

Reference > shuffle()

# shuffle()

Shuffles the elements of an array.

The first parameter, `array`, is the array to be shuffled. For example, calling `shuffle(myArray)` will shuffle the elements of `myArray`. By default, the original array won't be modified. Instead, a copy will be created, shuffled, and returned.

The second parameter, `modify`, is optional. If `true` is passed, as in `shuffle(myArray, true)`, then the array will be shuffled in place without making a copy.

## Examples

```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Create an array of colors.
  let colors = ['red', 'orange', 'yellow', 'green', 'blue',
'indigo', 'violet'];

  // Create a shuffled copy of the array.
  let shuffledColors = shuffle(colors);

  // Draw a row of circles using the original array.
  for (let i = 0; i < colors.length; i += 1) {
    // Calculate the x-coordinate.
    let x = (i + 1) * 12.5;

    // Style the circle.
    let c = colors[i];
    fill(c);

    // Draw the circle.
    circle(x, 33, 10);
  }

  // Draw a row of circles using the original array.
  for (let i = 0; i < shuffledColors.length; i += 1) {
    // Calculate the x-coordinate.
```

```
function setup() {
  createCanvas(100, 100);

  background(200);

  // Create an array of colors.
  let colors = ['red', 'orange', 'yellow', 'green', 'blue',
'indigo', 'violet'];

  // Shuffle the array.
  shuffle(colors, true);

  // Draw a row of circles using the original array.
  for (let i = 0; i < colors.length; i += 1) {
    // Calculate the x-coordinate.
    let x = (i + 1) * 12.5;

    // Style the circle.
    let c = colors[i];
    fill(c);

    // Draw the circle.
    circle(x, 50, 10);
  }

  describe(
    'A row of colorful circles on a gray background. Their
sequence changes each time the sketch runs.'
  );
```

## Syntax

```
shuffle(array, [bool])
```

## Parameters

- array

Array: array to shuffle.
- bool

Boolean: if `true`, shuffle the original array in place. Defaults to `false`.

## Returns

Array: shuffled array.

This page is generated from the comments in [src/utilities/array\\_functions.js](#). Please feel free to edit it and submit a pull request!

## Related References

<b>append</b> Adds a value to the end of an array.	<b>arrayCopy</b> Copies an array (or part of an array) to another array.	<b>concat</b> Concatenates two arrays, maps to <code>Array.concat()</code> .	<b>reverse</b> Reverses the order of an array, maps to <code>Array.reverse()</code> .
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