

### Machine Cycle/Processing Cycle

**Fetch** - Retrieves the next program instruction from memory.

**Decode** - Determines what the program is telling the compy to do.

**Execute** - Performs the requested instruction.

**Store** - Stores the results to an internal register or to memory.

### Basic HTML Structure

```
<!DOCTYPE html>
<html>
  <head>
    <title>website title</title>
  </head>
  <body>
    content of website
  ...
</body>
</html>
```

### Random Bytes

- \*Bit = Smallest piece of data a compy works with
- \*8 Bits = 1 byte aka a single unit of storage
- \*Binary Data = written in 1s and 0s

### System Unit Main Components

|              |                  |
|--------------|------------------|
| Motherboard  | Internal Speaker |
| CPU          | Drive Bays       |
| Power Supply | Expansion Slots  |
| Cooling Fan  |                  |

### Abbreviations

|                                |  |
|--------------------------------|--|
| CSS - Cascading Style Sheet    | HTML - Hyper Text Markup Language              |
| CPU - Central Processing Unit  | VoIP - Voice over Internet Protocol            |
| LAN - Local Area Network       | WAN - Wide Area Network                        |
| POST - Power-on Self-Test      | CMOS - Complementary Metal Oxide Semiconductor |
| BIOS - Basic input/Output Sys. |  |

### Access 2013

|                                       |                                  |
|---------------------------------------|----------------------------------|
| 4 Objects = Tables, Queries & Reports | Rows = Records, Columns = Fields |
|---------------------------------------|----------------------------------|

### JavaScript/HTML Thing

`<form></form>` `<input></input>` = within form

"document.write" to print `alert - simple popup window w/ ok button`

`onClick = event that's triggered when a user clicks something` `<script></script>`

Conditional Statements (if/else) `if (something happens){- takes action}`

Call Function by using its name & listing constants `else{takes a different action}`

### 6 Steps of Booting a System

- 1.) BIOS (Basic Input/Output System) is load
- 2.) Power-on self test (POST) is completed
- 3.) OS is loaded
- 4.) System Configuration is accomplished
- 5.) System utilities are loaded
- 6.) User is authenticated

### Memory Bank

- RAM (Random Access Memory)
  - \*Volatile
  - \*Temporarily stores data & instructions for CPU
- Cache Memory
  - \*Small unit of ultrafast memory built into or near the processor
  - \*Stores frequently or recently access info
  - \*3 Lvl. = L1 (primary), L2 (secondary), L3
- ROM (Read-only Memory)
  - \*Nonvolatile
  - \*BIOS - 1st code when compy is powered on
  - \*CMOS - Starts the power-on self-test
- POST - checks circuitry & RAM
- Bootstrap Loader - locates & loads OS into RAM

### HTML Basics

|   |                              |
|---|------------------------------|
| <code>&lt;h_&gt; &lt;/h_&gt;</code>                         | Heading (h1-h6)              |
| <code>&lt;b&gt;&lt;/b&gt;</code>                            | bold                         |
| <code>&lt;a href="url"&gt;&lt;/a&gt;</code>                 | Create a link                |
| <code>&lt;img src="filename.jpg"&gt;</code>                 | Show an Image                |
| <code>&lt;ul&gt;&lt;li&gt;list&lt;/li&gt;&lt;/ul&gt;</code> | Unordered, bullet-point list |
| <code>&lt;ol&gt;&lt;li&gt;list&lt;/li&gt;&lt;/ol&gt;</code> | Ordered List                 |
| <code>&lt;table&gt;&lt;/table&gt;</code>                    | Define a Table               |
| <code>&lt;tr&gt;&lt;/tr&gt;</code>                          | Table Row within table       |
| <code>&lt;th&gt;&lt;/th&gt;</code>                          | header cell within table row |
| <code>&lt;td&gt;&lt;/td&gt;</code>                          | Table cell within table row  |

### 3 Ways to Insert CSS

- 1.) External Style Sheet - link to style sheet in the HTML file.
- 2.) Internal Style Sheet - put in the HTML file; put the style section in the header section.
- 3.) Inline Styles - Add the style formatting in the desired line by "style=".

