Worksheet Loops Answers

ALLSTARCODE

Multiple Choice:

1) **C -** An If Statement is a conditional that runs a segment of code based on whether or not a condition is true or not. Loops run a segment of specified code over and over again until a condition is no longer true (For loops run until the iterator, *i*, is no longer below a specified value, while loops run until the condition specified is no longer true). A nested for loop is just a for loop inside a for loop, and therefore is also a type of loop.
2) **B -** The proper way to set up a for loop is as follows:
   for(let iterator = startValue; iterator [operator] end value; increment) {...}
   Valid operators: < (less than) > (more than) == (equal to) >= (more than or equal to) <= (less than or equal to) != (not equal to)
3) **B -** False, i is just a common variable name used because it is the value being *incremented* (the i in increment)! You can use any variable name you want, it's just common practice to use i, followed by j, k, etc.
4) **C -** pay attention to the initial value for i! It starts at 15, and because the condition states that i must be less than or equal to 15 to run the code inside, `Hello World` will only be printed once.
5) **D -** An error will occur because variable names in javascript (and almost every coding language) are case sensitive, meaning uppercase `I` will be a different variable from lowercase `i`.

Free Response:

6) The Output:

```
********
*******
******
*****
****
***
**
*
```

7) One possible answer:

```
let salad = ["Lettuce", "Tomato", "Cucumber", "Dressing",
"Avocado"];
for (i=0; i<salad.length; i++){
      salad[i] = “Chicken”;
```

```
};
console.log(salad);
```

8) One possible answer:

```
let i = 1;
while(i <= 10){
      console.log(i);
      i++;
};
```