

GESTIONE DEL BOX

Il box model

- Ogni elemento html è contenuto in un box rettangolare
- Le proprietà css sono applicate al box
 - width, height, padding, borders, e margins
- Visualizziamo i box con la proprietà border
 - border: 1px solid black;

The Back of the New \$20

Have you seen the "Series 2004 \$20 Notes"? The U.S. Treasury has rolled out yet another revamp of the U.S. twenty dollar bill in an effort to stop those pesky counterfeiters once and for all. It features high-tech fake-busting elements like a watermark, a security thread, and color-shifting ink. It also features crappy design.

I'm not going to concern myself here with a critique of the front of the bill (my friend Jeff says "it looks like spilled on it."). It's the back of the note that's driving me crazy.

Too Many 20s



In particular, it's all those little 20s haphazardly sprinkled in the white space. They are nails-on-a-chalkboard design senses.

Are they supposed to be another security feature? ("They'll NEVER be able to duplicate this \$20... look at those 20s... they're all OVER the place!") Did they let a summer intern at the Bureau of Engraving and Printing design it? ("Hey, let Jimmy try it!") Were they concerned the \$20 bill might be confused with a \$10? ("What this 20 needs is a LOT more 20s.")

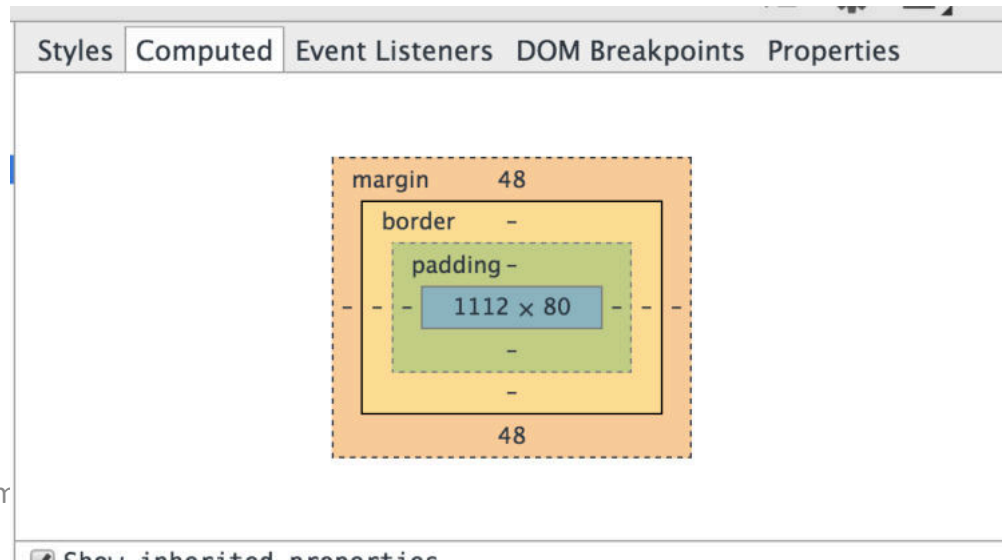
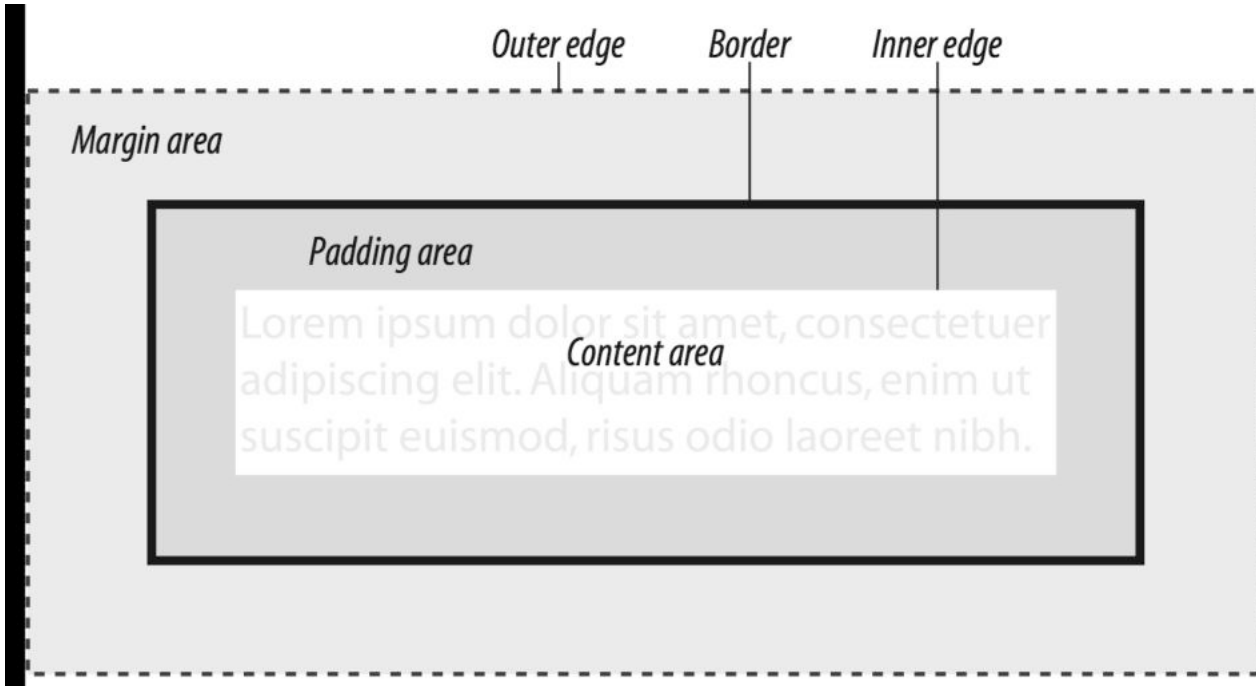
Connect-the-Dots

There must be more to it. My theory: the new 20s contain subliminal connect-the-dots messages, like tiny constellations. So, perhaps the 20s connect to form a secret message designed to stimulate the economy ("SPEND MORE") or boost patriotism ("WE'RE NO.1").

I'm not sure I've successfully cracked the code, so I'm asking for your help. I encourage you all to get a new \$20 bill, connect the dots to find the message on the back (pencil is best), and mail it to me for review. Together, we can get to the bottom of this.

concern myself
the back of the

Il box degli elementi



Dimensioni

width

Values: *length measurement | percentage | auto | inherit*

Default: *auto*

Applies to: *block-level elements and replaced inline elements (such as images)*

Inherits: *no*

height

Values: *length measurement | percentage | auto | inherit*

Default: *auto*

Applies to: *block-level elements and replaced inline elements (such as images)*

Inherits: *no*

Padding

padding-top, padding-right, padding-bottom, padding-left

Values: *length measurement | percentage | inherit*

Default: 0

Applies to: *all elements except table-row, table-row group, table-header-group, table-footer-group, table-column, and table-column-group*

Inherits: no

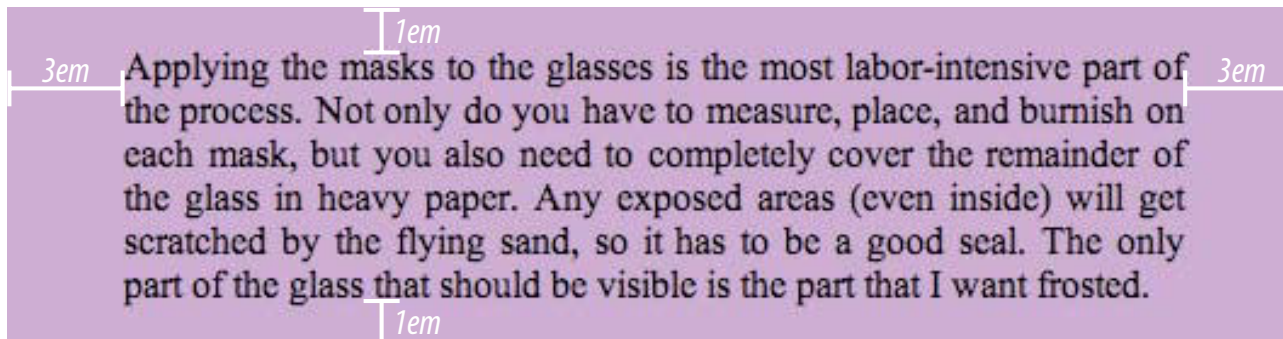
padding

Values: *length measurement | percentage | inherit*

Default: 0

Applies to: *all elements*

Inherits: no



```
blockquote {
  padding-top: 1em;
  padding-right: 3em;
  padding-bottom: 1em;
  padding-left: 3em;
  background-color: #D098D4;
}
```

```
blockquote {
  padding: 1em 3em 1em 3em;
  background-color: #D098D4;
}
```

Margin

margin-top, margin-right, margin-bottom, margin-left

Values: *length measurement | percentage | auto | inherit*

Default: *auto*

Applies to: *all elements*

Inherits: *no*

margin

Values: *length measurement | percentage | auto | inherit*

Default: *auto*

Applies to: *all elements except elements with table display types other than table-caption, table, and inline-table*

Inherits: *no*

After the blasting, the protective paper and the resist masks needs to be removed from the glasses. A cycle in the dishwasher finishes the job.

```
margin-top: 2em;
margin-right: 250px;
margin-bottom: 1em;
margin-left: 4em;
```

Border

- Del contorno di un elemento potete specificare:
 - border-style
 - border-width
 - border-color

Stile del border

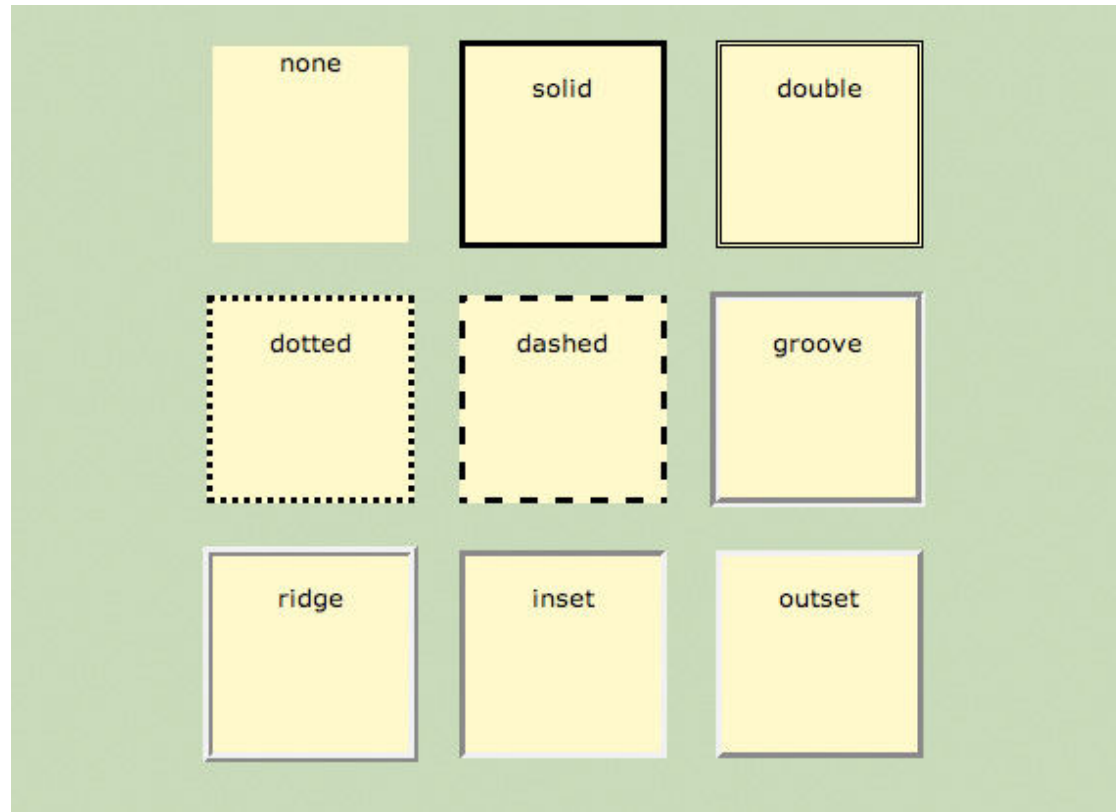
border-top-style, border-right-style, border-bottom-style, border-left-style

Values: none | dotted | dashed | solid | double | groove | ridge | inset | outset | inherit

Default: none

Applies to: all elements

Inherits: no



border-style

Values: none | dotted | dashed | solid | double | groove | ridge | inset | outset | inherit

Default: none

Applies to: all elements

Inherits: no

Dimensione del border

**border-top-width, border-right-width,
border-bottom-width, border-left-width**

Values: *length units* | thin | medium | thick | inherit

Default: medium

Applies to: all elements

Inherits: no

border-width

Values: *length units* | thin | medium | thick | inherit

Default: medium

Applies to: all elements

Inherits: no



```
div#help {
  border-top-width: thin;
  border-right-width: medium;
  border-bottom-width: thick;
  border-left-width: 12px;
  border-style: solid;
  width: 300px;
  height: 100px;
}

div#help {
  border-width: thin medium thick 12px;
  border-style: solid;
  width: 300px;
  height: 100px;
}
```

Colore del border

**border-top-color, border-right-color,
border-bottom-color, border-left-color**

Values: *color name or RGB value* | transparent | inherit

Default: *the value of the color property for the element*

Applies to: *all elements*

Inherits: *no*

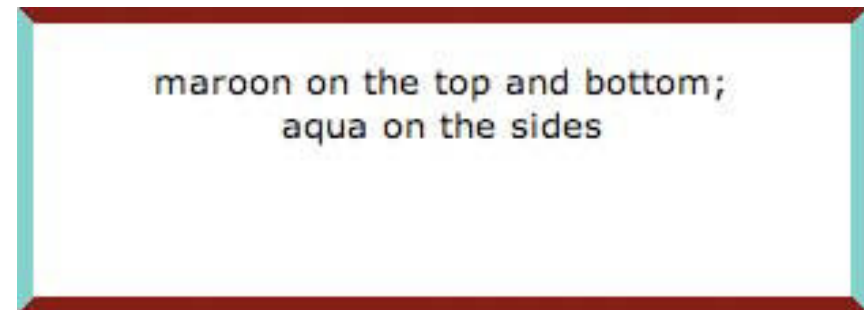
border-color

Values: *color name or RGB value* | transparent | inherit

Default: *the value of the color property for the element*

Applies to: *all elements*

Inherits: *no*



```
div#special {
  border-color: maroon aqua;
  border-style: solid;
  border-width: 6px;
  width: 300px;
  height: 100px;
}
```

Singole dichiarazione border

border-top, border-right, border-bottom, border-left

Values: *border-style border-width border-color | inherit*

Default: *defaults for each property*

Applies to: *all elements*

Inherits: *no*

border

Values: *border-style border-width border-color | inherit*

Default: *defaults for each property*

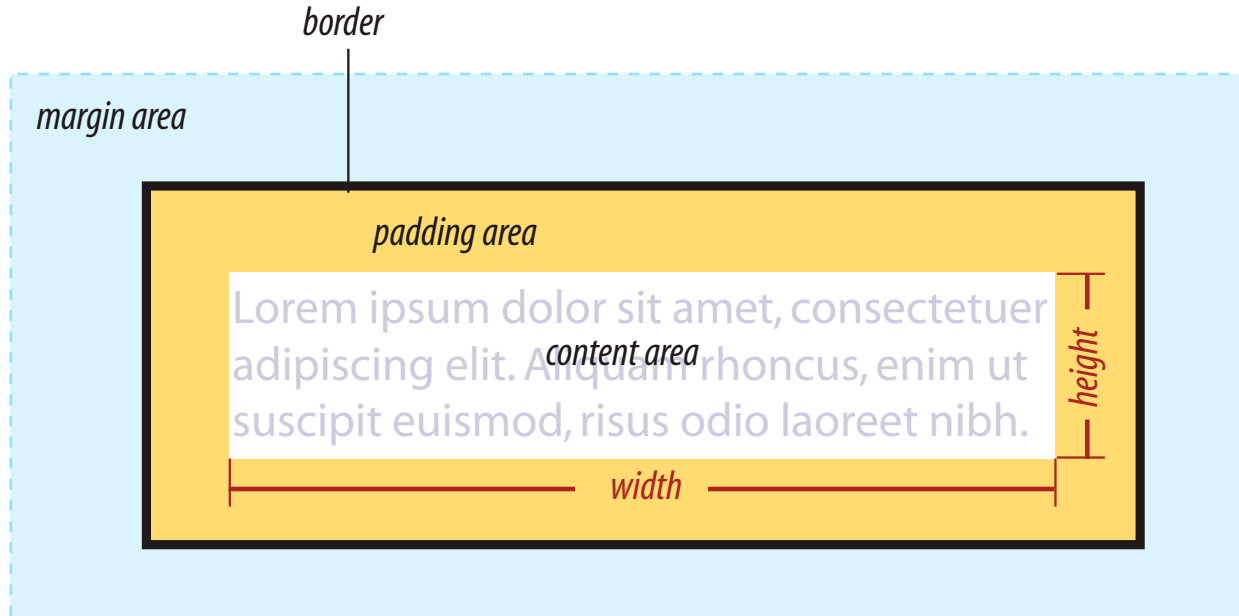
Applies to: *all elements*

Inherits: *no*

```
h1 { border-left: red .5em solid; } /* left border only */
h2 { border-bottom: 1px solid; } /* bottom border only */
p.example { border: 2px dotted #663; } /* all four sides */
```

https://www.w3schools.com/css/css_border_shorthand.asp

Esempio di sizing



```
p {
  background: #c2f670;
  width: 500px;
  height: 150px;
  padding: 20px;
  border: 2px solid gray;
  margin: 20px;
}
```

$20\text{px} + 2\text{px} + 20\text{px} + 500\text{px width} + 20\text{px} + 2\text{px} + 20\text{px} = 584 \text{ pixels}$

Area visibile

total visible box width = 544 pixels

width: 500px

Applying masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to completely cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by flying sand, so it has to be a good seal.

height: 150px

box-sizing

box-sizing

NEW IN CSS3

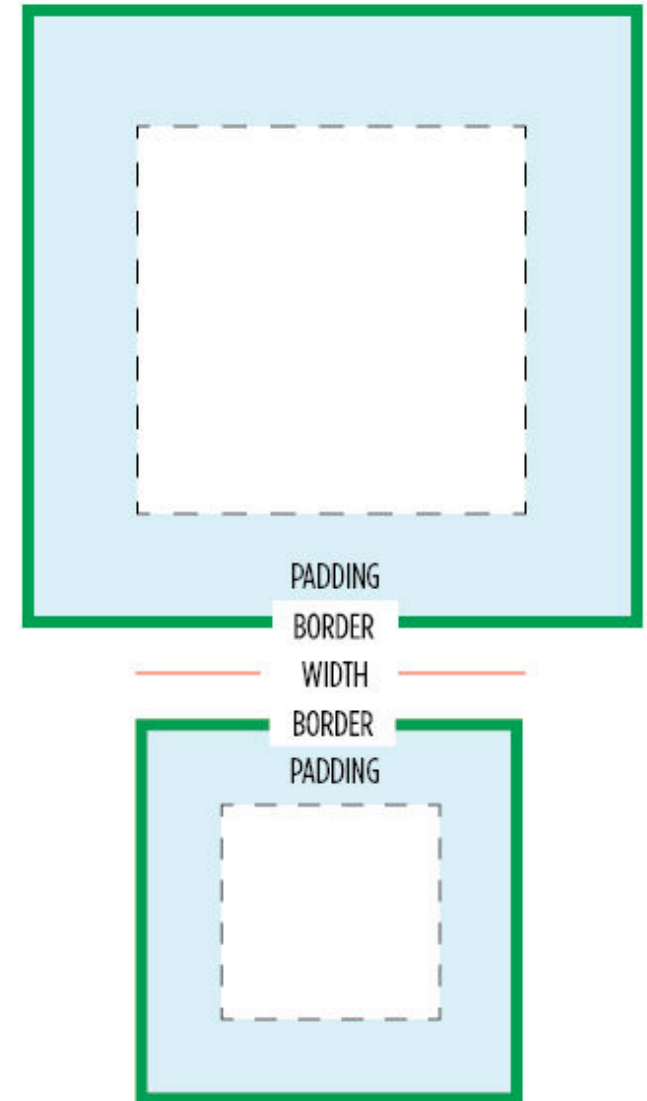
Values: content-box | border-box

Default: content-box

Applies to: all elements

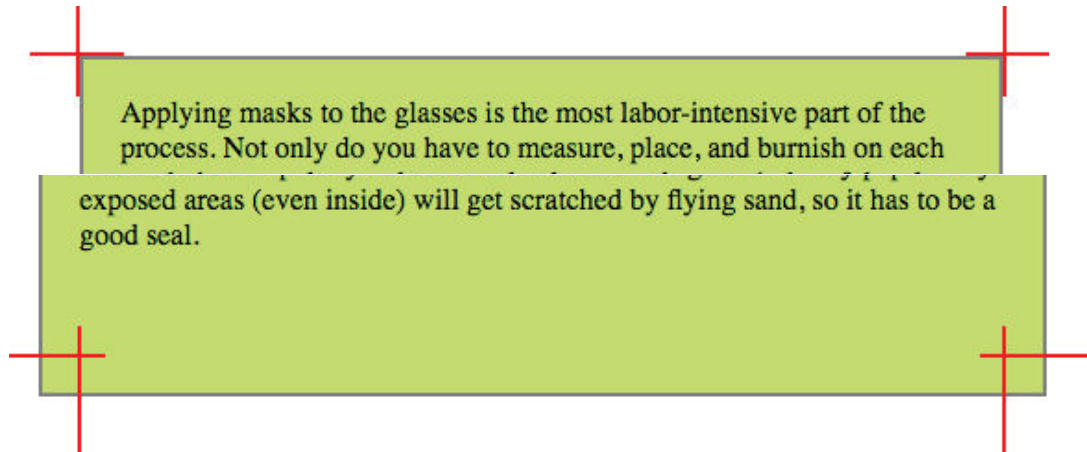
Inherits: no

- **border-box**
 - include nel size padding e border
- **content-box**
 - solo contenuto



Esempio

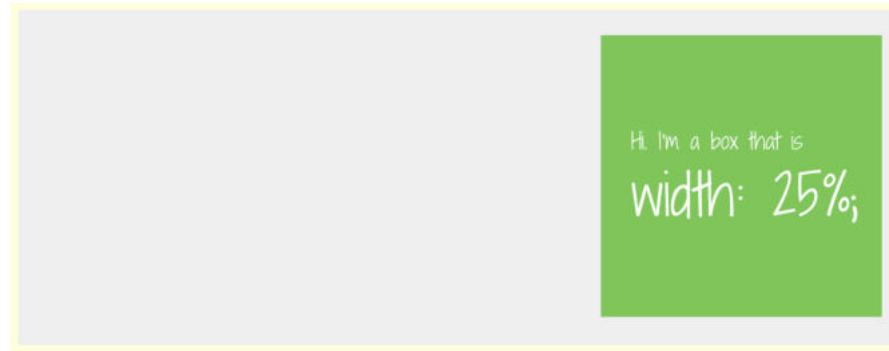
```
p {
  ...
  -webkit-box-sizing: border-box;
  -moz-box-sizing: border-box;
  box-sizing: border-box;
  width: 500px;
  height: 150px;
}
```



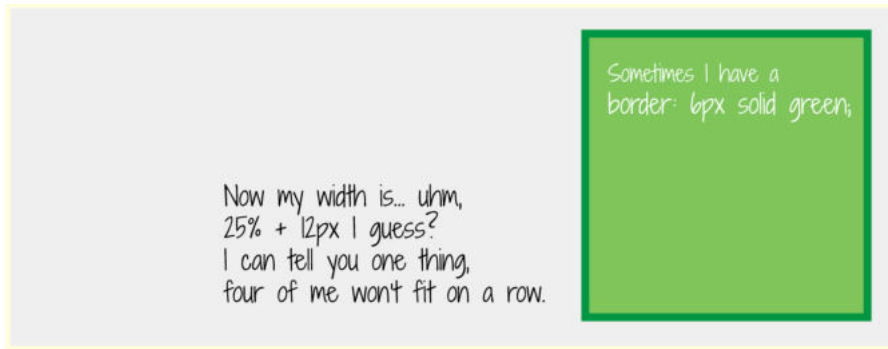
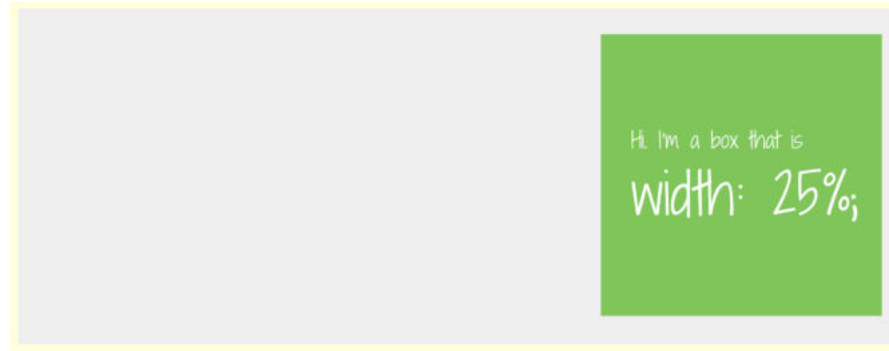
```
box-sizing: border-box;
width: 500;
```

```
box-sizing: content-box;
width: 500;
```

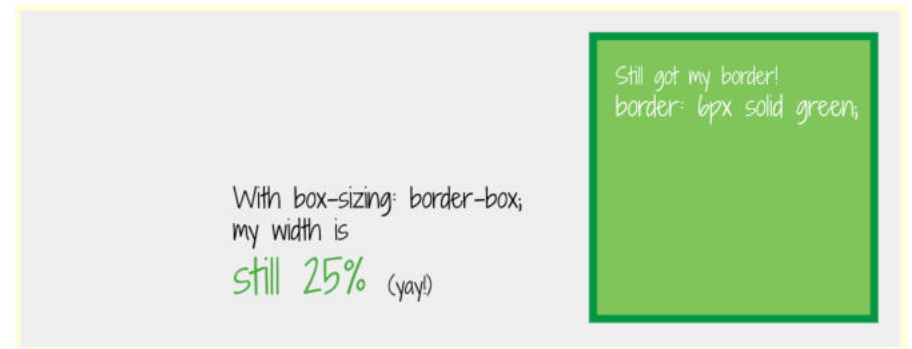
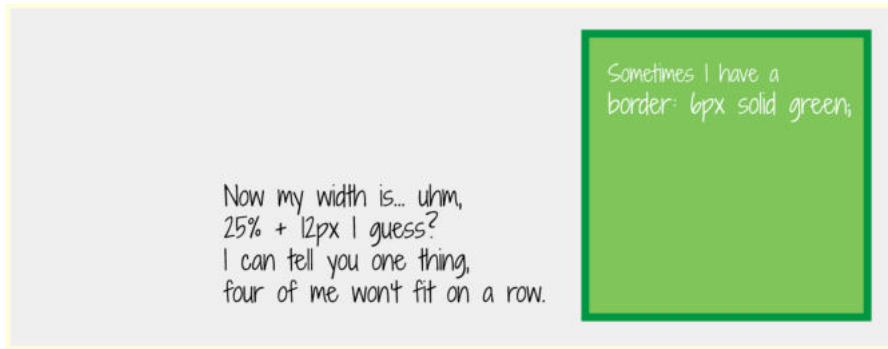
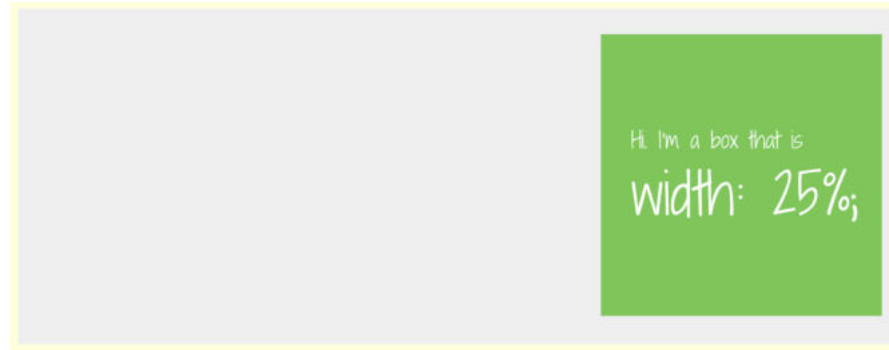
Perché border-box?



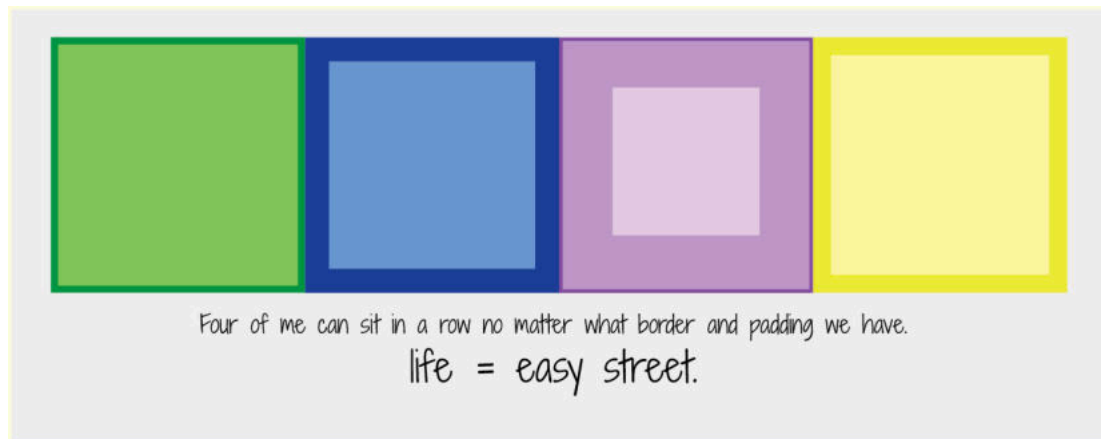
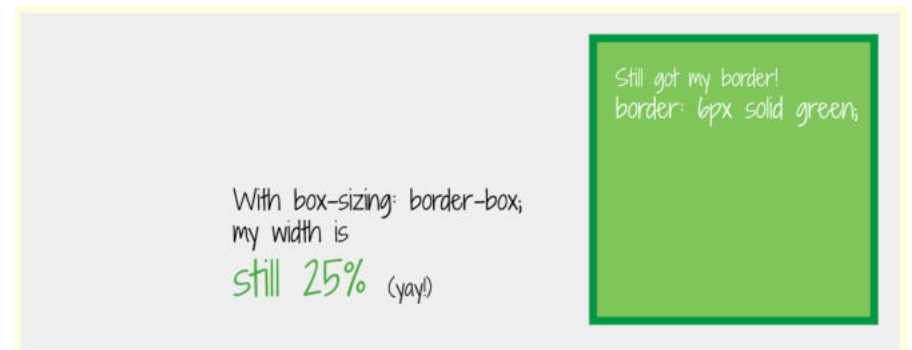
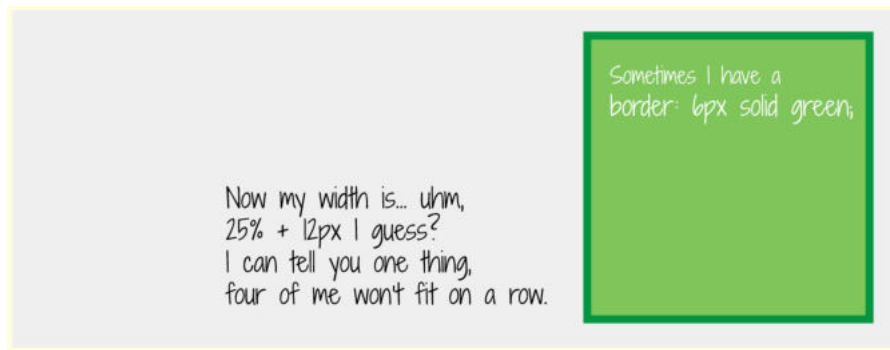
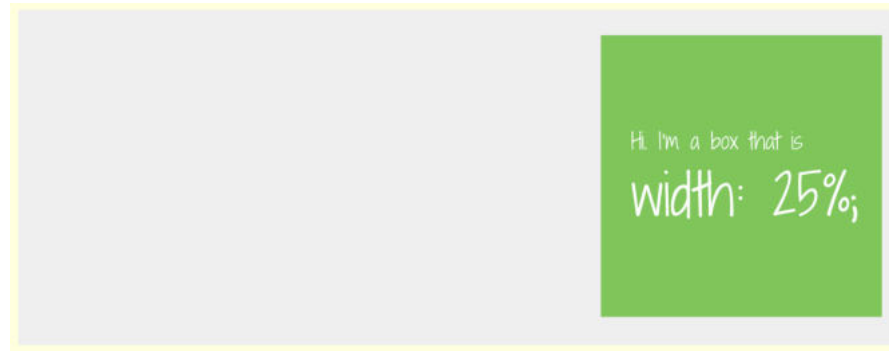
Perché border-box?



Perché border-box?



Perché border-box?



ANCORA SUL MARGINE

Margini elementi inline

```
em { margin: 2em;}
```

Only horizontal margins are rendered on non-replaced (text) elements.

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to **completely** cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

```
img { margin: 2em;}
```

Margins are rendered on all sides of replaced elements, such as images.

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each

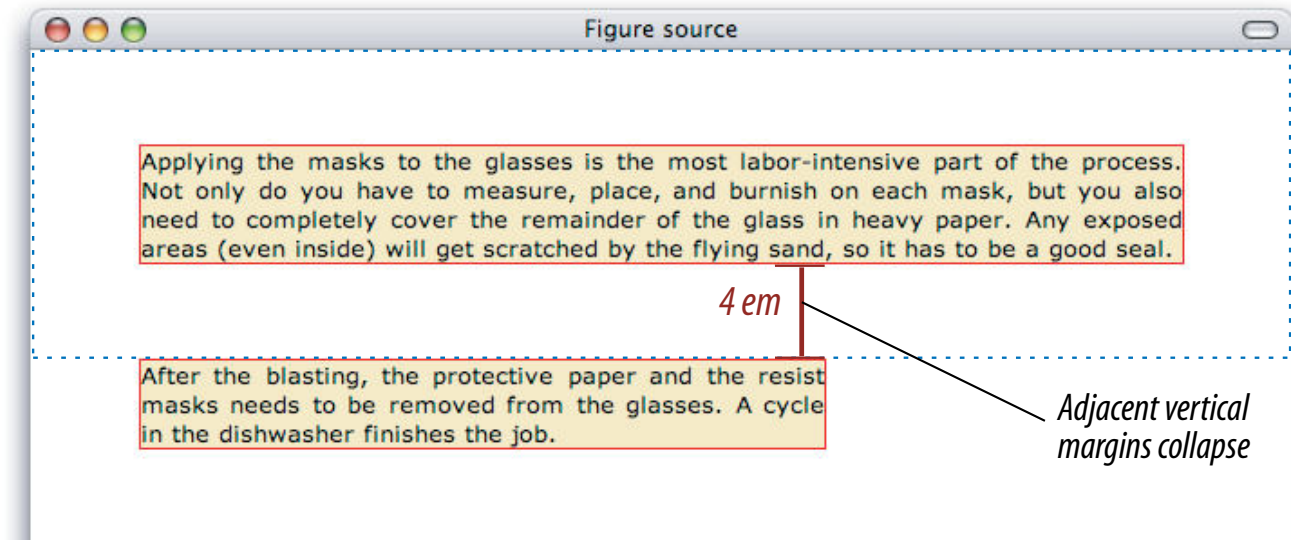


mask, but you also need to completely cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

- Gli elementi inline ignorano il margine top e bottom

— ad eccezione di quelli replaced (e.g. le immagini)

Margini che collassano



- Collassano il margine top e quello bottom in uno solo
 - il massimo dei due
- Non collassano se elemento float o absolute

Margini Negativi

```
p.top { margin-bottom: 4em;}
```

Pushes the following paragraph element away by 4 ems

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to *completely* cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need dot to completely cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

```
p.top { margin-bottom: -4em;}
```

The following element moves back by 4 ems

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to *completely* cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

- Si può impostare un valore negativo al margine

ALTRE PROPRIETÀ DEL BOX

Overflow

overflow

Values: visible | hidden | scroll | auto | inherit

Default: visible

Applies to: block-level elements and replaced inline elements (such as images)

Inherits: no

visible

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to completely cover the remainder of the glass in heavy paper. Any exposed areas (even inside) will get scratched by the flying sand, so it has to be a good seal.

hidden

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also need to completely

scroll

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also

auto (short text)

Applying the masks to the glasses is the most labor-intensive part of the process.

auto (long text)

Applying the masks to the glasses is the most labor-intensive part of the process. Not only do you have to measure, place, and burnish on each mask, but you also

Cambiare il display

display

Values: inline|block|list-item|inline-block|table|inline-table|
table-row-group|table-header-group|table-footer-group|table-row|
table-column-group|table-column|table-cell|table-caption|none
The following are new in CSS3: run-in|compact|ruby|ruby-base|ruby-text|
ruby-base-container|ruby-text-container

Default: inline

Applies to: all elements

Inherits: yes