JavaScript Rock Paper Scissors Instructions

Rock paper scissors is a classic two player game. Each player chooses either rock, paper, or scissors. The items are compared, and whichever player chooses the more powerful item wins.

The possible outcomes are:

- Rock destroys scissors.
- Scissors cut paper.
- Paper covers rock.
- If there's a tie, then the game ends in a draw.

Our code will break the game into four parts:

1. Get the user's choice.
2. Get the computer's choice.
3. Compare the two choices and determine a winner.
4. Start the program and display the results.

1	The user should be able to choose 'rock', 'paper', or 'scissors' when the game starts. Using `const` and arrow function syntax, create a function named `getUserChoice` that takes a single parameter `userInput`.
2	Since a user can pass in a parameter, such as 'Rock' or 'rock' with different capitalisations, begin by utilizing JavaScript's `toLowerCase()` function to make the `userInput` all lowercase. You can use code like this: `userInput = userInput.toLowerCase();`
3	When getting the user's choice, you should also check to make sure that the user typed a valid choice: 'rock', 'paper', or 'scissors'. Inside `getUserChoice()`, write an `if/else` statement that makes sure the `userInput` is either `'rock'`, `'paper'`, or `'scissors'`. If it does, then `return` the `userInput`. If not, use `console.log` to print an error message to the console.
4	Test the function by calling it with valid and invalid input, and printing the results to the console. You can delete this when you know your function works.
5	Now we need to have the computer make a choice. Create a new function named `getComputerChoice` with no parameters. Inside its block, utilize `Math.random()` and `Math.floor()` to get a whole number between 0 and 2. Then, depending on the number, `return` either `'rock'`, `'paper'`, or `'scissors'`.
6	Test the function by calling it multiple times and printing the results to the console. You can delete this when you know your function works.

7	Now it's time to determine a winner. Create a function named `determineWinner` that takes two parameters named `userChoice` and `computerChoice`. This function will compare the two choices played and then `return` if the human player won, lost, or tied. Let's deal with the tie condition first. Within the `determineWinner()` function, write an `if` statement that checks if the `userChoice` parameter equals the `computerChoice` parameter. If so, `return` a string that the game was a tie.
8	If the game is not a tie, you'll need to determine a winner. Begin by writing an `if` statement that checks if the `userChoice` is `'rock'`. Inside the `if` statement's block, write another `if/else` statement. The inner `if/else` should check if the `computerChoice` is `'paper'`. If so, `return` a message that the computer won. If not, `return` a message that the user won.
9	Next, write another `if` statement for if the `userChoice` is `'paper'`. Inside this `if` statement, the `computerChoice` must be either `'scissors'` or `'rock'`. Write logic that will `return` a winner.
10	Next, write yet another `if` statement for if the `userChoice` is `'scissors'`. Inside of this `if` statement, the `computerChoice` must either be `'rock'` or `'paper'`. Write logic that will `return` a winner.
11	Don't forget to test your function!
12	Everything is set up. Now you need to start the game and log the results. Create a function named `playGame`. Inside the `playGame()` function, create a variable named `userChoice` set equal to the result of calling `getUserChoice()`, passing in either `'rock'`, `'paper'`, or `'scissors'` as an argument. Create another variable named `computerChoice`, and set it equal to the result of calling `getComputerChoice()`. Under both of these variables, use `console.log` to print them to the console.
13	Finally, let's determine who won. Inside the `playGame()` function, call the `determineWinner()` function. Pass in the `userChoice` and `computerChoice` variables as its parameters. Make sure to put this function call inside of a `console.log()` statement so you can see the result. Then, to start the game, call the `playGame()` function on the last line of your program.

14	Stretch & Challenge Make this game better by adding a secret cheat code. If a user types 'bomb' as their choice, then make sure they win, no matter what.