

Tutorial 2: *Working with Operators and Expressions*

Objects

An **object** is an individual unit of run-time data storage that is used as the basic building block of programs.

Objects act on each other; each object is capable of receiving messages, processing data, and sending messages to other objects.

Each object can be viewed as an independent little machine or actor with a distinct role or responsibility.

Objects have properties, methods, and events.

Properties

A characteristic, attribute, or state of an object.

Property Examples		
Car Object	Dog Object	JavaScript <i>document</i> Object
Year	Color	document.bgColor (sets the background color of Web page)
Make	Breed	document.title (sets the title bar of the Web page window)
Horsepower	Weight	document.URL (retrieves the location of the current Web page)

Methods

An action an object can perform.

Method Examples		
Car Object	Dog Object	JavaScript <i>document</i> Object
Go	Bark	document.write() (add text to the Web page)
Stop	Growl	document.writeln() (add an entire line of text to the Web page)
Turn Left	Jump	document.getSelection() (retrieve the currently selected text)

Events

Something that happens to an object.

Event Examples		
Car Object	Dog Object	JavaScript <i>document</i> Object
Flat tire	Receive a bone	document.onClick() (if a user clicks on the Web page)
Run out of gas	See a cat	document.ondblclick() (if a user double clicks on the Web page)
Rain	Owner comes home	document.onkeydown() (if a user presses a key on the Web page)