

Week 2 Study Questions

12. Write an example of a XHTML comment? A JavaScript comment.

```
<!-- XHTML Comment -->
// Javascript Comment
/* multi-line
javascript comment */
```

13. List and define the data types available in JavaScript.

- **Strings** – Simple text characters (sentence), Strings are always nested in quotations.
- **Numbers** – numbers can be positive or negative, Integers, floating-point numbers and exponentials
- **Booleans** – Special values known as constants, They can only be true or false and are typically represented by 1 and 0.
- **Arrays** – A variable that can hold more than one value. Useful for keeping a set of related value together. Like an egg carton for data.
- **Object** – an object is identified by { }, Inside the braces the object's properties are defined as name and value pairs (name: value) with properties separated by commas.
- **Undefined** – the value of a variable with no value.
- **Null** – variables can be emptied by using null, It can also mean that the word/object/value does not exist in the program.

14. What is concatenation?

The joining of two expressions, such as strings together. If there is a string and number, Javascript will convert the number to a string.

15. Define the purpose of a conditional statement.

The purpose of a conditional statement is to execute a certain bit of code if a certain condition is met. If those conditions are not met, the process loops, or performs another task. (used to check the truthiness of a set of code).

16. What is the difference between a local and global variable?

Variables declared within a function are *local variables*. These variables are only usable by the code within the function. A universal variable does not have any restrictions and can be used more widely throughout the program.

17. Give an example of when you might need to use a repeat loop.

A repeat loop may be used in

```
Var names = [ "tim", "judy", "bob" ]
for (i = 0; i < names.length; itt)
{
    alert ( names [i] );
}
```

18. Write an example of a function that returns the result of "a" times "b".

```
function test( )
{
    var a = 3;
    var b = 10;
    return a * b;
```

```
}  
alert ("you are" + test() + "years old") | alert ("you are + 30 + "years old")
```

19.What is a parameter or “argument” and how is it related to a function?

Parameters or arguments are a way to pass data to the function by the function call.

20.What are JavaScript operators and how are they used?

Javascript Operators are symbols used to assign and add values to a variable.

Ex: The assignment operator = is used to assign values to JavaScript variables.

The arithmetic operator + is used to add values together.

Math Operators

- + Add
- - subtract
- / divide
- * multiply

Logical Operators

- && And
- || or
- <= Less/equal
- >= Greater/equal
- == strict equal
- < Less Than
- > Greater Than

Strings

- + concatenation

21.List 5 type of events that we can use JavaScript to listener for.

onClick, onMousedown, onMouseover, onkeydown, onkeyup, load, unload, open, close,

22.Define childNodes, firstChild, and lastChild properties.

The childNodes are arrays of the children within an element. The firstChild is the first element in a div, and the lastChild is the last element in a div

23.What property do we use to access the text within an XHTML element?

Nodes

1. Element – p, div, a

2. Attribute – src, id, class, name, alt
3. Text – raw text ex. “hello”

24.What is meant by graceful degradation of a JavaScript?

Writing an event listener that detects the loading of the HTML page and then adds relevant listeners to other events on the page, as well as other behaviors as required, can solve the problem of separating JavaScript functionality from HTML markup. Keeping most of the JavaScript out of the default namespace helps ensure that it is as unobtrusive as possible in that sense.

A page that can go from working with javascript, to working without javascript degrades gracefully.