

Web Font Sizing

Once you know that the default font size is 16px, you can then use ems to allow your clients to resize the page easily but think in pixels for your font sizes. Say you have a sizing structure something like this:

- Headline 1 - 20px
- Headline 2 - 18px
- Headline 3 - 16px
- Main text - 14px
- Sub text - 12px
- Footnotes - 10px

You could define them that way using pixels for the measurement, but then anyone using IE 6 and 7 wouldn't be able to resize your page well. So you should convert the sizes to ems and this is just a matter of some math:

- Headline 1 - 1.25em ($16 \times 1.25 = 20$)
- Headline 2 - 1.125em ($16 \times 1.125 = 18$)
- Headline 3 - 1em ($1\text{em} = 16\text{px}$)
- Main text - 0.875em ($16 \times 0.875 = 14$)
- Sub text - 0.75em ($16 \times 0.75 = 12$)
- Footnotes - 0.625em ($16 \times 0.625 = 10$)

Don't Forget Inheritance!

But that's not all there is to ems. The other thing you need to remember is that they take on the size of the parent. So if you have nested elements with different font sizes, you could end up with a font much smaller or larger than you expect.

For instance, you might have a style sheet like this:

```
p { font-size: 0.875em; }  
.footnote { font-size: 0.625em; }
```

This would result in fonts that are 14px and 10px for the main text and the footnotes respectively. But if you put a footnote inside a paragraph, you could end up with text that is 8.75px rather than 10px. Try it yourself, put this the above CSS and the following HTML into a document:

```
<p>This font is 14px or 0.875ems in height.</p><br /> <p>This paragraph  
has a <span class="footnote">footnote in it</span></p><br /> <p  
class="footnote">While this is just a footnote paragraph.</p>
```

The footnote text is hard to read at 10px, it's nearly illegible at 8.75px.

So, when you're using ems, you need to be very aware of the sizes of the parent objects, or you'll end up with some really odd sized elements on your page.

Font size: the 'font-size' property

'font-size'

<i>Value:</i>	<u><absolute-size></u> <u><relative-size></u> <u><length></u> <u><percentage></u> <u>inherit</u>
<i>Initial:</i>	medium
<i>Applies to:</i>	all elements
<i>Inherited:</i>	yes
<i>Percentages:</i>	refer to parent element's font size
<i>Media:</i>	<u>visual</u>
<i>Computed value:</i>	absolute length

The font size corresponds to the em square, a concept used in typography. Note that certain glyphs may bleed outside their em squares. Values have the following meanings:

<absolute-size>

An <absolute-size> keyword is an index to a table of font sizes computed and kept by the UA. Possible values are:

[xx-small | x-small | small | medium | large | x-large | xx-large]

The following table provides user agent guidelines for the absolute-size mapping to HTML heading and absolute font-sizes. The 'medium' value is the user's preferred font size and is used as the reference middle value.

CSS absolute-size values	xx-small	x-small	small	medium	large	x-large	xx-large	
HTML font sizes	1		2	3	4	5	6	7