round(0.4) will give you the number 0.

Math.ceil(someNumber)
Rounds up the number you give it to a whole number. Math.ceil(.2) will give you the number 1.
This can be handy when using Math.random() with frames in a MovieClip.

To get a random frame number, use the following example:

```
var randomFrame:uint = Math.ceil( Math.random() * myMovieClip.totalFrames );
```

Math.floor(someNumber)
Rounds down the number you give it to a whole number.