

Programming for Beginners Part 3

20.4

Directions: Go to <http://www.programmingbasics.org/en/beginner/while.html> and click Start Normal Version. Read along and fill the blanks in as you work through the different lesson on this site.

While: Loops and Repeating things

To make a computer do something more than one time you will need to use a _____ command.

If a computer keeps doing the same _____ again and again forever than it is called an _____ loop.

Write the commands to make an infinite loop to flatter your partner: _____

Have your partner watch your flattering loop and write their initials if it works on the line _____

What are loops are useful for _____?

Usually, you don't want the computer to repeat something _____.

In Javascript, there is an instruction called " _____ "

It stops _____ things when a computer sees the break instruction.

You can also use break to _____ a loop when something important happens.

Random Numbers and Choose

Javascript has a command called "random" for making random _____ like rolling a _____.

With the random command, you must give a number between the _____.

Javascript will then give you a _____ number between 1 and the number you gave.

If you type "show(random(4));" what are the possible numbers the program could give you? _____

Random Number Practice:

Write a program to play Rock, Paper, Scissors three times.

STOP: Copy the code from your program area and paste it here.

Have your partner play your game and write their initials if it works on the line _____

Bonus: if you can make the computer keep score show your teacher and receive 10 points on this worksheet.

STOP: Copy the code from your program area and paste it here.

Have your partner play your game and write their initials if it works on the line _____

FSM: The finite state machine

A finite state machine is one way to _____ programs.

A FSM is made up of two things.

1. Some writing about what's _____. It has some arrows that show different _____ you can make.
2. You should make a choice and follow the _____

FSMs are good for making _____ and _____.

FSM: The finite state machine Practice:

Try writing some commands to get the computer to have you explore the rooms of the house.

STOP: Copy the code from your program area and paste it here.

Have your partner play your game and write their initials if it works on the line _____

Extra credit: take what you have learned and make a simple scavenger hunt game.

Have your teacher play your game and write their initials if it works on the line _____