

BACKGROUND

Background Color

To specify a solid background color, use the **background-color** property. Color values used for the **background-color** property can be referenced by name or by numeric value.

Background Color by Name

The color names are *aqua*, *black*, *blue*, *fuchsia*, *gray*, *green*, *lime*, *maroon*, *navy*, *olive*, *purple*, *red*, *silver*, *teal*, *white*, and *yellow*.

Example of color value by name:

```
body { background-color: aqua; }
```

This example produces a background color with an intense light-blue referred to as *aqua*.

Background Color by Number

Colors can also be represented numerically by their component values of *red*, *green*, and *blue*. The amount of each of these color values is specified by a whole number varying from 0 to 255.

Example of color value by decimal number:

```
body { background-color: rgb(0,255,0); }
```

This example produces a background color with an vibrant green. Notice how the numeric values indicate that there is no red (0), maximum green (255), and no blue (0).

Frequently, numeric color values on the Web are represented in another *base*; more specifically, *base 16*. Whereas *decimal* numbers are base 10 (zero through nine for each units place), *hexadecimal* numbers are base 16 (zero through fifteen for each units place).

Example of color value by hexadecimal number:

```
body { background-color: #00ff00; }
```

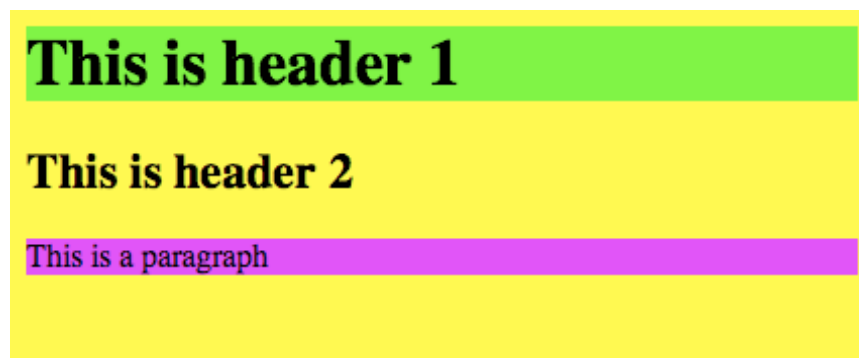
This example produces a background color with the same vibrant green as before. Notice how the numeric values indicate that there is no red (00), maximum green (ff), and no blue (00).

Background Color on Other Tags

The `background-color` can be specified for more than just the body of the document. It can also be specified for a wide variety of other HTML *tags*, such as headings, paragraphs, and lists.

Example HTML with CSS:

```
<!DOCTYPE html PUBLIC "-//W3C//DTD HTML 4.01//EN"
  "http://www.w3.org/TR/html4/strict.dtd">
<html>
  <head>
    <title>Example HTML with CSS</title>
    <style type="text/css">
      body { background-color: yellow; }
      h1 { background-color: #00ff00; }
      h2 { background-color: transparent; }
      p { background-color: rgb(250,0,255); }
    </style>
  </head>
  <body>
    <h1>This is header 1</h1>
    <h2>This is header 2</h2>
    <p>This is a paragraph</p>
  </body>
</html>
```



Background Images

In addition to solid colors, images can be used for backgrounds. This is accomplished through the **background-image** property. Further, just as with specifying the background color, it's important to remember that the background image can be specified for HTML tags other than `body` such as `h1`, `p`, and `li`.

Background Image Paths and URLs

This property takes a file path or a Uniform Resource Locator (URL) as its value. When dealing with CSS, *relative paths* and *relative URLs* point to a target relative to the location of the file in which the stylesheet is written. In contrast, *absolute paths* and *absolute URLs* specify the exact location of the target file regardless of from where it's being referenced.

Example with local relative path (or relative URL) — target is in the same folder:

```
body { background-image: url("stars.gif"); }
```

Example with local relative path (or relative URL) — target is in the "images" sub-folder:

```
body { background-image: url("images/stars.gif"); }
```

Example with local relative path (or relative URL) — target is in the "images" super-folder:

```
body { background-image: url("../images/stars.gif"); }
```

Example with local absolute path — target is located in the "images" folder at the root level:

```
body { background-image: url("/images/stars.gif"); }
```

Example with absolute URL:

```
body { background-image: url("http://example.org/background.png"); }
```

Whenever possible, it's recommended to use relative paths and relative URLs within a web site, since they are independent of any "root" path changes and are therefore more portable.

Suppose for example the web site at "`http://example.com/`" was moved to "`http://users.example.edu/~brian/`". As a consequence, the file originally located at "`http://example.com/target.png`" was moved to "`http://users.example.edu/~brian/target.png`".

Using absolute paths or absolute URLs, the location would need to be updated. In the case of the absolute path, `"/target.png"` would need to be updated to `"/~brian/target.png"`. And, in the case of an absolute URL, the change would be from `"http://example.com/target.png"` to `"http://users.example.edu/~brian/target.png"`.

However, if a relative path was used—suppose from a `my.css` file originally located at `http://example.com/my.css`—then the `my.css` file would be referencing the image by simply `"target.png"` and would not need to update this after the move.

Background Image Repeating into Patterns

By default, background images repeat themselves in both the *horizontal* and *vertical* directions. The horizontal direction is referred to as the “x” direction, and the vertical is referred to as the “y” direction.

To control how a background-image repeats itself, use the **background-repeat** property. The background-repeat property has four possible values:

- **repeat** *repeats the image both horizontally and vertically*
- **repeat-x** *repeats the image only in the horizontal direction*
- **repeat-y** *repeats the image only in the vertical direction*
- **no-repeat** *does not repeat the image at all*

Example of the background image “stars.gif” being repeated horizontally and vertically:

```
body
{
  background-image: url("stars.gif");
  background-repeat: repeat;
}
```

Example of the background image “clouds.png” being repeated horizontally and composited against a solid aqua background color:

```
body
{
  background-color: aqua;
  background-image: url("clouds.png");
  background-repeat: repeat-x;
}
```

Background Position

The **background-position** property sets the starting position of a background image. Possible values include:

Value	Description
top left top center top right center left center center center right bottom left bottom center bottom right	Places the image in the vertical (top, center, bottom) and horizontal (left, center, right) positions specified. If you only specify one keyword, the second value will be center.
x% y%	The first value is the horizontal position and the second value is the vertical. The top left corner is 0% 0%. The right bottom corner is 100% 100%. If you only specify one value, the other value will be 50%.
xpos ypos	The first value is the horizontal position and the second value is the vertical. The top left corner is 0 0. Units can be pixels (3px 2px) or any other CSS units. If you only specify one value, the other value will be 50%. You can mix positions specified by relative percentage (%) and non-percentage numerical values.

Background Attachment

The **background-attachment** property sets whether a background image is fixed or scrolls with the rest of the page. It can have two possible values: `scroll` or `fixed`.

The default behavior is for the background image to `scroll` with the rest of the document. This means that the background image moves when the rest of the page scrolls.

The other behavior is for the background image to remain `fixed` in place in the window. This means that the background image does not move when the rest of the page scrolls.

Background attachment example:

```
body
{
background-image: url("stars.gif");
background-attachment: fixed;
}
```

Shorthand (Consolidated) Background Property

Instead of having to specify `background-color`, `background-image`, `background-position`, `background-repeat`, and/or `background-attachment` properties individually, there is a consolidated, single **background** property which takes multiple parameters all at once.

In order, the possible values are as follows:

```
background:
background-color
background-image
background-repeat
background-attachment
background-position
```

Example 1 of the shorthand background property:

```
body
{
background: aqua url("clouds.png") repeat-x fixed top;
}
```

This example background has a aqua solid color with an image of some clouds (presumably transparent so as to see the aqua background color through the clouds). The background image is repeating horizontally and is **fixed** in the window (does *not* move with scrolling); and is positioned at the top (vertically) and center (horizontally). Although the horizontal centering is not explicitly written, because a vertical position is specified, only the horizontal remains and the default value for the unwritten second value is **center**.

Example 2 of the shorthand background property:

```
body { background: red url("woo.png") no-repeat right; }
```

Here, the image is *not* being repeated, scrolls with the document (default value), and is positioned on the right (horizontally) and center (vertically). Although the vertical centering is not explicitly written, because a horizontal position is specified, only the vertical remains and the default value for the unwritten second value is `center`.

Example 3 of the shorthand background property:

```
li { background: #cc08a0; }
```

The background of each *list item* will be a solid color resembling dark magenta. (Same as `rgb(204,8,160)`, which is a combination of mostly red, very little green, and a good portion of blue.)

Example 4 of the shorthand background property:

```
body { background: url("spheres.gif") repeat-y top; }
```

Vertically repeating image of spheres, starting from the top.