Sonic Pi Basics

Here are some of the basic terms, functions and language you will use in Sonic Pi. With these building blocks you can create all kinds of sounds, beats, noises and compositions!

play

play a note
syntax:

```
play 50
play :A4
```

sleep

wait for amount of time before doing next thing
syntax:

```
sleep 1 (1 = one second)
```

sample

play sample
syntax:

```
sample :drum_heavy_kick
```

(all samples listed in help section of Sonic Pi)
to change speed/pitch use rate

```
sample :drum_heavy_kick, rate: 1
```

loop

loop a piece of code continuously
syntax:

```
loop do
 your code
end
```

n.times

```
#play a piece of code a specific number of times
#syntax:
   n.times do
    your code
   end
#change n to number of times you want code to repeat
```

use_synth

```
#set synth sound
#syntax:
   use_synth :tb303
#all synth sounds are listed in Sonic Pi's help panel
```

use_synth_defaults

```
#change synth settings
#syntax:
   use_synth_defaults attack: 0.25, amp: 2
#each synth listing, in the help panel, will tell
#you which parameters you can change for that sound
```

with_fx

```
#add effects to your synths and samples
#syntax:
    with_fx :reverb, mix: 0.5 do
     your code
    end
#all available fx are listed in the help panel, along
#with all the parameters you can change
```

in_thread

```
#make different parts play simultaneously
#syntax:
   in_thread do
    your code
   end
```

choose

```
#randomly choose a value from a set of values each
#time your code loops
#syntax:
   play [50, 55, 60].choose
   play [:A3, :C4, :D4, :E3].choose
   sleep [1, 0.5, 0.25. 0.125, 4].choose
```

rrand

```
#randomly pick a value from a range of values each
#time your code loops
#syntax:
   play rrand(50, 100)
   play rrand(0.1, 1)
#the first number in the brackets is the minimum
#value, the second the maximum value
#rrand will play any decimal value between your min
and max, not just whole numbers. To use just whole
numbers use rrand_i rather than rrand
```

Further guidance on Sonic Pi language and syntax can be found in the help section of the program itself, along with useful code examples.

There is a great online starter guide to using Sonic Pi 2 available here:

www.raspberrypi.org/learning/sonic-pi-2-taster