

NAME

Welcome to Javascript ! JavaScript is an awesome programming language that can be used to make online websites and applications as well as games! Lots of times we integrate it with HTML and it is a great tool for web design.

What is a variable?



Variables can be described as places to store information in a program.

We need to label our places just like we would label our boxes in our home for storing thing. Above is a picture of a toy box. If I were to make a toy box variable in Java it would look like this.

```
var myTB =teddy bear;
```

This is naming my toy box TB and storing a teddy bear in it.

Other programming languages are more picky and you have to declare before the variable what type of box it is, but JS cares more about what you are putting into it. What would happen if after we decided to put toys in the toys box we tried to put in dishes???

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Here are a list of data types in JavaScript and how to declare them.

```
var carname = "Volvo XC60"; //string
```

```
var x = 3.14;    // A number with decimals
```

```
var y = 34;      // A number without decimals
```

```
var cars = ["Saab", "Volvo", "BMW"]; // an array
```

Above I have declared an array. What kind of “box” is the Array meant to be, and what data type is in this box?

Booleans can be true or false. What in a game would we use a Boolean for? Hint: What happens when our heart points hit 0?

Below is how to declare a boolean

```
Boolean(10 > 9)    // returns true
```

JavaScript operators are used to assign values, compare values, perform arithmetic operations, and more.

What are some operators we learned in math class?

Addition

Subtraction

Multiplication

Division

Below follow the instructions using code and tell me after each line what y is. (y++ adds 1 to y)

Set y to 5.

Add 5 to y:

Subtract 5 from y:

Multiply y by 10:

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Add 1 to Y:

Methods and Statements!

```
// code start
```

```
if(x==5)
```

```
{
```

```
    X++;
```

```
}
```

```
else
```

```
{
```

```
    x=10;
```

```
}
```

What does x = if x is 5

What about if x = 12?

What do we use methods for!?